President's Message

This month's issue of ACUMA NEWS will mark the end of my term in office and the beginning of a new year for Ruth Michalecki and ACUMA. It's hard to believe a year has gone by already and it is with very mixed feelings that I leave this office. Although the past year has been a lot of work, I have found the experience to be challenging, educational and rewarding.

I am grateful for all the support I received during the past year and would personally like to thank the members of the Board, all the other members in the organization who assumed additional responsibilities, and all those who volunteered to participate in our activities. To the members' credit, the level of interest within ACUMA continues to grow each year. It is very encouraging to see the high level of participation in the surveys that were mailed out and in the attendance at all meetings during the past year.

An association like ACUMA, with no paid staff, relies heavily on the time commitments of it's members who have helped ACUMA become a very strong and well recognized organization. Deregulation has certainly helped our Association grow in numbers but it has been the tireless efforts of our members who have prepared informative programs for our meetings, prompted the Association tirelessly, and developed affiliations with other organizations concerned about telecommunications.

I strongly encourage you all to become involved in ACUMA and consider running for office, volunteering to host a conference or seminar or participating on a committee. Your active involvement will contribute to the enrichment of the Association while at the same time I believe you will find the experience will add to your overall professional growth.

I have been a member of ACUMA since it was founded in 1971, and seen the efforts of all the members through the years help develop ACUMA into a truly great association. As a last parting word on this particular subject, I would simply like to say, it has been an honor to serve as your president during the past year and I thank all of you for this wonderful opportunity.

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During the past year I have had the opportunity to meet many people on behalf of ACUMA. The message that I received most was just how difficult it was to keep current on telecommunications technology. Most say this is a result of time constraints and lack of educational programs. In today's world, with regulatory scene and technology changing as fast as it is, it is mandatory for the professional telecommunications manager to find the time to read the trade journals and attend workshops and seminars. ACUMA has a

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TELECOM STUDY PROGRAM TO BEGIN

New York -- Beginning this fall, New York University will offer a certificate program in telecommunications that will eventually become an interdisciplinary major. The project is sponsored by a consortium of national companies interested in developing academic programs to generate telecommunications specialists.

Some colleges and universities offer continuing education courses in telecommunications. George Washington University, the University of Colorado at Boulder, Michigan State, Southern Methodist, Golden Gate University, North Carolina State and the University of Kansas have graduate programs in engineering or public policy. Michigan State, Ohio University and Texas A&M have undergraduate telecommunications majors, but the proposed NYU program has no precedent. One specific factor that sets NYU apart is the collaboration of many competitive vendors in a project that benefits them all.

Experience Was Teacher

Up to now, the telecommunications specialist learned his trade largely in the "school of hard knocks." Many professionals started their careers as telco engineers, installers or operators. Others have military backgrounds or were borrowed from technical fields such as electrical engineering. And some have advanced degrees in education or medieval history.

Managing corporate telecommunications involves large sums of money, and recognition is growing that a company's business may depend on its telephone system and data communications. As for telecom firms, those telephones need administrators, technicians and salespeople, but must devote much time and money to bring a trainee to productivity. An indication of the severe talent shortage is the degree of personnel piracy that goes on among competitors in the industry.

A political crisis is also brewing between telecommunications and data processing. For many executives, telephones are more familiar and less mysterious than computers. Thus the person in charge of telephones is sometimes considered less important than his DP counterpart. This is especially true when the DP chief has enough degrees to break a thermometer, and enough clout to convince the brass that an extra computer should be purchased before a modern voice/data PBX. Telecommunications managers need matching academic credentials to compete for power, money and respect.

Too Much Now At Stake

However, AT&T divestiture and the accelerating development of new technology now seems to rule out the haphazard approach to the training of telecommunications professionals.

The National Telecommunications Education Council (NTEC) was formed in January of this year to link industry and education in providing quality telecommunications programs at the college level. The organization is cooperating with the North American Telephone Association (NATA), the American Association of Community and Junior Colleges, and the American Association of Community College Trustees to act as a national clearing house for educational programs and materials. NTEC will also hold workshops and seminars throughout the U.S. in community and private colleges. Membership is comprised of education professionals and representatives of companies such as AT&T, MCI, GTE, Northern Telecom, DEC, TTI and Bell.

Two Areas In Trouble

MCI's manager of technical training and education, Dr. Bennett H. Berman, who (along with Dr. Steven Easkow) is co-director of NTEC said, "Industrywide, technical and sales-technical training are two areas that are really in a bad shape. When we are training in telephony it is the equivalent of the engineering sales representative. That is, someone who is technically knowledgeable, and becomes a marketing rep. This is what our interest would be in the NYU program--to develop a curriculum that would produce people who understand the technical side of operations so that they can go out and discuss needs, problems and solutions with a prospect."

Berman continued, "In general, the whole career field of telecommunications management is exploding. I think even small companies will be hiring an individual to manage both internal and external communications. Considerable amounts of money can be saved, so companies will be looking for young people who have managerial skills and technical understanding."

Cost $25,000 Per

When asked how much MCI spends to train someone with no experience, Berman replied, "Three years ago, we calculated the cost was running somewhere about $25,000. Now that does not take into consideration errors or lost productivity. Our formal training program has cut down on this, but as academic programs become available, people will come to us better prepared. The goal that we're striving for is that by 1990, each applicant for a technical job would have a minimum of an associate's degree in electronics technology with a major in telecommunications. On the management side, it would be an associate's degree in business administration also specializing in telecommunications."

In terms of his involvement with NTEC, Berman beamed, "MCI really put its money where its mouth is. I'm proud that we made the corporate commitment to support NTEC, and help fulfill the needs of the country. By 1990 we would like to see 200 colleges teaching telecommunications technology, and turning out four to five thousand qualified graduates each year."

Stuart Pink, director of NYU's Information Technologies Institute which is handling the details of the new program, told MIS Week, "We just changed our name from the Data Processing and Systems Analyses Institute because it connoted too much what we've done in the past. Now a large part of our audience is interested in personal computing and telecommunications. We're representing the direction of business and industry in general. There is a merger or synergism of voice and data technologies. To teach one without the other is a rather shortsighted way to go about the whole thing."

When asked about who might enroll, Pink said, "We want to serve the beginner, as well as the career change individual who wants to get into telecommunications, and the seasoned professional who wants to keep up with the new developments. The certificate program could take a couple years to be accredited, and then it may be a concentration within an existing associate's or bachelor's degree."

Over 260 Hours

At full tilt, the degree program will involve 260 hours of coursework such as: Introduction to Corporate Telecommunications, Basic Voice Telephony, Basic Data Communications, Transmission Theory, Financial Planning, Digital Network Design, Regulatory and Legislative Issues, AT&T Divestiture, Advanced

(Continued on page 3)
President's Message (Continued):

responsibility to continue providing ways to help our members in this important area.

In an effort to further our educational commitment to the membership, ACUTA will double the number of workshops and seminars during the coming year. The first of these seminars will be held on October 21-23, in Madison, Wisconsin. The topic of this two day seminar will be Telecommunications Management Information Systems for Colleges and Universities. At that time we will be discussing software systems for record keeping, billing, inventory control, traffic engineering, directory assistance, cost accounting and automated work-order processing.

The brochures for this meeting will be in the mail to all of you shortly. The telecommunications staff at the University of Wisconsin is pleased to be hosting this meeting and we are looking forward to having many of you visit our city. If you have any questions regarding this meeting, please call either Ruth Michalecki or myself for further details.

Sincerely,

Michael A. Toner
President

CORNELL UNIVERSITY
Senior Telecommunications Engineer

General Description: This is a new, permanent, and senior position within the Telecommunications Department to provide technical support and leadership for the installation and further development of new voice and data communications systems throughout Cornell University.

General Duties: Provide technical overview and project management for the installation of a new campus-wide PBX; provide technical leadership for the further development of that system; including the development of high speed data networks; provide technical support to Cornell faculty and staff in development of communications capabilities; assume responsibility for overall maintenance of Cornell's communications system and supervise the appropriate staff.

Minimum Qualifications: Bachelor's degree in engineering, preferably in EE or Computer Science; technical knowledge of telephony, data communications, large PBX's, and computer systems; 5-7 years related experience; good oral and written skills; computer programming skills.

Application Procedure: Please submit resume to:
Dr. Harold D. Craft, Jr.
Director, Telecommunications
Cornell University
104 Maple Avenue
Ithaca, New York 14850

Cornell University is an Affirmative Action/Equal Opportunity Employer

TELECOM STUDY (Continued):


The stated goal of the program is to coordinate segmented knowledge about telecommunications, and to provide mastery of the field. According to PINK, "Our philosophy is that we're providing a forum for industry to teach itself. We're looking for successful practitioners who are articulate, and willing to develop and share ideas. We just take care of the logistics. To make sure we were on the right track we went to both the International Communications Association (IOA) and the Communications Managers' Association (CMA). We asked them what we should have, and how to be practical about designing it."

NYU Advisory Board

NYU also has its own local advisory board, of which NTCE is a part. PINK explained, "The advisory board has input about what the program should be, and then later on they're going to be serving a monitoring and auditing function for us, reviewing our curriculum on a semester basis to make sure that the latest developments are incorporated, and that the quality of education—the classroom experience—is something that the University and the students can take some pride in."

Much of the credit for what has taken place so far goes to Carole Z. Cooney, chairwoman of the advisory board, who began consulting for NYU last year, and has proceeded to form the board and help structure the curriculum. "Carole's contribution has been significant," said PINK. "She knows all the right people. Trying to find out who we should be inviting to help us in this undertaking would have been a major study on its own. But the professionals she contacted readily agreed to join the advisory board, and some will even be teaching."

Individual members of the NYU Advisory Board include: Val Bala, director of telecommunications for Johnson & Johnson and president of the CMA; Chester K. Bellairs, director of telecommunications for ABC; Robert Amunziata, senior vice president of Teleport-Merrill Lynch; Harry Newton, president of Telecom Library; Perry L. Schwartz, president of InterTech Associates; Robert Lawley and Dan Muecke, both vice presidents of telecommunications for Bankers Trust; Mike Davies, Esq. of New York Telephone; and Florian Mikulski of Chase Manhattan Bank. Dr. Steven Eskin of the American Association of Community and Junior Colleges and Dr. Bennett H. Berman of MCI represent NTCE on the board.

Further information is available by calling (212) 598-7771, or writing to the program's coordinator, Tony Rizzo, Information Technologies Institute, New York University, 70 West 4th Street, New York, NY 10003.

("Telecom Study Program to Begin," is reprinted from the May 23, 1984 issue of MANAGEMENT INFORMATION SYSTEM WEEK.)

Success is measured, not by material gains, but by work well done.

Theodore N. Vail—AT&T
INFORMATION MANAGEMENT SAYS TELECOM MANAGERS FULFILL CRITICAL ROLE

Favors Giving Telecom Manager A More Visible Position

...by Jack Walsh

In an era when the "system is no longer the solution" and nearly everyone recognizes that the key to successful corporate information integration will lie in network integration, it is time to better understand and position the responsibility of the telecommunications manager.

For corporations truly to attain that much talked about "competitive edge" through using the new technologies, everyone—users, information system (IS) and office automation (OA) managers and particularly senior corporate managers—must recognize the critical role that communications technology will play.

In particular, they must recognize the crucial role of the telecommunications manager in achieving positive results.

At data processing (DP) and OA conferences and seminars we hear all too often that telecommunications technology is too important to leave to the telecommunications managers.

The rationale is often that the telecommunications manager staff "doesn't really manage the technology, but is really only concerned with technical issues."

Many of the speakers at these conferences state categorically that the telecommunications function should be limited to a title no higher than manager, and that the responsibility should be organizationally located within IS.

I, for one, feel these statements and recommendations fail to demonstrate an understanding of telecommunications' role and responsibility.

In a time when we are demanding more and more communications technology, in a world driven by the emergence and acceptance of the personal computer—a world in which the single-chip computer has altered traditional perspectives on every aspect of our workplace—the telecommunications manager's function is perhaps the most critical technological responsibility within most organizations.

With communications consuming 2 percent of gross annual sales dollars in the average corporation, and as much as 10 percent in heavily transaction-based organizations, the function increasingly plays a significant financial role as well.

It is interesting that as the telecommunications-manager function moves more and more from financial or administrative services to the IS department, we frequently hear such statements from the IS area as:

"How do you think we keep up with what's going on? Why can't we get the kind of supplier support that we get in data processing? Why can't we get accurate billing statements? Why are our profit plans always off? Why can't we decrease our costs? How can the new communication technologies affect our business plans?"

Given the opportunity, most telecommunications managers can answer these questions quite adequately.

What is that opportunity?

—Sufficient staff support to be truly effective in today's dynamic environment.

—Enough time to properly assimilate, analyze and direct corporate communications policies and strategies.

—Recognition and acceptance by senior management of the key role the function plays in the information revolution now underway.

In the confusion and even chaos since divestiture, the telecommunications manager is all too often the "unknown soldier" of the rapidly converging world of telecommunications, DP, OA and factory automation.

Unlike his highly visible counterparts in DP, with responsibility for critical production of data and large staffs, the telecommunications manager is all too often involved in critical but relatively mundane tasks. These include reconciling equipment records and billing statements, developing pricing predictions for equipment and developing explanations for why telecommunications profit-plan expense is significantly higher than anticipated.

All too often he feels frustrated. And is it any wonder, when he discovers that the local regional telephone company has decided, without notice, to have equipment pricing be reflected in a single year, rather than two or three?

We could multiply examples of the frustrations telecommunications managers face; local telephone companies fail to develop and present projections of equipment rental and purchase pricing as planned. They change their marketing representative several times over the year. The only way to obtain a purchase quotation for inhouse cabling and equipment is to agree to a billing arrangement forwarded by the regional operating company.

Couple these frustrations with the telecommunications manager's constant effort to maintain an up-to-date technology knowledge base and you have the markings of a drama.

Local-area network technologies, value-added and public data networks, distributed system architectures, bypass alternatives, computer-to-PBX interface standards, network standards, cellular radio and digital termination systems are but a few of the major issues facing the already overburdened telecommunications manager.

Typically, he will have only a handful of people to manage billing, regulatory and technology development, the telephone and telex operations staff and even the telephone directory.

While his DP counterparts average one staff member for every 100 employees, the telecommunications manager will more often than not have one staff member for every 1,600.

Clearly, it is time to recognize the telecommunications manager, and time to give him a more visible position in his organization. The change is long overdue.

(Jack Walsh, an OA consultant and frequent participant in industry forums, is a co-founder and principal of Integrated Strategies, Inc. and the Visual Technology Group Inc., both of New York).
MASTER OF SCIENCE DEGREE
IN TELECOMMUNICATIONS

...by David C. Metz - ACTTA Region 4 Director

The University of Colorado at Boulder offers a unique Master of Science degree in Telecommunications. Established in 1971, the program is designed to teach engineers the economic, social and political aspects of telecommunications, and to teach non-engineers how to talk and work with technical people in telecommunications. The interdisciplinary program includes materials selected from the disciplines of business, electrical engineering, law, political science, computer science, finance and sociology. Students are prepared to be leaders in the social, technical and administrative aspects of the rapidly growing field of telecommunications.

Students who enter the program have in common a special interest in telecommunications, but come from a wide variety of academic backgrounds. Recent students have come from such diverse fields as electrical engineering, journalism and anthropology. Course selection in the program is individually tailored to meet the needs of each student and courses are chosen to provide a well-rounded balance between technical and non-technical areas. While many students enter the program directly from undergraduate schools, a large number have significant experience from careers in business, education, government and the military, in telecommunications and many other fields.

Each student must take at least six credit hours each of technical and non-technical courses out of the total minimum degree requirement of 32 credit hours. Six hours are devoted to the major topic chosen by the student with the approval of his/her advisor. The remaining hours are selected according to the interests and needs of the student. While it is impossible to complete the program in 12 months, the majority of students find that it is desirable to spend 18 months in the program in order to gain an understanding of a fuller range of the many issues which now face telecommunications professionals. Students are admitted to the program for both part-time and full-time study, and special arrangements can be made for executives who cannot afford to spend extended periods away from their work.

The program is unique in the breadth of its interdisciplinary nature. Courses are offered in the technology of telecommunications systems and media, their cost effectiveness, applicability to specific situations, capacity for expansion, etc. Planning, finance, administration and management of telecommunications systems and organizations are also studied. An understanding of political, regulatory and legal issues involved at the international, national and local levels is gained. Guest lecturers prominent in the industry supplement course work taken from a number of the University's traditional schools and departments.

Starting in the Fall Semester, 1984, the program plans to offer a new laboratory course based on PBX equipment donated by several major manufacturers. The laboratory will be unique among masters degree programs in this field, and will feature PBX systems donated by ROLM, Northern Telecom and ATT-1S. Analog and digital carrier systems also will be present for laboratory experimentation. Students will have an opportunity to observe the systems as they react to test situations such as different levels of loading, data speeds, etc., and to learn far more about various voice and data features, system management concepts, etc., than can possibly be taught in more conventional ways.

Requests for additional information about the program, as well as applications, should be addressed to:

Professor Leonard Lewin
Telecommunications Program Coordinator
Department of Electrical Engineering
Campus Box 425
University of Colorado
Boulder, Colorado 80309

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AUDBURNT UNIVERSITY

TELECOMMUNICATIONS MANAGER

Auburn University is seeking an individual that has had at least five years of extensive experience in the area of voice/data/video transmission. The person should have had some management experience in the field of telecommunications and outstanding oral and written communications skills. Such person should have the ability to work well with people, analyze complex technical and administrative problems, and formulate viable solutions to such problems.

The University is embarking on a project of analyzing its total communication needs. Outside consultants have been retained to assist in this project. It is envisioned that the individual that is hired for this position will work closely with the consultant as well as the administration of the University. Accordingly, it is imperative that the individual be a self-starter who is ready to accept a great deal of responsibility in a dynamic environment. Individuals with an advanced degree in a related field are preferred but an equivalent combination of education and experience will be considered.

Interested parties should submit a resume, a list of at least four current references and salary expectations to:

Office of Business Manager and Treasurer
105 Sanford Hall
Auburn University, AL 36849

The University desires to fill this position as soon as possible and all vita should be submitted no later than August 27, 1984. Auburn University is an Affirmative Action/Equal Opportunity Employer.
AT&T: WHAT WAS IT WE WERE TRYING TO FIX

...by Brian O'Reilly

AT&T WAS BROKEN UP so that no one company would control the $75-billion-a-year telecommunications industry. Unfortunately, no one company is now responsible for things that go wrong. The result is increasing pain and suffering for customers--businesses in particular—who can't get the service they need when they want it.

You wouldn't want to put Ma Bell back together to solve the problems. The new competition is already lowering prices for all kinds of equipment—including some that the phone companies themselves buy—and giving more customers easy access to a variety of long-distance networks. But the breakup has also severed old ties and set former allies to feuding in a business where cooperation and smooth relationships mean everything. The old AT&T was one of the world's great providers of service, and the system that replaces it may never perform as well.

Residential phone users have done most of the squawking to date. Some have just been confused—thousands marched into the local phone company's offices before divestiture carrying their leased phones under the erroneous impression that they had to turn them in and buy new ones. Others can't make heads or tails of phone bills that may include separate AT&T listings for equipment and long-distance calls, and another charge from the local company for its service. And no one can be sure whom to call (write?) when the phones stop working. The problem could lie in the handset from AT&T, the extension cord from Radio Shack, the line from the pole owned by the local company, or a combination of all three. Whatever the players are eager to repair another supplier's problems, finger-pointing has become endemic. "If I call up to say I've got trouble," complains an executive, "they always get back to me in half an hour to say, 'The problem isn't on my end.'"

Customers can probably learn to live with the inconveniences. "People get electricity from one place and toasters from another," says Howard J. Trinane, AT&T's chief counsel. "They will learn to do the same with telephone service." Indeed, outright breakdowns have been rare, and complaints from residential customers to state regulatory commissions have been dropping.

No such accommodation appears in store for the business customer. The worst problems have shown up in the installation of private lines—the custom-made and specially dedicated phone lines that connect two and sometimes dozens of points for a single customer. A securities firm, for example, might use one private line to connect a branch office with headquarters, and another to keep a broker in touch with the trading floor. Private lines both carry voice traffic and--modified with special central-office equipment--relay up to 1.5 million bits of computer data per second. That's capacity enough to transmit War & Peace in 13 seconds. AT&T has installed 315,000 private line circuits for 31,000 customers to date. The line provided $3.8 billion of AT&T's revenues last year.

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Installations of new private lines slowed abruptly in the early days after divestiture. The delays have caused enormous problems for customers ranging from General Electric, with a 12,000-circuit network connecting 850 locations, to a travel agent in Salt Lake City who couldn't move into new offices without the line for his reservations terminal. Before divestiture, 97% of private lines were installed on the dates promised, according to AT&T; in April the rate had dropped to 20%, and even the company no longer has much confidence in the dates it predicts.

The private line problems have created a public relations nightmare. Worse, they may be driving away some of the very customers AT&T is most eager to woo: the big users with enormous telecommunications budgets who can abandon AT&T almost entirely if they have to. Control Data was one of the first to complain officially to the Federal Communications Commission. The company uses phone lines to handle remote date-processing for customers around the country; without new lines it cannot add new users or even serve existing ones adequately. Western Union, which operates one of the biggest private line networks in the country, sent a catalogue of complaints to the FCC itemizing 26 cases of disconnected lines, incorrect billing, and missed installation dates. The Bank of America can't get lines from San Francisco to Manhattan, where New York Telephone is suffering computer and organizational confusion that compounds AT&T's problems. A major insurance company can't move its employees into new offices in Philadelphia because data lines are three months late and no firm installation date has been set. "AT&T's expertise has disappeared," complains William P. Pomeroy, head of General Electric's communications system. "It's melted into a pool of butter."

Divestiture was an enormous undertaking. Its costs were a good part of the reason AT&T's income, in its last year as a single entity, fell $7 billion. So disruptions were to be expected. Thousands of employees were shifted. AT&T's Long Lines department (now AT&T Communications), which once handled only interstate service, took over responsibility for thousands of long-distance circuits inside the states as well. AT&T and its orphans had to establish myriad new prices and set up new computer programs to handle others.

AT&T also inherited from the local phone companies the low-cost WATS lines and toll-free 800 lines used by many businesses. Counting those circuits and private lines, total orders for AT&T Communications jumped from 18,000 a month to 60,000. Many of the employees AT&T acquired to process the orders got almost no training in new procedures before they started working. Orders had piled up during a three-week strike in August and were often lost. Clerical workers had to struggle with an unwieldy order form that required them to plug various codes describing a private line order into 240 blank spaces. There were so many errors on the order forms that AT&T technicians couldn't decipher them and begin wiring new circuits. Because many local companies had different order-entry systems, problems worsened. In Washington, D.C., Chesapeake & Potomac Telephone rejected 35% of the first 1,000 orders from AT&T because they were either wrong or incomplete according to its standards.

SUCH PROBLEMS, like customer confusion, might have been expected to pass in time. But breakup has also sullered a delicate web of formal and informal relationships that bound the old Bell System together and was essential for making it work. Like a parent (Continued on page 7)
who fails to realize that the children have turned into surly adolescents with agendas of their own, AT&T seems not to have anticipated that its relationships with the spin-off Bell operating companies would change dramatically. The one-powerful subcommittee and economic incentives that encouraged a regional company to work frantically to solve an AT&T problem have disappeared.

Nowhere did the rupture cause more friction than in the division of responsibilities for private lines. AT&T's Long Lines department had always supervised those lines—taking an order from a customer, passing it from the sales department to AT&T's engineering center, notifying, say, New York Telephone and Illinois Bell to install local lines of specific transmission quality and capacity by a certain date, then coordinating all the testing. If Long Lines didn't think the local company was moving fast enough, it could put pressure on the employees. "They used to send out orders that we call 'do-it-dammit' letters," recalls a New Jersey Bell employee. "Long Lines didn't care if we had something else to do. We had to do what they said, dammit."

Knowing its authority would end with divestiture, AT&T began developing a new set of computer programs last year for passing those requests to the local companies. It asked for a complementary system from a support organization that had been set up to help the operating companies. But when the breakup finally came, AT&T discovered that the support organization had designed a system to meet the needs of the local companies, which differed in many details from the one AT&T had in mind.

To make matters worse, when the system came out in October only some local companies adopted it. So the support organization issued another system in November. A few companies adopted that standard. Others adopted part of the October system and part of the November system. "When I saw that second version come out in November, I knew we were in big trouble," says John " Gus" Blanchard, an AT&T Communications vice president assigned to solve the problem.

AT&T's authority, it turned out, had eroded even before divestiture as the soon-to-be independent operating companies began to plan for their own futures. Today those companies are even less reason to adopt AT&T procedures. "The operating companies don't all work in standard ways," says Phillip A. Campbell, Bell Atlantic's top strategic planner and former chairman of New Jersey Bell. "We're not the Bell System anymore. We're each optimizing for our own needs."

That kind of thinking will increasingly pit AT&T and the operating companies against each other. Before divestiture, profits made on all Bell System private lines were divided among the operating companies according to the proportion of assets they devoted to that service. Now there is no clear connection between the total system's performance and the profits each member can make. More visible profits are to be had from other pursuits—from the sales of equipment to customers, for example.

BRAMLING OVER PROFITS began even before divestiture. One of the biggest problems in devising the computerized order-entry system was setting equipment prices and calculating labor charges for private lines. Each side was afraid the other would use the confusion to its advantage. "I was at a meeting in September where it was very clear that we would not share any information with AT&T," recalls Leonard J. Curnelle, a former product manager for network services at Pacific Telephone. "A guy was there from AT&T, trying to develop their new prices, and we asked him to leave." Crunelle says Pacific Telephone knew what customers would pay for a private line between San Francisco and Los Angeles but didn't want to share that valuable information with a company that would be getting a portion of the business after divestiture.

In their slugfest for new business, AT&T and the operating companies are often landing body blows on the customers. New York Telephone won't sell some high-capacity lines to AT&T because it fears AT&T will use them to help a large customer bypass the local phone network and connect directly with long-distance lines. While the companies scrap, the customer waits.

AT&T and the operating companies are also beating on each other in the courts and regulatory chambers. Bell Atlantic has six lawsuits or regulatory actions going against AT&T. In one, it is protesting AT&T's efforts before the FCC to get a monopoly on business with the federal government, which would lock Bell out of big contracts. Meantime, AT&T has asked the FCC to lower the rate of return local companies are allowed to earn on facilities that carry AT&T's long-distance traffic. If the FCC approves, AT&T's earnings will increase at the expense of the local companies.

Some big customers are starting to worry that the battling will poison the atmosphere down in the local company service departments. "The low-level employees can screw you," says the communications director at a major bank. "At the executive level an operating company can be laying fiber-optic cable to accommodate AT&T, and in the trenches an installer can be terrified his company will be cut out of the market and think he has to do something to slow AT&T down."

All this nose-blowing cannot be what the architects of divestiture had in mind when they foresaw increased competition. "I don't think anyone ever realized that AT&T and the operating companies would be locked in mortal combat," says a planning department official at AT&T. "But the combat is getting fiercer all the time, and AT&T is beginning to insist that the local companies do some yielding. Gus Blanchard says AT&T comes out of divestiture having to beg for service from the local companies. He adds, 'It's not supposed to be that way.'"

AT&T could start throwing its weight around: it might decide to connect directly to customers, bypassing the local companies entirely. Perhaps testing the waters, it recently won a court decision against Pacific Bell allowing it to install credit-card phones at Los Angeles International Airport. Pay phones had always been the property of the local companies. AT&T would take a lot of flak in the courts, the FCC, and state regulatory bodies if it tried to bypass the local companies in a big way. But it might well win if its efforts appeared to offer the best solution to a mounting service crisis.

The operating companies, meantime, are keeping their fists up. They were limited by divestiture to providing local phone service and selling equipment, but already are seeking permission to offer more services. Bell South wants to develop an interstate communications network for NASA by leasing facilities from long-distance carriers. New York Telephone hopes to provide services within its network to help different types of computers communicate—competing with a similar service AT&T already offers.

Can the companies chase all this new business and still provide adequate service? "One of the operating companies wants to go into the international (Continued on page 8)
telecommunications business," complains Phillip C. Omtad, a lobbyist for Control Data. "I wish they'd concentrate on solving the private line problem before they do that."

At worst, the operating companies could run into irreconcilable conflicts of interest. William F. Baxter, the former assistant attorney general who started the divestiture talks with AT&T, thinks today's problems began when federal district court Judge Harold H. Greene, who presided over the divestiture, gave local companies permission to sell equipment. "That decision re-created all the problems that were the reason we broke up AT&T in the first place," he says. The local companies now have an incentive to give preference to customers who buy equipment from them and second-rate service to those who are using AT&T equipment. To avoid making matters still worse, Baxter says, it's imperative to limit the local companies' future expansion into new areas.

A RELATED FEAR is that the operating companies will poorly serve customers in markets they intend to enter in the future. "Suppose a local phone company is planning to provide computerized information services five years from now," says Philip L. Verveer, a Washington attorney and former Justice Department lawyer. "Will they be thinking up ways to use their billing equipment to help Dow Jones with its News Retrieval?"

Blanchard says his group is making headway on the private lines. The company has put more than a thousand added people to work on them and has started to talk with local companies about ways to reconcile the procedural differences. He recently predicted that the backlog would be cleared up by the end of the year.

A more radical solution may be shaping up. According to the Eastern Management Group, a telecommunications consulting company, half of the 200 biggest U.S. corporations are hunting for someone to handle their communications needs—serving, in effect, as a general contractor that would parcel out the work. So far nobody provides that service, but with desperate customers willing to buy it at a premium, suppliers should not be long in coming forth.

Several major companies are in a good position to go after the business. GTE already owns both local phone service and the Sprint long-distance network. IBM owns 23% of Rolm, a major maker of electronic phone switches, and 33% of Satellite Business Systems, one of the biggest voice and data transmission companies. Small entrepreneurs are also apt to emerge as dozens of midlevel men skilled at negotiating the details of service. Even AT&T could be a contender if it can somehow restore its battered reputation. In a narrow sense, at least, Ma Bell may yet be put back together again.

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BITS & PIECES (Continued):
Olympics. I was there a few days prior to the annual Calgary Stampede and what great fun. Mel and I visited Banff and the Banff Royal Springs Hotel. (the site of the 1985 Annual ACUTA Conference). What a treat ACUTA members have in store for next year. I will be telling you more about this dream location in future editions of ACUTA News. In the meantime, I am looking forward eagerly to my year as President of ACUTA, and to seeing some of you in Boston very soon....

MIDWESTERN TELECOMMUNICATIONS CONFERENCE '84
The Chicago Industrial Communications Association is hosting the 7th Annual Midwestern Telecommunications Conference on October 14-18 at the Chicago Marriot Hotel.

Featured sessions will cover basic voice/data, traffic engineering, fiber optics, voice mail, cellular radio, strategic planning, and office integration. In addition to these informative sessions the largest telecommunications exhibit in the midwest will be held in conjunction with this conference.

Participating associations in this meeting will be:
Chicago Industrial Communications Association
Minnesota Telecommunications Association
Mississippi Valley Telecommunications Association
Michigan-Ohio Telecommunications Association
Wisconsin Telecommunications Association
Indiana Telecommunications User Group
Northeastern Wisconsin Telecommunications Association
Iowa Telecommunications Users Group
Midwest Communications Association
Mid-American Telecommunications Association
Missouri Valley Communications Association

Registration fee is $250.00 for the first attendee and $200.00 for each additional attendee.

For further information and registration information please contact Bob Hagglund at (312) 275-3000.

1984 ACUTA FALL SEMINAR
The ACUTA Fall Seminar will be held October 21-23, 1984 at the Concourse Hotel located in downtown Madison, Wisconsin. The topic of this seminar "Telecommunications Management Information Systems For Colleges and Universities," will focus on the concept of telecommunications managers operating their own telephone company.

Discussion will concentrate on typical requirements such as cost accounting/financial analysis; automated inventory control for voice and data equipment; automated work-order processing; trouble-reporting; wiring and cable inventory for voice and data services; network engineering; billing reconciliation and chargeback capabilities; and telephone directory assistance.

The main sessions will run on Monday the 22nd and Tuesday the 23rd. Tuesday will also feature a panel of representatives from several different industries who will discuss various telecommunications services.

Brochures and registrations forms for the seminar will be out in the mail soon, so be sure to mark the dates on your calendar. For further information contact the seminar host, Michael Toner at 608-262-0521.