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Powers and Tritsch present Financial Management

"Excellent seminar. I learned a lot about financial management ..." This comment from a participant in the Financial Management under Austere Conditions seminar in Traverse City typifies reaction to the presentation by John Powers and Geoff Tritsch.

Opening the session by addressing their purpose, Powers and Tritsch told their audience they hoped to provide a strategic overview of what's happening in the industry and how it affects telecom on campus, the impact of developments and events outside of the industry, and how financial management fits into telecommunications management. They emphasized the necessity of changing the perception of the telecommunications department—its direction, its value to the institution, and its importance to strategic planning. They encouraged the audience to return to their campuses and start asking the questions nobody likes to answer, such as, "Why do we do this this way?"

Three basic truths

Beginning with a dramatization involving a dollar bill beneath someone's chair, Powers and Tritsch described three basic truths relative to the business of telecommunications:

1. You have to get up to get a buck, and the return is usually less than you expected.

2. Integrated networks should be a part of long-term strategic planning.

3. No matter what they're talking about, they're talking about money. Telecom managers need to recognize that their network is a strategic asset, a toll highway that transports information and allows multiplexing of voice, data, and video into a single stream that bridges a lot of departments across the institution, and that delivery is a business that telecom needs to be in. Information has value—not only to people on campus, but also to off-campus sites and distant campuses. Being able to transport that information and make money off the transport is an important element in the business plan of telecommunications. There is no better agent of change in business today than telecommunication.

Competing for budget dollars

Under austere financial conditions, it is essential that the telecom manager have some understanding of financial management. When upper management talks about money, you can't talk about technology. You've got to be able to...

See "Financial Management..." on page 5

North American Numbering Plan will change

Frederick S. Wood
SUNY Buffalo

The present North American Number Plan (NANP) covers the World Zone 1 calling area which includes the US, Canada, Bermuda and most of the Caribbean. This plan, designed and implemented by AT&T in 1947, has been accepted as a de facto industry standard even though at the time it was not subject to regulatory approval. Back in those days it was assumed that this pool of available telephone numbers would last well into the future.

Over the past twenty years however, the rapid growth of the telecommunications industry has exhausted most of this spare capacity. The introduction of cellular phones, FAX machines, pagers, DID numbers and other telephone system enhancements has required the assignment of large blocks of ten digit numbers. This trend is projected to continue well into the future. In 1992 the last traditional area code (NPA) was assigned. It is estimated that over one dozen of the 160 existing area codes will reach number exhaustion by the end of 1995. Hence, quick action is required.

See "NANP..." on page 6

Seminar Evaluations

Evaluations by those attending the seminar in Traverse City indicate members were generally satisfied that they had spent their time wisely. On a scale of 1–5, with 5 the highest possible rate, the following averages were tallied:

Overall Event ......................... 4.08
Telecom Mgmt Info Sys .... 4.04
Financial Mgmt ..................... 4.15

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ACUTA outgrows office space

Beginning with this issue, the newsletter will feature a brief summary of the activities of the Board as reported by Jim Cross, Secretary.

Relocation of the ACUTA office in January, 1994 was the top item of planning and discussion of the Board of Directors in October. The current office space lease expires in January, 1994. Other items on the agenda were:

- Planning the implementation of the new governance structure and completion of the members needs assessment
- Planning the recruitment of a new Executive Director
- Approval of the Electronic Access Project Mission and charter statement
- Finalizing plans for the Traverse City Seminar held October 17 - 20, 1993

FCC rules in favor of AT&T: Business must pay for fraud

As quoted in Mizzou Telecom Connections, according to the September 6th edition of 411 (a telecommunications industry newsletter), the FCC recently ruled against a business that was attempting to make AT&T pay for fraudulent calls that were billed to their phone system. Chartways Technologies was held liable for all $81,789 in fraudulent charges that were incurred by hackers who broke into their system several years ago. According to 411, "The FCC ruling endorses long distance carriers' position that users, not carriers, are responsible for protecting their phone systems from unauthorized users."

"The implication of this ruling for the University of Missouri is clear," states Connections. "We cannot expect anyone else to pay for a lack of vigilance on our part. Keep your authorization number confidential and avoid keeping 'master lists' of department authorization codes."

Associations contribute to economy and culture

Did you know...

- There are 1,300,000 nonprofit organizations in the United States with budgets over $25,000.
- Associations held more than 10,600 conventions in 1992, and more than 135,000 other meetings.

The attendance at association meetings and conventions in 1992 was more than 35 million people.

- Associations spend $432 for every dollar spent by the government on setting and enforcing standards.
- Seven out of ten adult Americans belong to at least one association. Forty percent belong to four or more.

Association of College and University Telecommunications Administrators

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Those of us who attended the fall seminars in Traverse City, Michigan, are just getting back to our offices. I am pleased to report that the seminars—Telecommunications Management Information Systems (TMIS) and Financial Management under Austeres Conditions—were a success. Total attendance was around 100 and the exhibit hall was full of vendors and seminar attendees hungry for information. Kevin Adkins, our Telecom Resources Manager whose responsibility includes exhibits, was successful in recruiting 15 exhibitors for the seminar, including most major players in the TMIS arena. This gave those attending the TMIS seminar a ready and willing “research laboratory,” a nice complement to the seminar sessions.

There was a substantial amount of interchange among the speakers and the attendees in both sessions, and each included “real life” perspectives provided by speakers from our membership who augmented the professional speakers. As I promised you in my column last month, the Michigan colors were beautiful, and the Grand Traverse Resort was a terrific facility. If you missed these seminars, you missed some very good sessions. But, there’s no sense crying over spilled milk...just plan to join us in Palm Springs in January for our next dual-track seminar: Planning the Telecom Infrastructure plus TQM and Organizational Structures.

The smaller number of attendees at the most recent seminars afforded me the opportunity to talk with more people than larger meetings typically allow. No big surprise to any of you, I’m sure, but one recurring theme I heard over and over again as I conversed with attendees, vendors, and presenters was CHANGE. Change in job responsibilities and organization structure; change in process, policy, priorities; change in clientele and vendors; change in service offerings and the way business is conducted...change, change, and more change. Get the picture? Even if you do for now, don’t dilly-dally complacently along, because you might miss the next subtle or less-than-subtle change coming your way, soon!

Remember when change was something you got back from your dollar when you ate at a certain fast-food restaurant? What your parents had to prompt you to do with your favorite outfit as a child? What you do with your vehicle’s oil every 3,000 miles (or so) or with its tire when it goes flat? What you enjoy happening to scenery as you amble down a country road or explore new territory? See, some change is good! I guess the degree of “good” directly relates to how the change is perceived...or maybe even to how much of a role you had in it, the degree of it, the control of it? Hmmm, could we be onto something here?

Seems our membership is no different than we inherently are as human beings. Those I spoke with who saw the change coming and had time to prepare for it, or participated in it, seem to have the most positive impression of the changes facing our institutions and industry today. Some know it has already happened and are wallowing in the aftershock of getting lost in the shuffle, either having missed the boat entirely or wondering why they weren’t asked aboard. Then there are those who are fighting it—or, worse yet, denying that anything has happened or will happen to them or their institution. How do you think they perceive the changing world of telecommunications? Where will they be in three years? Five years?

The phrase “winds of change” has taken on a whole new meaning. Change is not only in the air—it is the air! ACUTA is changing, too, trying to be sure we don’t miss the boat for our membership. It’s not an easy task, but we are making sure that you’re involved so that you can understand and anticipate the changes ACUTA must undergo as an organization to ensure not only our survival as a dynamic organization, but to ensure yours as a dynamic, dedicated, and well-trained telecommunications professional!

During the focus group sessions (held almost two years ago in conjunction with our strategic planning effort), you said you wanted more education and information brought to you; that you couldn’t always come and drink from our well of national events. We heard you. You said you wanted us to keep our costs low so you could afford what we had to offer. We heard you. You asked for more ways to network with your peers and told us that was one of the most valuable things ACUTA offered. Again, we heard you.

With these goals in mind, we are working on ways to meet those needs. In the next 30–60 days we will be asking a substantial number of you to participate in our member needs assessment. The information we glean from this anonymous survey will help focus our attention on the things you, the membership, think are important. Just like you, we do not have unlimited resources; together we must set reasonable, attainable goals.

If you receive a survey, please take a few minutes to fill it out and return it to the survey firm. Participation and interaction—that’s what accepting change is all about. You can help guide the changes in ACUTA and know they were made with you in mind. And, as always, call if you have questions, comments, or ideas. We can’t be everything, but we really do care about what you think!
Many schools have taken advantage of Terminating Access Service Agreements being offered by the long distance carriers. Under the terms of such agreements, the subscriber is given a commission from that carrier on all incoming long distance traffic which bypasses the local exchange carrier’s switched network. This is normally accomplished by routing such traffic over dedicated T-1 facilities which terminate directly on the customer’s PBX from the carrier’s local point of presence (POP). This is now even being done in the case of Centrex and Intellipath services wherein the telephone company will permit the termination of such T-1 circuits directly into class 5 end office switches which furnish Centrex and/or Intellipath services to subscribers. In such cases the telephone company is actually bypassing themselves!

Each of the long distance carriers is assessed an egress charge by the local exchange carriers (LECs) for the carriage of their terminating traffic to the subscriber. This charge varies between $0.03 and $0.04 per minute of use depending upon the time of day.

**Subscriber rebates**

Where Terminating Access Service Agreements are in place, the LD carrier generally rebates to the subscriber a monthly commission of up to 50% of the LEC egress charges which they would have been obligated to pay had the call been terminated over the Public Switched Telephone Network. (This egress charge is built into the LD carrier’s rate structure and paid by the call originator regardless of any terminating agreements.) For many SUNY schools this has been a rather lucrative arrangement over the past year or so. At SUNY Buffalo, for example, a net income for 1992 of well over $100,000 was realized from a single carrier.

The proliferation of such agreements throughout the end user community has resulted in a significant loss of income for New York Telephone. In an effort to stem this tide, New York Telephone recently announced its own Terminating Access Service Agreement for the larger users. To be eligible, a user must have at least 8,000,000 minutes of incoming LD traffic per year. Since, for most schools, telephone traffic is not uniform throughout the year, the contract has provisions to accommodate the lean months. Most contracts are for a three-year period with a penalty for early termination. In order to take advantage of this offering, it is a prerequisite that the subscriber cancel all existing contracts for such service with their long distance carriers. Since most existing contracts have some sort of waiting period before termination can become effective, the telephone company will generally agree to a “ramp up” period of say 3 to 4 months in order to minimize the loss of commission revenue to the end user.

**Potential pitfalls**

While at first analysis this offering may appear quite lucrative compared to existing agreements with the LD carriers, the user should be aware of several potential pitfalls before such an agreement is signed.

This is a non-tariffed offering and hence not subject to the normal tariff constraints. For example, the sample agreements contain a “save harmless” clause which holds the telephone company harmless in the event that these agreements may be cancelled or modified by either the Public Service Commission or a court of competent jurisdiction. While the New York State Public Service Commission feels that these offerings are legal, the long distance carriers are mounting a campaign to have them nullified. They claim, with a high degree of validity, that if New York Telephone can afford to rebate up to 1/2 of the egress charge back to the subscriber, then the egress charge is not “cost based” and in fact should be reduced.

Furthermore, some of them feel that if there is any rebate, it should be back to the LD carrier who is paying the charge in the first place rather than to the subscriber of the terminating station who generally has no financial commitment for the cost of incoming traffic.

Should their arguments be successful, the possibility looms that the PSC or some court could invalidate the offering and force the telephone company to not only cancel the contract but, in certain instances, to seek a return of commissions paid to date.

Such a move would force the customer to go back to their LD carrier begging to be “let back into the fold.” While the carriers have said that they would probably reestablish the original agreements, it is likely that they would be at a lower rate than those currently in place. In addition, the time required to reestablish the bypass circuits may result in a loss of commission income for which no one will assume responsibility.

In summary, this appears to be an attractive offering but ACUTA members are cautioned to take a good look at all of the pitfalls and to weigh carefully the potential risks vs the anticipated increased income before putting the pen to the paper.
Financial Management...

continued from page 1

translate the technology into their language if you expect to get results. Planning must include cost justification; how technology benefits the institution, not the features of the technology. And you can’t rely on vendors or accounting or anyone else to do it for you. They advised implementing the rule of So What. Making the translation from features to benefits, ask yourself, “We’ve got this feature; so what? What does that really mean to me, to the department, to the institution? If you can’t answer that question, you’ve got to take another tack. If you can answer, then ask “so what” again. Keep working till you get to the net result of what you’re trying to do.

Some of the financial terms that were identified as essential to the telecom manager include cash flows, simple payback, return on investment, life cycle analysis, benefit to cost ratio, net present ratio, internal rate of return. The manager who doesn’t understand these terms, they suggested, would do well to audit an accounting course at his or her university in order to attain a comfort level with the language of finance.

Telecom managers must compete for their share of budget dollars. Traditionally, departments which get the most funding are those which management sees as contributing most significantly to the overall strategic direction; the mission. That’s why MIS has in the past received a larger piece of the pie: They’ve been seen as most strategic. This has to change because the strategic mission of telecom is becoming greater than the strategic mission of data processing.

The changing perception of telecom on campus

Influenced by society as a whole, many institutions are seeing enrollments decline and student demographics changing dramatically. Technology can help any institution remain full to capacity, maximizing the investment already made in facilities. Telecommunications is not just bits, bauds, and bytes; it’s revenues, kids, growth, development. It’s become an asset, not just a utility. As the telecom manager, you must take a proactive role or changes will be made for you.

In addition to competition from outside the university, changes in financial structures today put telecom in competition with other departments for funding. For instance, many are moving to a telemangement environment. How do you compete for funds when everyone operates under the same umbrella? You have to protect yourself. You have to be able to compete as a stand-alone operating unit. Parameters must be set up so you can be measured by pre-takeover and post-takeover standards.

The perception of telecom is changing from a maintainer to an innovator; from a reactive follower to a progressive, proactive leader; from an expense to a revenue source with larger investments and higher return on investments. The telecom manager has gone from “techie” to entrepreneur, virtually running a small business.

Recognize that you are in transition and you are at a decision point in your career. Build your own niche, find your comfort level. Recognize that task-oriented vision means you are dead in the water. Expand into more process-based design taking a macro vs micro view.

Powers and Tritsch advised their audience to consider also the influence of world events such as NAFTA. You can’t control world events, but you’d better understand them. No one operates in a technological vacuum. “For instance,” they illustrated, “the influence of NAFTA may mean jobs are going south of the border. Blue-collar towns in Michigan are going to have to retrain the work force. That means institutions will have an influx of non-traditional students. So something as simple as opening trade with Mexico has ramifications on our service and what we deliver.

“One of the problems we face as a country is we’re entering the 21st century with companies designed in the 19th century. We use a 19th century manufacturing model, and the same approach applies to our educational institutions. We haven’t changed our educational model—it’s still a transmissional model. We haven’t begun to use technology to change education into a more interactive model. We treat institutions as if we were manufacturers of knowledge.”

One important point

There are times when you just have to say no. When management comes to you and says you have to cut the budget, maybe what you say is, “Okay, which day of the week don’t you want dial tone? I can’t keep providing the services you want, be a strategic asset, and support the needs of technology education with telecom services and distance learning and admissions and development and everything else that brings funding into this company if you keep cutting my budget.” But you have to be prepared to say no.

Changing the perception of the budgeting process means demonstrating to administration that you aren’t taking money out of their pockets. They are providing seed money so that you can put more money back into their pockets using technology you control. What you control has the ability to improve development and admissions, make the institution more attractive to students, bring in better faculty and more grants. You are not a sink hole they are throwing money into that they’ll never see a return on, and you’re one of the few departments that can make that case.

From the editor: These notes provide only a superficial overview of this presentation. We highly recommend tapes from this session for all ACUTA members.

Tapes of all sessions at the fall seminars are available from the ACUTA office.

Call Kellie Bowman at (606) 252-2882 for details.
NANP...

Continued from page 1

Under the existing plan, the geographic area codes are three digit numbers with the middle digit being either 0 or 1. The area code was originally followed by a seven digit number in the form NXX-XXXX where N could be any digit between 2 and 9 and X could be any digit between 0 and 9. A few years ago the standard for number assignments was changed to the NXX-XXXX format to permit the introduction of additional central office codes as a stop gap measure.

After divestiture, management of this numbering plan became the responsibility of Bellcore (Bell Communications Research) which is jointly owned by the Regional Bell Holding Companies. Recognizing the need for additional numbers, Bellcore, under the jurisdiction of the FCC, issued a proposal in early 1992 for major changes in the numbering plan to provide an expanded pool of available numbers well into the future. This proposed new integrated numbering plan will create interchangeable Numbering Plan Areas and Central Office Codes which will affect essentially all users and which may have a significant financial impact upon large users who have premises based switching equipment employing routing software. These changes can be segregated into three distinct areas.

Interchangeable Numbering Plan Areas (NPAs)

Under the proposed plan, the second digit of the NPA will no longer be restricted to either 1 or 0 but may be any number between 0 and 9 (NXX), which is the same format as existing Central Office Codes. This change alone will create 640 new NPAs and add 5 billion new numbers to the existing 7 billion number base.

Interchangeable Central Office Codes

The change from the NNX to the NXX format, introduced a few years ago now permits the use of 0 or 1 for the middle digit. For example, 315 will now be valid for either an NPA or an NXX.

Expanded Carrier Access Codes

The familiar Equal Access or 10XXX codes for long distance carrier selection will be expanded to a 101XXXX format in mid 1995. This is required to accommodate the need of businesses such as hospitals, hotels, motels as well as educational institutions to implement Selective Carrier Restrictions on outgoing equal access calls placed directly by the occupants, as required by law.

Dialing Procedure Changes

In preparation for these changes, many of the local exchange carriers have already, or will soon, put in place a portion of the dialing plan modifications that will be dictated by the new NANP. For both local and toll calls within the caller’s home NPA, the plan calls for the dialing of only the seven digit number. No “1” will be required. From the listed number, a caller can have difficulty determining whether a particular call is local or toll within the Home Plan Numbering Area. For the placement of calls into a foreign NPA, 1 + 10 digits will be required for direct dial calls.

Unfortunately, this proposed Bellcore plan has not met with universal acceptance by the Bell Operating Companies in so far as the dialing of intra NPA toll calls is concerned. The Ad Hoc Telecommunications Users Committee, in a petition to the FCC, requested that an alternative plan for the dialing of intra NPA toll calls be approved. Under this proposed alternative, such calls would require the dialing of all 11 digits as is now uniformly done for interlata calling.

As it stands today, the dialing of intra NPA calls will be a mixed bag with some jurisdictions moving to the 7 digit format while others will require the dialing of all 11 digits for such calls.

The magnitude of these proposed changes will have a ripple effect throughout the telephone industry. This will be no small task. There is some conjecture at the present time as to whether the industry will even be ready for this change by January 1995. For the large user with multiple sites, the cost and effort required will be significant. It is not only the switch software that will need to be changed. Call accounting software and directory listings will also be effected.

In summary, the 1995 proposed changes will result in a pool of new numbers which should last well into the next decade. Users are encouraged to discuss the impact that implementation of these proposed changes will have on their institution with both their local exchange carrier and their equipment vendor. It will be incumbent upon telecom managers to ascertain and budget for the financial commitment, if any, that may be required for switch upgrades to support this new numbering plan.

For an in-depth coverage of this subject, CCMl will host an Emergency Conference on Telephone Numbering on December 6-7, 1993 at the Crystal Gateway Marriott Hotel in Arlington, VA. Call (301) 816-8950 ext. 292 for more information.

Directory updates

Has your phone number or extension changed? Have you added e-mail? Help us keep our directory up-to-date. Call Kellie Bowman, Membership Services Coordinator at (606) 252-2882 to report changes and corrections.
Numbering plan means net manager pains

By Bill Burch
Network World
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The launch of the new North American Numbering Plan [in October] in California promises a bounty of new phone numbers for users and service providers, but for network managers, the new plan will also mean expensive PBX upgrades and the risk of unauthorized toll calls.

Bell Communications Research has long planned to switch to the new numbering plan in 1995, but to prepare for that change, a number of states will adopt new dialing schemes earlier. Following California’s October launch, Indiana will migrate to the new dialing plan Dec. 1.

With its new numbering plan, Bellcore will alter the area code format to allow an area code’s second digit to range from 0 to 9, rather than the 0 or 1 used today. To implement the plan, local exchange carriers can choose between seven-digit and 11-digit dialing.

Under seven-digit dialing, a local exchange carrier allows customers to place any call within an area code by dialing only seven digits, eliminating 1-plus dialing for toll calls within an area code. Eleven digits—1 plus a phone number with an area code—are used to call outside an area code. Seven-digit dialing will be used throughout California after its switch (in October).

For 11-digit dialing, a caller uses an 11-digit number for toll calls within an area code, as well as for all calls to other area codes. Launching the plan will require network managers to upgrade their private branch exchanges to handle the new dialing schemes.

Unfortunately, California’s early launch of the new dialing plan has caught some PBX manufacturers unprepared. AT&T has most of its upgrades ready but will not have gear for its Dimension and System 85 switches until January.

For Northern Telecom users, most of its Meridian switches can be reprogrammed by technicians without an upgrade. Users of old equipment should upgrade before reprogramming for the new numbering plan, according to Northern Telecom staff. The company plans to have a new release available in November for its Option 11 users, and for others, new software will be out in January.

Once the upgrades are ready, users may have to make changes in both software and hardware. AT&T users are looking at about $1,500 to upgrade a Definity G1 and between $4,000 to $5,000 for a System 75, according to Charlie Fallon, AT&T’s product manager for the Definity PBX line.

Many PBXs use the 1-plus prefix to block toll calls from some phones. With seven-digit dialing, that prefix will disappear, opening up some customers’ nets to unauthorized toll calls (NW, Aug. 29, page 29).

To solve the problem, PBXs must keep a database of all toll-free exchanges, a feat beyond the current versions of some manufacturers’ PBXs. Managers must also track future changes in toll calling areas.

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ACUTA Calendar

- Winter Seminar -
  Palm Springs, CA
  Jan. 9-12, 1994

  HOTEL: The Westin Mission Hills Resort
  TOPICS: Planning the Telecom Infrastructure
          TQM and Organizational Structures

- ANNUAL CONFERENCE -
  Anaheim, CA
  July 31-Aug. 4, 1994

  HOTEL: Anaheim Hilton
  TOPICS: Management; Regulatory Issues; Professional Growth; Voice, Data & Video; more

- Spring Seminar -
  Baltimore, MD
  April 24-27, 1994

  HOTEL: Hyatt Regency Hotel
  TOPICS: Hot Management Topics
          Campus Cable TV

- Fall Seminar -
  Richmond, VA
  Oct. 16-19, 1994

  HOTEL: Hyatt Regency
  TOPICS: Network Planning & Management
          Student Services
Are you familiar with InfoAccess? Ever heard of Pilgrim Telephone? Do you have numerous calls to Guyana on your monthly bill? Have you seen collect calls carried by Intregretel on your bill?

If you answered yes to any of these questions, you have been exposed to one of the latest (perhaps hottest?) issues facing the telecommunications professional.

Over the past few months numerous collect calls have appeared on our bill at Central Missouri State University. Because we subscribe to Billed Number Screening (BNS) from our local exchange company (LEC), which is supposed to alert an operator when completing collect/third party calls, large quantities of these calls are cause for immediate attention.

By calling the originating telephone number shown on the bill, I accessed a recording instructing me to call a customer service number if I had questions about the calls that were appearing on my bill. A little assistance from the security office of the LEC revealed the name of the company responsible for the originating phone number.

A quick call to the company revealed that the originating telephone number appearing on my bill was not where the call actually originated. Rather, it was merely the billing number associated with an 800 number. It was when I called the 800 number that I finally understood why there were so many calls on our bill.

The profit margins for these calls must be astronomical, given the explosive growth of these services. Think about it: a DDD call (maximum cost, maybe 25 cents per minute, even less if completed over a private network) billed at $3.95 (and more) per minute?

Even worse, everyone in this industry is exposed (pun intended) because no billing verification is done. Payphone owners, businesses, government offices—no one is immune!

So, is there a solution? I have heard from some of my colleagues that they merely refuse to pay for the calls, and return them to the LEC for credit. They believe that if the financial burden on the alternate operator service (AOS) provider becomes large enough, the problem will be fixed.

Another alternative is to bill the user for the call, and work to minimize access to these types of services by contacting the AOS provider and blocking access.

There is a real dilemma here for the campus telecommunications manager. If we subscribe to the notion that service in residence halls should roughly equate to what’s available in the local community, then what type of behavior are we encouraging if we take no steps to prevent access to these services and merely ask the LEC to remove the charges from our bill? On the other hand, do students have the right to access...
services of this type, so long as they assume responsibility for paying the bill?
At Central Missouri we have attempted to resolve this problem in a two-step process. First, students are billed for the calls (to the best of our ability). As soon as a student sees a bill for these calls, there is financial incentive to cease and desist using the service. We have also contacted Integretel, an AOS for over 40 of these types of service providers, and requested that all faculty, staff, and student telephone numbers be blocked from any service that they bill for.

The FCC has also been involved with this problem, and in July adopted some new rules to comply with the 1992 Telephone Disclosure and Dispute Resolution Act. The commission’s new rules generally require interstate pay-per-call services to use the “900” area code. Callers to “800” numbers and other toll-free numbers can’t be charged for information services unless they have set up some prior arrangement with the information provider or have completed their transaction using a charge card. In the credit card scenario, charges would then be subject to the Truth in Lending or Fair Credit Billing laws.

Additionally, long distance companies that carry pay-per-call services over their networks are supposed to cancel services that fail to comply with federal regulations.

CMSU cannot afford to wait for the policing of the FCC requirements and/or the interpretation of whether or not calls of this type actually are covered by the rule changes (we believe that they are indeed pay-per-call services). Instead, we have taken necessary steps to minimize our financial exposure by billing for the services already used, and doing our best to block access to services of this type from our campus telephones.

Use your own long-distance carrier from any hotel phone

Many ACUTA members expressed frustration over the charges for long-distance calls made from their rooms during the conference in Nashville. Hotels are free to assess a surcharge for using their phones, but they are required by law not just to allow guests to use their own long-distance carriers, but to post signs informing guests of that right.

However, according to the Wall Street Journal, a survey earlier this year by a hotel newsletter found that 52 of 100 randomly picked properties weren’t complying with the law’s disclosure provisions. As a result, many travelers who don’t realize they have a legal right to select the long distance carrier of their choice are paying more than they have to for long-distance calls.

Western Illinois Univ. awarded $500,000 Ameritech grant

Illinois Governor Jim Edgar and Ameritech’s Illinois President Doug Whitley announced that the College of Education at Western Illinois University has been awarded the $500,000 Governors/Ameritech EdTech Grant. The award is based upon the College of Education’s proposal to establish a program that will train new and working educators in the classroom use of telecommunication-based teaching tools.

WIU students in teacher education programs will learn to use communications technologies along with computers to support the instructional process; link students with electronic databases, including Prodigy, ILINET, and Internet; and use communications technology to expand education options for special-needs students, such as gifted and disabled students.

EdTech is one of several pilot projects and grants Ameritech is initiating in Illinois, Indiana, Michigan, Ohio, and Wisconsin to demonstrate how advanced telecommunications can benefit education, economic development, and the quality of life.

WIU students will be able to start the program in January, 1994. The University will utilize the program to work with teachers, students, and administrators at all levels of instruction.

WIU’s proposal was selected over proposals from 19 other Illinois college and universities offering teacher preparation.

Sallie Mae provides schools with short-term funds

Sallie Mae, one of the nation’s leading sources of funding for college facilities, is introducing a revolving line of credit, the Under Prime-Line, providing colleges and universities with a competitive source of short-term financing for their plant and equipment needs.

According to Sallie Mae Vice President John Gibb, lines of credit will be available in amounts of $50,000 or more, for terms of up to one year. The interest rate on funds drawn under the line of credit will be equivalent to the daily prime rate (reported by the Federal Reserve) less one percent.

“Once a line of credit has been established, all the school has to do is contact us and the funds will be delivered within five business days,” says Gibb. For more information, contact John Gibb, 202/298-3003.
High-tech to fly high

Bored with reading magazines as you wing your way across country? Stuck in a holding pattern with nothing to do? Don't despair—Captain Video is on the way. Video games, Las Vegas-style gambling, live sports events, and PCs that hook into on-line services will soon be available for first-class and business-class air travelers. Coach travelers will follow closely—USAir expects to have personal computer screens installed in all its seats in 402 airplanes by the end of 1994.

The real truth via Internet

If you've ever wondered if myths like alligators in the New York sewer system are for real, wonder no more. Computer consultant Charles Lasner researches such popular urban myths and posts his findings on the Internet (alt.folklore.urban). Some 60,000 readers worldwide confirm, rebut, or debate electronically the validity of popular legends. (Truth is stranger than fiction.)

Networking puts job hunting at your fingertips

Looking for a job? You may not have to go any farther than your keyboard. According to EDUPAGE, forty leading U.S. corporations have formed a nonprofit employer association to develop and manage a national public-access database on Internet for recruiting, outplacement, career assistance, and communications. The database includes job listings and full-text resume files with online keyword search to assist both employers and individuals seeking employment. For more information, contact occinfo@mail.msen.com.

For educators, the Academic Position Network (APN), an on-line service accessible worldwide through Internet, has announced an expansion of its service. In addition to providing notice of academic position announcements for faculty, staff, and administration, it has expanded its service to include program announcements for postdoctoral fellowships, graduate fellowships, and assistantships. Access apn@staff.tc.umn.edu.

Cellular phones for rent

So you thought you saw a 7-foot-tall telephone in the middle of the airport. Don't panic. According to a story in the Tampa Tribune recently, travelers will soon be able to rent cellular phones from vending machines shaped like overgrown telephones. Located in major airports, car rental agencies, and hotels nationwide, the machines will dispense you a cellular phone for a daily charge of $4.95 to $6.95, plus $1.60 to $2 a minute for air time.

Pay bills—and more—by phone

An advanced new screen phone developed by US Order®, PhonePlus allows consumers to bank, pay bills, catalog and grocery shop as well as access various telephone services by using one convenient in-home device—no checks, no trips to the bank or the mall, no wear and tear on the car or your nerves. With a retail price of $199 and a low monthly fee, PhonePlus will be available to consumers in April, 1994.

Phone Plus combines the intelligence of a computer with the familiarity of a telephone. It looks like a sleek telephone with added features such as a 4-line by 20-character display screen and a telephone keypad that lifts to reveal a 48-character computer style keyboard concealed beneath. Consumers enter information via the keypad and perform transactions. The information is transmitted over the existing telephone network. Paying bills is as simple as waving a wand across a bar code.

US Order has been in business since 1991 and now supports some 10,000 customers nationwide. For more details, call 1-800-888-9190.

Smart chips outwit speeders

From Telecommunications Policy Review (9/26/93) we learn that a computer chip installed in every automobile, along with periodic sensors on the highways, could put an end to radar detectors and speed traps. Each car's chip would register as it passed each sensor, allowing a computer to calculate speed and record vehicle ID. When a violation is noted, the vehicle owner receives a ticket in the mail. Don't believe it? It's already up and running during peak traffic periods in Hong Kong.

Come to Palm Springs January 9-12

The ACUTA Winter Seminars will be held at the beautiful Westin Mission Hills Resort. Explore one of two topics of significance to your role in campus telecommunications:

- Planning the Telecom Infrastructure
- Total Quality Management and Organizational Structures

Register by December 10 and save $50!

Call Kellie Bowens
(608) 252-2882 for details.
Secure your system against call diverter toll fraud

A call diverter is a device used to forward calls to a different location, usually after regular business hours. A call diverter typically requires the use of two exchange lines: an incoming line to receive calls and an outgoing line to transfer calls. The user directs the call diverter to transfer all incoming calls to a predetermined number. Call diverters are widely used, with well over a million such systems in operation. Calls are normally diverted to an answering service, a user’s 24-hour work center, or to an employee’s home. They are particularly popular with businesses and professionals who receive calls after normal hours.

Long distance thieves call a user’s published telephone number after normal business hours to determine if and how the call is diverted. If the call is diverted and answered, the intruders pretend to have misdialed or they remain silent. When the called party hangs up, the call diverter sometimes leaves a momentary dial tone before the disconnect. When this happens, the thief seizes the dial tone and uses it to place long distance telephone calls. In most cases, the company that owns the call diverter does not know this has occurred until it receives the next month’s telephone bill. If you employ such a system, the following actions should be taken to protect against this type of toll fraud.

Modify the call diverter
The user should contact the call diverter vendor to request inspection and modification of the call diverter to ensure connection to the outgoing line is immediately disconnected if secondary dial tone is detected. If a new call diverter system is purchased, the user should ensure that this inspection and modification are accomplished prior to activating the system. As will all other demands on your vendor, these instructions should be in written form with copies preserved. Not all call diverters can be modified to detect secondary dial tone; the vendor should know.

Delete call diverter and utilize call forwarding
Call forwarding is available from virtually all LECs. This service forwards calls from an individual’s telephone number to another pre-selected number. One disadvantage of call forwarding is that some forget to cancel the call forward after returning to the office. As a result, they miss important telephone calls. This problem can be avoided by leaving instructions to “switch back” at a predetermined time. Use of the call forwarding feature deletes the call diverter (and the risk of toll fraud) from the system.

Employ toll restriction on the outgoing line
If the user employs a call diverter, he should employ toll restrictions on the outgoing line, restricting that line to local area access only and blocking all “0+”, “0-” and “1+” services. Most LECs can provide this service.

Employ billed number screening
Another option the company has is to make an agreement with the LEC to screen all calls to and from the call diverter. Basically the company refuses in advance all long distance charges on either line.

Take call diverters out of numerical sequence
Sometimes companies with multiple call diverters have their telephone numbers in numerical sequence (e.g. 1520, 1521, 1523, etc.). This makes it easier for intruders to identify the call diverters. The company should take their call diverters out of numerical sequence and ask the LEC to assign the telephone numbers randomly.

Educate all employees on call diverter toll fraud
All user employees and answering service personnel should be educated about the risk of call diverter toll fraud. Employees should be alerted to watch for fraud indicators, such as frequent “wrong numbers” or silence on the line.

This excerpt was reprinted with permission from Toll Fraud and Telabuse, published by Telecommunications Advisors, Inc. This two-volume work is available to ACUTA members at a $50 discount. Contact the ACUTA office for details.
Editor's Notes...

Yale, Mizzou, Washington State, Florida State, Univ. of Ariz., and SUNY. These are the newsletters I receive regularly. Where's yours?! Please add my name to your mailing list for campus/departmental newsletters!... As reported in EDUPAGE, the Management Archive is a free electronic forum for business management ideas and information of all kinds. Complete details are available by e-mail message to "ma-request@chimera.sph.umn.edu" with "Subject: archive" and a one-line message: "get ma-info"... More free info via e-mail: A data share program providing universities and colleges quick access to comparative planning data, with up-to-date information on the finances, staff, salaries, enrollment, and academic libraries of participating institutions. For details, call National Cooperative Data Share (800/444-8110)... Don't forget! I'm looking for cartoons as a money-saving alternative to the ones we've been running... Send news and notes (and cartoons) to: Pat Scott, ACUTA, 250 W. Main St., Ste. 2420, Lexington, KY 40507. Phone (606) 252-5665 or fax (606) 252-5673.

Others' events...
The National Association of College Auxiliary Services will present a symposium on the concept of privatization in higher education in Orlando, FL, Jan. 23–25. For details: 703/885-8826.
The Eastern Assoc. of College Auxiliary Services is soliciting program proposals for their annual meeting to be held in Quebec City June 5–8. Honorarium: $300. For details: 716/395-2497.

DIRECTORY UPDATES
September 28–October 27, 1993
Welcome New Members

Region 2 (Southeast)
- Frederick Comm. College, Frederick, MD. Caroline Kreimer (301) 846-2425

Region 3 (Midwest)
- Univ. of Toledo, Toledo, OH. Jerry Nogy (419) 537-8432
- School of the Art Inst. of Chicago, Chicago, IL. Mary Freeman (312)899-1226
- College of the Mainland, Texas City, TX. Peggy Blizzard (409) 938-1211

Copper Corporate Affiliate
- MFS Network Technologies, Omaha, NE. Robert Eide (612) 937-1153

Asst. Manager, Operations
Miami University (Ohio)

Responsibilities: Oversees & coordinates operation of telephone switching eqpt., ancillary systems, & cable plant, inc. maintenance, repairs, installation, traffic control, & sys. configs. Reports to Mgr. Assists in planning, proj. mgmt., & system reporting.

Qualifications: Working knowledge of telecom systems & operations, both technical & admin. Relevant work exp. with telephone utility, interconnect companies, or large in-house operation highly desirable. Hands-on exp with NEAX 2400 a plus. AA or BS in relevant field.

Salary Range: Mid $30s, DOE

Resumé, salary history, & names, addresses, & telephone numbers of at least 3 business references to: Miami University, Director of Business Services, Oxford, OH 45056

Equal Opportunity in Education & Employment M-F-H

Positions Available
Mgr. of Networked Computing Services
Southwestern University

Responsibilities: Planning & implementation of support services for users of desktop computer systems, network & telecom infrastructure; supervising ROLM voice & data PBX system support staff.

Requirements: Knowledge of design models, implementation techniques & hardware available for networks; superior organizational, written, verbal, & interpersonal skills; B.S. in electrical engineering, electronics tech, comp. sci., or other relevant combination of education & exp. in networking computers using TCP/IP, Novel IPX, & AppleTalk/Ethernet & in managing telecom services; min. 3 yrs comp. networking exp. in complex environment using routing of multiple protocols; exp. linking networks with Internet. Ability to interact successfully with end-users as trainer, troubleshooter, & resource person. Exp. with tariffed voice telecom desirable. Exp. with FDDI and/or ATM a plus.

Application: Send letter of application, resumé, salary history and 3 refs to: Office of Human Resources Job #9373, P. O. Box 770, Georgetown, TX 78627-0770. Deadline: Nov. 17, 1993 AA/EOE

Asst. Dir., Budget & Financial Services
Univ. of Calif, San Diego

UCSD Admin. Computing & Telecom Dept. seeks experienced financial mgr.

Qualifications: Must have progressively responsible mgmt. exp. in full scope of financial analysis, acctng., cost acct., and business planning. BS/business, pub. admin., finance, acct., or related field highly desirable.

Application: Call for brochure & questionaire. Submit questionnaire, 2 resumés, cover letter, current salary, 5 refs by NO. 30. 1993 to: Dr. Richard Garcia, President, RJA Management Services, Inc., 550 W. Duarte Rd., Ste. 6, Arcadia, CA 91007 Ph. (818) 447-3318 AA/EOE