ACUTA eNews October 1983, Vol. 12, No. 10
While conference, stand business this utr-Ir ty services. Increased eventually disturbing Included Result: Services Communications) reselling the service $400. Expected). Users separate actron will certainly be-involved in the "fut"ri., ii it--' issue people paper access charges normally total! can you. article in the article in Cost of AT&T, and installation. Between AT&T' and OCCs affected by this order are: MCI, Western Union Corp, ITT Corp., and GTE-SPRINT. Result: The margin between AT&T and OCC Network Services will shrink!

Included in the article in CCMI REPORTS is the following note from Editor's Notes: "The most disturbing aspect of the FCC's access order is its shameless scam 'protecting the residential user' by assessing the business community a 200% premium surcharge on trunk lines. Not only is it substantially less costly to provide access facilities to the business community, as any student of Economics 101 will tell you, the consumer eventually pays the tab in any event. As with most utility expenses (oil, gas, electricity, etc.) increased costs are marked up at every point in the business chain---from raw materials and manufacturing through retail outlets---resulting in a 2-300% inflator in the consumer cost of goods and services. There is no argument among economists on this point---the consumer gets the raw end of the deal. Based upon Commission's credentials this regulatory body will be hard put to plead ignorance in its decision. I guess it's simply too much to ask of any governmental agency to stand above politics and truly work for the public interest".

While we were in Boulder at the ACUTA Annual Conference, someone suggested ACUTA take an official stand concerning the access charge in relation to

---Ruth Michalecki, Nebraska

PARTY LINE, continued:

Centrex Service. What would appear to be more effective and reflective of each individual ACUTA member, would be to encourage each of you to write to your Congressman and Senators, make your views known and ask them to support your views. If you can provide data that shows the impact your institution would face, include that data with your letter. Whether you support or oppose the access charge for long distance, take a few minutes, write to your representative, make your views known! It is still the best tool we have and we should exercise it more often....

* * * * * * * * *

By the time you receive this issue, our seminar on the LATA structures will be over. I will try to summarize the information we receive for our members in our next issue of ACUTA News. We all know the LATA structure will change our whole concepts of networking and optimization.

Then in November, (13, 14 & 15, 1983), ACUTA will sponsor a seminar at Berkeley, California. Uni of California-Berkeley will be our host for an updated version of a seminar on "Profit Center Management". This seminar was conducted at Tulane last year and proved to be a highly successful and informative session. If you haven't registered yet, and you are interested in attending---be sure you register at once! Hotel space is limited and they will hold our rooms only until October 15, 1983....

While we are on the subject of seminars and workshops, if anyone is interested in hosting a seminar next year, please give me a call. We are looking at possibly three sites. A seminar normally involves 2½ days and about 50 participants.

* * * * * * * * *

IBM is conducting an experimental Artificial Intelligence Program that could lead to machine recognition of a person's social class. It is aimed at evaluating a letter, document or memo to assess the style, syntax and construction used by the author. The immediate application is to highlight "inappropriate style" in documents prepared by managers. Future applications could be applied to determine social origins, politeness, and general character of the writer. Long range goals would be to provide office workers with intelligent applications for natural text processing. It would address incoming materials, giving a synopsis of contents, highlighting items known to be of interest to the manager, generating indexing terms for future retrieval and it will critique documents prepared by the manager. .....If only it would do dishes, what a future!
PRESIDENT'S MESSAGE

I'm sure many of you are all having the same experience on your campus. August and September is always the busiest time of the year for us here at Wisconsin because it is the beginning of the school year. New people are arriving on campus who require new phone service, existing service must be moved and changed to accommodate normal departmental needs and lastly because all departments are flush with new budget money and are making changes that were put off from last year. The telephone strike this year only added to the confusion already in progress on our campus. Before the strike, we were already two weeks behind schedule on all campus telephone installations. The arrival of the nicely timed strike then added an additional three weeks delay to all our orders.

The only amusing thing I find to come out of all this is the amount of greed that seems to surface in times of crisis. To some there is not such thing as waiting ones' turn. The axiom seems to be: while almost all will wait patiently, those inconvenienced the least will make the most noise about getting service first. I'm sure Murphy also has a law to correspond to this phenomenon.

It is times like these that one must attempt to invoke a little Irish Diplomacy: This is the ability to tell a man to go to hell in such a way that he looks forward to the trip.

The "President's Message" is written each month for the purpose of keeping the membership advised on issues currently being discussed and of recent decisions made by the ACUTA Board of Directors. Traditionally, the Board of Directors meet via conference call on the first Thursday of each month to report on their areas of responsibility and to discuss general ACUTA business matters.

At the time of this writing, the Board has not yet had their first monthly conference call of the new year. However, in the absence of a Board report, I would like to pass along several items that have come to my attention here at the office.

The results of the survey taken at the Boulder conference indicate the basic telecommunications short course was very well received by those attending the sessions. This is very encouraging because we have felt for quite some time now that a dual tract concept at our annual meeting would be accepted by the members. In the coming months Past President Steve Harward will be investigating other basic courses in an effort to further develop a series of individual workshop/seminar short course programs. We would also aim to incorporate these courses into the annual summer conference program on a separate tract much like that employed at Boulder this year. Any comments or suggestions on this project should be directed to Steve Harward. Phone: (919) 962-8353.

PRESIDENT'S MESSAGE (Continued):

In the past few years several of the Board members have written "How To" handbooks to be used as guidelines to develop consistency in conducting ACUTA business. To date we have a Finance manual and a Conference guide handbook.

Our Finance Chairman, Michael Grunder, has suggested that we start an ACUTA "How To" series on different, relevant telecommunications subjects. These manuals, written by ACUTA members, would be published and distributed to all the members.

Although the subject matter is endless, some suggested topics might be: How To Write An RFP, Pitfalls of Buying Your Own Telephone System, Helpful Hints of Facilities Work, Successful Contract Negotiation, Optimizing Long Distance Service, Repair and Maintenance of Your Own Telephone Equipment, etc.

I think this is an excellent idea and invite all the ACUTA members to assemble and submit a "How To" document or manual on one of your telecommunications experiences for publication and distribution.

As a final item this month I would like to remind those interested in holding a future meeting to contact Ruth Michalecki. For planning purposes we are compiling a list of people willing to host a meeting so a calendar for the next couple of years can be developed. Ruth can be reached at (402) 472-2000.

Sincerely,
Michael A. Toner, ACUTA President

FREE PUBLICATION

ACUTA members seeking additional information regarding Local Area Networks may obtain a National Bureau of Standards publication entitled "Guidelines for the Selection of Local-Area Computer Networks" by calling the National Bureau of Standards at 301-921-1000. A copy of this publication will be mailed to you free of charge.
...by Robert Feldman

ANN ARBOR, Mich.--Present uncertainty about the impact of the per-line access charges on the state level will be followed by anger and dismay when they are announced next month, says a leading telecommunications industry consultant.

Dixon Doll, president of the DMW Group with headquarters here, adds that the confusion about transmission costs next year has already led to a "psychology of fear" among communications managers. One result is that some of them are unable to submit estimated budgets for the next year.

"Lacking details about the new tariffs, users are unable to predict their costs, revenues and prices," said Doll. "No one can predict what the total access charges will mean and how they will be applied on the carriers, resale carriers and the end user.

"I've seen the model access-line charges that have been filed in California," Doll observed. "Not only are they complex as hell, but they will create a new environment in which the end-to-end connections and service control will be much more difficult to obtain.

"As a result, the internal operations staff of many users is doubling and tripling in size just to keep even."

Doll predicted that when the new tariffs become known to business users, "they're going to go right through the roof, start complaining to their Congressmen, and there will be unbelievable political chaos."

Because of the bifurcation of transmission service and the division of responsibility between the local telco and the interexchange carrier, communications managers are putting in their procurement packages requests for advanced devices for diagnostics, technical control and performance measurement equipment.

BRIDGES A DILEMMA

Doll said a typical dilemma confronting a multi-point user is what to do about the bridges that are now part of his circuit.

"Are they going to be handled by the BOC or by AT&T Communications (ATTCOM)?" Doll asked. "An interesting option presents itself--is it better to have the BOC do the bridging and simply call in ATTCOM to tie the bridging points together?"

"Or is it better to have ATTCOM do the bridging and only depend on the BOCs to do the tail circuits?"

"A third possibility: the customer can do the bridging on its own site."

Should the user seek a turnkey solution, he might be still worse off, said Doll. "Every vendor will have his axe to grind, and the only thing the user can be sure of is that the vendor will have optimized his own interest," Doll believes.

Doll said his consulting business has "exploded" in the last 60 days as a result of the general confusion. "We consultants intend to make hay while the sun shines," he added.

In addition to transmission uncertainties, there is a perceptible pressure on people to make the GEX decision," he observed.

"They see Centrex becoming more and more hopeless, and some time ago we began advising clients not to sign long-term Centrex commitments. When I look at the access charge for Centrex (the FCC has set it at $2 per line), I see that our advice was very good. The concentration ratio that the FCC was talking about putting into effect fell by the wayside, and now Centrex users have really been clobbered."

Doll said that users are leaving Centrex in droves, despite telco "gimmicks" to keep them on board. "None of them addresses the fundamental requirements of the office," he charged. "People don't want to go back to the local telco office to do their local area network data switching and they can't get other PBX features out of Centrex."

Sam Ewing, the chief of telephone and sound systems for the County of Orange, Calif., says that the local operating companies serving the county government switches, Pacific T&T and General Telephone, had notified him of "whopping increases in next year's rates. The county has commissioned a study of its communications problems.

"Our last year's communications budget of $4.1 million is going to shoot above $4.6 million, for sure," Ewing told MIS Week. "So our Centrex has to be phased out. Our biggest concern is the maintenance of equipment, and we're putting out RFPs for premises equipment to several of the big vendors."

Ewing said that the confusion of divestiture had already started for him. "We have to do our own telephone worksheets now, and I've had to hire two new full-time consultants and a clerk."

("Access Charges Cause Anger, Dismay" is reprinted from MANAGEMENT INFORMATION SYSTEMS WEEK, September 14, 1983 issue.)

(Above) One of the banquet speakers, Jim Tunney, tries to motivate ACUTA members during the Annual Conference in Boulder, Colorado.
THE BREAKUP OF AT&T IS A MONUMENTAL BLUNDER

The decision to break up the American Telephone and Telegraph Co. was wrong.

By now, the U.S. Department of Justice, U.S. District Harold Greene and AT&T have made the final adjustments in the consent decree that ended the government's misdirected antitrust case. As a result, major changes in the industry--indeed, the entire country--is now barreling toward the black hole on the other side of Jan. 1, 1984.

Every information system (IS) director, professionally, and every U.S. resident, personally, will come to rue 1/1/84, as the date is referred to in the telecommunications business. Everyone is about to become an unwilling pawn in the greatest socioeconomic experiment in American history. By the time it is over--if it ever ends--everyone will be reminded of something no one should have forgotten in the first place. It is a basic law of human nature: If it isn't broken, don't fix it.

What were the arguments? The government said AT&T stifled competition and controlled the pace at which new technology was introduced into U.S. telephony. The charges are basically true. AT&T's monopoly was a matter of state and federal law and regulatory practice. Until the early 1970's, it was the only long-distance voice carrier. In most major cities, it is still the only phone company with wires on the poles. As for new technology, it was introduced into the U.S. telephone network at a glacial pace. AT&T was afraid of "shooting itself in the foot" by outsourcing equipment worth tens of billions of dollars.

Bell offered counter-arguments. The United States has the best phone service in the world (try making a long distance call in France some time). The monopolies were granted by law and regulated at both the state and federal level. All the practices the Justice Department attacked were condoned by a number of legislators and regulators. The slow pace of new technology introduction was required to ensure a smooth-running network.

And, Bell offered what many believe was and still is the ultimate argument: An integrated system allowed long-distance, business and special services revenues to be used to subsidize home telephone rates, creating universal service. This AT&T belief was first codified in 1908, when the father of the modern Bell System, Theodore N. Vail, coined the heavily promoted phrase, "One policy, one system, universal service."

Vail succeeded in spreading the telephone into every home and business in America. Much of our freedom and our economic success in this country stems from the global availability of telephone service which he and AT&T are responsible for. There are millions of people who cannot be reached by phone. In the Union of Soviet Socialist Republics, by contrast, phones are rare. The Soviets do not even publish phone books. Free communications undermine totalitarian regimes. When Solidarity was crushed in Poland, the first thing the government did was cut off long-distance telephone service.

Splitting up the Bell System will probably not mean the end of democracy in the United States, or even the availability of phone books. But it could mean less-than-universal telephone service. And AT&T officials tried to warn of this possible consequence.

They were scarcely heard above the din of special-interest pleading, led in large part by savings-hungry IS managers who, blinded by the prospects of elaborate data services and lower long-distance costs, ignored the long-range social effects of a phone system without cross-subsidy, without strong central authority to set standards.

What will we see in the years to come? We have examples aplenty in the DP business, and would that IS managers, among others, had looked at them in time. Try, for example, to communicate with a Racal-Vadic 1,200 baud modem if you happen to be Bell 212A compatible. Until now, every telephone in the world could communicate with every other telephone. Now that Ma Bell has been broken up, will that continue to be true? No one knows.

But many people do think that Bell was right. Universal service and controlled change were the best way to run a telephone system that provided maximum benefit to everyone.

Why, after all, did AT&T have what amounted to a monopoly in the first place? Students of history will recall the one prior period during which there was unfettered competition in American telephony, between the installation of the first telephone exchange--in New Haven, Conn.--in 1878 and the historic Kingsbury commitment of 1913.

In major cities, there was chaos, as the presence of multiple, unconnected phone companies required multiple phones on corporate desks. Long-distance service was expensive and difficult, not only because of technology, but because there was no integrated system.

Vail of AT&T saw the disorder and in classic laissez-faire style, set about to change it by buying up all his competition. The coup de grace came in 1909 with his purchase of the Western Union Telegraph Co. (WU). Federal trust-busters threatened court action to force WU to be spun-off, so on Dec. 19, 1913, AT&T in the person of vice President Nathan C. Kingsbury wrote the U.S. Attorney General a letter that amounted to a consent decree: It agreed to sell WU, not to buy any more telephone companies without federal approval, and to allow all independent phone companies access to AT&T long-distance lines.

This served the country well until 1949 when another antitrust action was started, this time to force divestiture of Western Electric. The 1956 consent decree did not call for that drastic measure, but did keep AT&T out of the DP business for 28 years.

A third time proved the charm. The U.S. Department of Justice came at AT&T again in 1974, and this time after only eight years, it won the consent decree that everyone knows and most people love.

The readers of this newspaper are sophisticated (Continued on page 5)
THE BREAKUP OF AT&T (Continued):

consumers of telecommunications. They will benefit personally and professionally, from the new system. At home, they will buy telephones, join MCI or Sprint, and otherwise come out ahead. At work, they will dump Centrex systems for all-electronic PBX switches, buy their data lines from other common carriers, and otherwise cavort like kids in a candy shop.

But the majority of phone customers will not be so lucky. The poor, the elderly, the uneducated will likely be confused about the three separate, higher phone bills they may get next January -- local service, long-distance service and equipment. Nationally, millions of people will be priced out of the market for telephones. Some of them will be people a coporation may want to reach. Maybe the Bell breakup will mark a resurgence in telegram traffic.

IS managers will be affected too, as they try to figure out whose fault it is that phone service has deteriorated at work and at home. The number of incomplete calls will probably rise in direct proportion to the number of separate, independent companies handling each switching effort. Cost-cutting usually means decreased maintenance, which means more bad lines. Many people say the rot has set in already.

Those who formerly stood at the head of the lynching mob screaming for Ma Bell's blood may have many long hours to reconsider their actions, as they attempt to complete once-simple telephone calls.

Perhaps the breakup will make sense in the long run, but how it will take is an open question. As John Maynard Keynes said, "In the long run, we are all dead."

("The Breakup of AT&T Is A Monumental Blunder," is reprinted from INFORMATION SYSTEMS NEWS, September 19, 1983. Written by Paul E. Schindler Jr.)

FUTURE OF PHONE SERVICE CONCERNS BEREUTER

(Lincoln Star, Sept. 8, 1983)

Preserving telephone service will be the crucial consumer issue of 1984, Rep. Doug Bereuter, Nebraska, said Wednesday.

In an address to the combined Optimists Clubs of Kearney, Bereuter noted recent predictions that rural telephone rates could double or triple in the next few years.

"A telephone company headquartered in rural Nebraska has projected that within the next couple of years, the average monthly charge to its customers will increase by 240 percent," the 1st District Congressman said.

"There are predictions that the fixed portion of the telephone bill, not including long-distance rates, will increase at least an incredible 75 percent for the average Nebraskan in 1984 if Congress doesn't intervene."

Bereuter has co-sponsored a resolution directing the Federal Communications Commission to provide the House with estimates of how many Americans would suffer economic hardship or would be forced to disconnect their telephones as a result of these changes.

THE SEVEN REGIONAL BELL OPERATING COMPANIES, JANUARY 1, 1984


2. PACIFIC TELEYSIS: Pacific Telephone and Telegraph and Nevada Bell. Includes the states of: California and Nevada.

3. SOUTHWESTERN BELL CORPORATION: Southwestern Bell Telephone Company. Includes the states of: Texas, Kansas, Missouri, Oklahoma and Arkansas.

4. BELL SOUTH: Southern Bell and Southeastern Bell. Includes the states of: North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Mississippi, Alabama and Louisiana.


THE SEVEN REGIONAL BELL OPERATING COMPANIES, JANUARY 1, 1984

("The Seven Regional Bell Operating Companies, January 1, 1984" and map is reprinted from the August 1983 issue of TELEPHONE ANGELS.)
TAKING CONTROL OF AUTOMATION

...by Mary E. Locke & Paula Calise

The stage has been set for office automation (OA)--the vendor's technicians have just uncrated the OA system, plugged it in and walked out the door. No one has heard anything more from the enthusiastic salesperson nor from the market support personnel promised, and the inevitable "post-installation blues" begin to creep into the office.

This scenario is all too common. A company recognizes that to remain competitive and responsive, it needs to install information processing or an advanced office system. This is followed by a horde of calls from vendors, a whirlwind round of system demonstrations, a barrage of buzz words no one understands, and intense attention and pressure from vendor sales personnel. When the OA system is finally in place, expectations for the system are high, and, most likely, projects have been stockpiling for the new system's arrival.

Unfortunately, too often, this scene does not turn out as planned, for the company did not address how the system would be used or implemented.

A "HORROR STORY"

As a case in point, one recent "horror story" focuses on a major engineering firm in the Houston area which installed an OA system with 12 terminals. No analysis for the system was performed, nor was there any planning of how the system would be implemented. The vendor's implementation policy was to train only one operator--the client would have to establish training sequences from the "self-placed" training manuals for all of the other operators. No discussions were held in-house or with the vendor in relation to application design or implementation.

After six weeks, four of the terminals still had not been uncrated, and the installed terminals were infrequently used. It is not surprising that after six months the company found the system totally unacceptable and was threatening the vendor with deinstallation.

Why did this happen? Can all of the blame be placed on the enthusiastic salesperson who said "yes, that can be done" in answer to every question? Was that "flashy" demonstration and eager reception at the vendor's office to blame? Or rather, doesn't the user have the responsibility to first set parameters, ask the right questions about the system and "get it in writing"?

The root cause of disenchantment with a system after installation is improper preparation by the vendor and the user. Even though the vendor said "it will be easy, just plug it in", you can train all of your own people by using the superior, self-paced operator training manuals, and call our 800 number if there is a problem," something else should have gone into this installation-planning.

So much emphasis is being placed by vendors, soothsayers and industry watchers on trends such as equipment capability, integration, portability, multifunctionality and the latest engineering breakthrough that users of these sophisticated systems tend to lose sight of the importance of planning. They fail to research and question how the system will be used, and whether it can do what is needed without costly programming and expensive peripheral solutions. The phrase "it can do it" may be true, but the "what" to be accomplished and the "how" need to be established prior to equipment selection and installation.

WHO SHOULD PLAN?

There are some very obvious members in a company who should be involved in information gathering and planning for an initial or upgraded automatic office system. They include, first and foremost, the president of the firm or his or her duly authorized representative; word and data processing managers and key personnel; administrative managers and key secretarial personnel; representatives from the focus of the firm, i.e., engineers, marketing representatives, advertising personnel; shipping and receiving personnel; and persons knowledgeable of the company's telephone system. There may be others, inherent to a particular type of business, who should be included as an integral part of the movement of information. This study and evaluation should not be conducted in a vacuum but by just the systems manager.

If the number of participants is unruly, break the members down into subcommittees for the initial planning stages. Don't let the "old hat" confrontation between the word and data processing managers develop. Be aware that technology is leading both of these managers down the same path and they should share equally in responsibility and recognition.

You cannot make an intelligent OA decision when the criteria for the system have not been clearly delineated. The members of the committee will probably be at different levels of knowledge relative to office automation. Take the time to educate them about today's technology. Include in these sessions the industry buzz words.

Foremost, the members of the planning committee need to have an understanding of the purpose and the ultimate goal of the company. It is surprising to find that many employees do not know what their company does, nor what operations their company does, nor what operations take place on the other side of the wall from their office. Employees need to understand how their departments function within the company administrative structure and how and what budgetary items are affected by their actions.

PICKING VENDORS

When the planning stage is completed and thoroughly documented, it is appropriate to communicate with vendors. In a cover letter, state what the firm hopes to accomplish with an advanced, automated office system and request that the vendor reply. Submitting a "request for proposal" will establish a professional relationship with vendors. Some vendors may not respond, however, if they do not want to take the time to put into writing how their systems can address the applications. This is perhaps a reflection of the quality and quantity of post-installation attention.

Inform the vendors of the type and size of computer, if one is present in the firm. They should also know if the firm has more than one (Continued on page 7)
TAKING CONTROL OF AUTOMATION (Continued):

location and where. List in an orderly manner the applications mentioned in the study analysis, where they occur in the company and how often. This will indicate to the vendors that the company has established criteria, and will also serve as a tool to make comparison judgments when reviewing vendor equipment.

When proper planning and preparation for an OA system occurs, and intelligent discussions have been held relating to expectations of the user and the vendor, most any system meeting the established criteria will serve an organization well.

After the vendor equipment selection decision has been made and delivery dates have been established, it is time to prepare an implementation plan.

Staffing decisions are, of course, paramount. Analyze the types of persons who will be working in the OA environment. Much has been written on the subject of matching personalities to the kind of task to be performed and this should not be taken lightly. Choose managers who have supervisory skills (it is helpful if they know how to operate the system and must have a thorough knowledge of its capabilities); choose persons who enjoy teaching for the training staff; and place technical personnel in systems planning and on keyboards.

Pre-train operators before installation. If the installation is large enough, there should be enough clout with the vendor to borrow a piece of equipment for training purposes. Inform employees why this particular vendor's equipment was chosen over the others and what is expected of the vendor, the employees and the system.

Plan for managerial-level orientation. Discuss phase-in of applications and be attentive to comments and preconceived impressions. Often at this time, managers will turn around and request terminals even though they could see no need for office automation earlier.

Consider priority applications and develop an implementation schedule. Large data-entry projects or media-conversion projects require more time. Not only do applications need to be phased in, but departments need phasing in as well. Establish a departmental phase-in schedule that attends to the priority applications.

It is important that trained staff or consultants implement the system and provide follow-through, as sudden personnel changes could leave an organization without continuity of purpose.

A successful and productive OA system is possible when a thorough system analysis and evaluation of applications is conducted, the staff's technical knowledge is reinforced with proper training, and a thorough implementation plan is developed and implemented.

With these cornerstones in place, an organization can avoid falling victim to the hazards of the post-installation blues or being left in the lurch. 

("Taking Control of Automation" is reprinted from the October 1983 issue of MANAGEMENT WORLD).

BITS & PIECES
—Ruth Michulecki, Nebraska

Proposed legislation by Senator Packwood, R-ORE., would insure that companies planning to bypass the local exchange will have to pay for that privilege. The Senator is concerned about universal telephone service at reasonable rates for all and plans to introduce a bill to assure the continuation of the concept of universal telephone service. What a political time bomb 1-1-84 might prove to be!

If the CWA (Communication Workers Assoc) has its way, we might receive a refund from the telcos as a result of the millions they saved during the recent telephone workers strike. The CWA is being joined by Consumer Advocate Groups in their effort. Might set a precedent for future actions, if the telcos cannot maintain salary savings from work stoppages, they might not be influenced to prolong such stoppages...

In TELEPHONE ANGLES, is an article on the Bell Operating Companies Centralized Operations Group (COG). This group was formed to handle orders from customers that own their own telephone system. COG was formed as a part of the antitrust agreement between AT&T and seven interconnect companies. You can get a 43 page guidebook that provides step-by-step "how-to" instructions for ordering, form completions, etc. To get a copy of the COG manual, write: (COST - $15.00 per single copy)

NATA, 511 Second Street, N.E., Washington, D.C. 20002
phone: 202-547-6450

The manual was prepared by NATA (North American Telecommunications Assoc.) and the cost is $15.00 per single copy.

HELP PLEASE!

We are still looking for information on smart consoles to replace some not-so-smart ones. We would like to get operator/traffic statistics on a real-time basis from our operator consoles. The current system simply isn't capable of giving us the information we need. Our system is the GTE/AE #2EAX. What we want to do, since we cannot receive any usable stats from our present consoles is to find a smart console or a 'black box' operation that will give us what we want.

And, we will soon have our Store & Forward Voice Message System in place and I would like to hear of any experiences any of you have had in this technology. What kind of training and education did you find most effective? What controls have you put on storage? What has your experience been in charging back for the service?

THANKS for your help---we need it!

......AT&T has joined with San Jose State University to conduct the nation's first graduate level course in Telemarketing....

......Northern Telecom has announced a new device that allows the IBM PC or the IBM PC XT to connect directly to Northern Telecom's SL-1 business communications system using standard twisted pair telephone wiring. I know of software being developed now for accounting/billing/inventory for the IBM PC, using your telco mag tapes...More on this in a later issue....
COMPUTER, CORRESPONDENCE COURSE PAIR UP IN 'ELECTRONIC UNIVERSITY'

(Reprint from the Washington Post)

Washington--A national "electronic university" offering college-credit courses and direct communication with professors is offering 170 courses by home computer, a group of computer entrepreneurs announced.

The profit-making venture, called TeleLearning Systems, will sell equipment to connect home computers to professors via phone lines. The company also plans to recruit teachers--several thousand within the next two years--ranging from retired people to full professors at major colleges.

Secretary of Education T.H. Bell, who attended announcement ceremonies, praised the new business and said the administration was "excited about the concept."

"The thrilling thing about...the electronic university is its flexibility and its adaptability as far as its ability to reach all learners on all levels, and then to teach them where they are, and then to individualize the instruction for each and every student," Bell said.

30 MILLION COMPUTERS

The idea is a cross between the correspondence course and the computer.

Americans now own about 11 million home computers, and the number is expected to increase in more than 30 million within the next 18 months. More than 70 universities now offer about 12,000 different correspondence courses.

"The trouble is that when you are working on a course and you are interested, you want to communicate with the teacher, you want to get results of questions and tests back right now, not three weeks from now in the mail," said company Chairman Ronald F. Gordon, the former chief executive officer of Atari Inc.

The new system offers an "electronic mailbox" that allows teacher and student to send each other messages and test results daily.

The company now offers 170 courses from 200 teachers and backup instructors, with subjects ranging from human sexuality and "crap shooting for the innocent" to a lecture on James Joyce and lessons in contemporary American poetry.

The company expects to offer about 500 courses from 800 teachers beginning early next year.

The courses will carry no formal credit, but the company has recruited 15 colleges and universities to try out the network.

Colleges may allow credit for the courses, Gordon said, and the company also will offer courses that will prepare students to take the degree-equivalency tests of many states and university systems, such as the New York Regents college equivalency exams.

CREDIT EXPECTED

Gordon said he believes that current negotiations will lead by next year to a number of colleges granting credit for courses offered by the company or the colleges themselves.

The system is to work this way: the owner of any of a wide variety of home computers, from the $200 types to the $10,000 models, will buy from TeleLearning a "knowledge package" consisting chiefly of a course catalog and a sophisticated computer program linking the computer with the company's network of teachers.

The "knowledge package" will vary in price from just over $100 to about $230. The company expects to make its profit through sales of this package.

After the initial purchase of the package, a computer owner may sign up for any number of courses. The cost will vary according to how much the teacher charges per lesson-hour, ranging from $35 to $150 for courses from well-known professors or experts.

The course fee covers telephone charges and network transmission charges as well as the "electronic lectures." The student will receive the text of lectures and graphics to accompany them, transmitted from the teacher.

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- Alternative ways to finance a new telephone system
- What determines the usefulness of a consultant
- The process for developing a really valuable request for proposal (RFP) when purchasing a new telephone system
- Steps in developing a telemarketing center
- A plan for training and educating staff in using a new system
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