VICE PRESIDENT'S MESSAGE

In the past couple of issues, the President/Executive Vice President's message has paid homage to Lu Robb for his dedication to the Newsletter, to Jackie Hugg for hosting an extremely productive Board of Director's Meeting and Telecommunications Workshop in Cleveland on extremely short notice, and to Ruth Michalecki for taking the reins from J. C. and coming through with an absolutely first class ACUTA NEWS publication.

I would like to echo my fellow officer's comments and to give you a little more insight into the efforts that have been made to improve the level of both written and verbal communication within ACUTA during the past year.

As previously reported, the response to my October '77 Newsletter Survey was far from overwhelming. The dozen or so interested members who did respond, however, provided us with the kind of information we were seeking, and I think the results speak for themselves. We are indeed indebted to these members as well as to Ruth herself, Connie Gentry, Dale Pollett, Mike Grunder, Joe Cleary, Tom Miller, Dorothy Heinecke, Brooks White, Elwyn Hull, et al., as well as to all our reporters out there whose names have not yet made it into print but who never-the-less are doing a splendid job. Let's not forget the Region Directors also, Edna Barnes, Tom Maglemre and Norm Setton especially, who actively solicit input on a continuing basis from members in their own Regions. All in all, a job well done. Don't forget that if you have any material for the ACUTA NEWS yourself, send it to our Associate Editor, Connie Gentry at Emory State University in Atlanta. Let's keep a good thing going.

Now then, apart from the newsletter, what have we done to improve communication? Well, President Doug Brummell's weekly conference calls are a fine example. With all of the executive officers "on-net", and other officers added on as required, we now have a mini meeting each week. Secretary Elwyn Hull records these sessions and produces minutes which usually manage to arrive on our desks within the week, complete with a summary sheet detailing what actions are required from each officer.

Then there's the News Release on the Utah Conference which has been sent out to 15 trade publications, to newspapers and chambers of commerce in and around Utah, and to independent telephone companies in the western states (through USITA). A new ACUTA Brochure has also been produced and printed, like the Snowbird Conference Brochure, using Ruth Michalecki's facilities and staff—and what a super job you have done on these, Ruth!

And probably most important of all, there is our face-to-face contact program which dispatches officers to the sites of upcoming seminars and conferences to assist the host (or prospective host) member in organizing the event and in obtaining the full support of his/her institution. Important events such as the Newsletter editorship changeover also required this kind of personal visitation involvement.

Many other improvements to our communications capability have been introduced this year and will become evident as time goes on. Your critiques and suggestions for improvement, as always, will be welcomed.

It has been a challenging and exciting year for me as your Vice President and I really appreciate the opportunity to work alongside the illustrious work-horses who comprise your officers and committee chairpersons. You have no idea of the degree of dedication afforded our association by these people and by such stalwarts as Bob Devenish, Dorothy Heinecke, Tom Miller and of course our first president, Lu Robb. Their involvement seemingly never ends, and this is one message that I would sincerely like to get across to all of you who are wondering whether or not you should stand for office, or volunteer to serve the association in some other way. The message is simply this: "DO IT". You will never regret it......

Before closing, I would like to express the appreciation and kind thoughts of all ACUTA office and members in wishing "Bon Chance" to John Meagher of Syracuse University who, because of ill health, has been forced into early retirement. We will certainly miss having you around, John, but will keep in touch and hope that you will do likewise.

Well, the Snowbird Conference is just around the corner and, believe me, Elwyn Hull has really gone out of his way to make this the best ever. Don't miss it----you'll kick yourself if you do. Get your flight booked now and take advantage of the super-savers fares and register now to save another $20.00 as an early bird. I'll see you there! Many thanks to all of you for your support and for your friendship.....
Well, the "Mouth of the South" has some good news and some bad news. First the bad news: Southern Bell (the largest WATS provider in North Carolina) has been granted a rate increase. As part of the package, they were allowed a rate increase in toll and WATS service. Historically the North Carolina Utilities Commission has always insisted upon uniform toll rates throughout the state. Now for the good news (this is stretching a point a little)—the North Carolina Utilities Commission ordered each of the other telco's, who will realize a windfall profit due to the toll rates being higher, to lower their basic service rates. Of course, the arguments have just begun as to the exact amount of windfall profit each independent telco claims it will get....

To illustrate what is happening as well as to point out some fine points, let me show you what is happening in General Telephone's area: Utilities Commission claims GTE will realize a $1.6 million per year windfall. GTE says no way—much lower figure—let's talk a bunch. Utilities Commission wants GTE to lower:

<table>
<thead>
<tr>
<th>SERVICE</th>
<th>REDUCED BY (MO)</th>
<th>% reduc.</th>
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<tr>
<td>1 party rotary res.</td>
<td>$1.20</td>
<td>11%</td>
</tr>
<tr>
<td>1 party rotary bus.</td>
<td>$4.05</td>
<td>15%</td>
</tr>
<tr>
<td>PBX &amp; Centrex trunks</td>
<td>$5.70</td>
<td>12%</td>
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Also to be noted is the fact that North Carolina may be the first state to institute 25% reduction of day rates for calls placed between 12 noon and 1 pm on business days.

Attention, all least cost routing and WATS Box type networks (forgive me, TDX and Data Point): Our Intrastate Out-WATS rates went up by $65.00 per month; our Intrastate In-WATS rates went up by $125.00 per month and the hours for both services dropped from 240 hours to 180 hours. Better take a closer look at your networks. This now means full business day outward service has gone from $2.52 per hour to $3.69 per hour or 46% increase. Inward service has gone from $2.52 per hour to $4.06 per hour or 61% increase. Who can remember the good old days when WATS service was 24 hours per day for a whole month?? There may be a hidden message here.....

Why don't Telecommunications' Managers get together with your Director of Purchasing and work up a list of in-wats lines telephone numbers? UNC did this by asking a firm to submit their in-wats telephone numbers when they submitted bids. This information was augmented with hotel/motel, airlines, etc., IN-WATS numbers. The whole list was then printed in the Campus Telephone Book.....

The Governor of the State of North Carolina has established a special task force to study telecommunications within state government. This Blue Ribbon Task Force is now collecting information about the extent of existing facilities including Broadcasting, Data Processing and Telecommunications. Norman Sefton has been asked to act a special consultant to the Task Force.....

"MOUTH OF THE SOUTH"
News from Region 2

It is with a great deal of pride that I welcome a new advertiser to the ACUTA NEWS. Motorola Communications & Electronics has subscribed to a full page ad with a novel idea that should be of great interest and help to all of us. They are asking us to send any questions we have concerning radio communications, how radio can solve your specific problems, etc., and they will answer the question or questions in the next ACUTA NEWS. All questions should be sent to: Ruth Michalecki, University of Nebraska, 211 Nebraska Hall, Lincoln, Ne 68588..... It is not necessary to identify yourself or your school, just send me your questions.....

Speaking of advertising, I am happy to welcome back INFOTRON SYSTEMS. They missed the June issue due to a copy change and we are glad to run their ad this month.....

Due to space problems this month, "Data Bits" will be held over until next issue.....

Your editor had the pleasure of a recent visit from our president and secretary; a part of the new face-to-face meetings by the board. Reading from the left, Mike & Ruth Michalecki, president Doug Brumell and secretary Elwyn Hull; enjoying a few minutes relaxation at my home following a very busy and long day.

"MOUTH OF THE SOUTH"
News from Region 3

This newly inaugurated column needs a snappy title, so all Region 3 members please contact your director, Tom Meglemre at Indiana University (812-337-9060) and give him your ideas.....

The regular one week "Spring Break" for Indiana Uni-Bloomington, was extended to two additional weeks due to the energy shortage during the month of March. Also at IU-Bloomington, installation of Datapoint's Infoswitch long distance telephone management system is scheduled for August of this year.

Ferris State College in Big Rapids, Mich will host a Region 3 workshop Oct 29,30,31. Focus on interconnect and the managers responsibilities. (Lois Hitzeman & Bob Kern will host).....
We at Motorola welcome the opportunity to support this publication. Rather than advertising copy, we would like to extend an invitation to you to exchange ideas with Motorola regarding questions you might have concerning communications. We encourage you to send your questions on security communications, paging communications, new product needs, radio/telephone interfaces, radio based alarm systems, or any other area of two-way communications.

Many of you have developed systems to solve problems in the areas above, and we would be happy to pass along your ideas to other telecommunications members through this forum. We would also be happy to research your problems and share our ideas with you.

As food for thought, we have recently been involved in a number of inquiries about radio based Intrusion Alarm Systems interfaced with a microprocessor to provide a plain English language read-out of the alarm and a response format for the dispatcher to use in responding to an alarm. Microprocessor technology has made this a very affordable approach to handling the remote monitoring of the many buildings you have on your campus from one central dispatch point without dependence on wire lines.

To reiterate, we not only solicit your questions, but would appreciate any input you may have on how you solved a communications problem that would be of interest to your fellow ACUTA members.

Please address your inputs to:

Ruth Michalecki, Editor
ACUTA NEWS
University of Nebraska
Telecommunications Center
211 Nebraska Hall
Lincoln, Nebraska 68588

We look forward to an enlightening exchange of information.

Best regards,

Don Sloter
District Manager
Education Market
Motorola Communications and Electronics, Inc.
The Common Sense Key System is Here

NEC's new Electra 100 has a built-in "brain." It actually "thinks" for the user in a way that lets it read and execute his needs immediately.

By incorporating microprocessor control, Electra 100 expands user capabilities, reduces the size of the whole system, facilitates individual system configurations and enables fast and economical changes or expansions.

Electra 100 is the key system that is compatible with any existing telephone line. This saves installation time for you and reduces costs for your customers. Significantly.

The Electra 100 can support one to 100 lines and two direct station selection consoles. Let you custom-design system configurations to suit your individual customers' service requirements.

NEC's time division multiple access technique allows several users to share a single communications line. Reducing wiring, space and installation requirements.

Electra 100 is the newest member in the NEC family of electronic key systems. With all the outstanding features of the Electra-28 and EL-411. Plus more.

Electra 100. Flexible. Reliable. Economical. Easy to install. And easy to service. Common sense reasons why NEC's new Electra 100 key system makes uncommon sense.

NEC Telephones, Inc.
532 Broadhollow Road
Melville, N.Y. 11746
Tel: (516) 752-9700

Visit us in Booth 18 at Snowbird

Spreading the word to the world
Potpourri

Connie Gentry, Emory University

Basically I am an optimistic and positive thinking person. I have even been known, upon rare occasion, to attempt to smile and act in a cheerful manner BEFORE my first cup of coffee in the morning. So, when I tell you that this has been a bad month for me, you ought to know I mean baaaaaaaaaadd!!! You may well ask why; on the other hand, you may not give a damn but I'm going to tell you anyway.

Emory University and three teaching affiliate hospitals are connected by tandem tie lines which terminate in one of the hospital's 701 switching equipment. Last August, a joint decision was made to purchase Datapoint's Infoswitch for long distance call management for all four locations. The Infoswitch would interface with the tie lines to provide easy access by all users.

Southern Bell was provided specific interface requirements along with an order for additional tie lines. Very simple, yes? NO! NO! NO!!! From the very beginning users were experiencing transmission problems which made them very unhappy, especially since they must dial 20 digits to get the call out in the first place. Imagine how you would feel if you got 20 numbers and when you got your call through; could not hear or be heard.... Very frustrated!

The Infoswitch was checked from stem to stern, no problems there. Then, we began to look in other areas. Here's what we found: A row of incoming selectors on the tie lines had not been soldered to the frame, normal post cams were not properly adjusted, one of the DCK interface units had a short and several were graded incorrectly, and a special adjustment required on the tie trunks had not been made.

That situation was bad enough in itself, but add the fact that for the past several months our CO Centrex has been going out of service at least once a month and last week the operator consoles suddenly lit up like fireworks and could neither receive or place calls.....for one hour and forty five minutes! Ask me if Southern Bell has given us a reason for these failures or assurances that it won't happen again. When we queried about emergency procedures or systems, one bright fellow suggested we might want to consider installing a Dimension 2000 as a precaution against future problems. Ask me if Emory University is ripe to go interconnect? Ask me if I will be in the front row at the next rate hike request put before the Georgia Public Service Commission? DO NOT ask me how angry, depressed and frustrated I am! Now, on to more important and interesting developments.....

The FCC approved AT&T's request to add 42 new cities to it's Dataphone Digital Service. DDS provides end-to-end digital data transmission at speeds between 2,400 and 1.544 Mb/s. Still pending is a request to add 30 more cities to the service.....

Telephone Management Systems of Waltham, Mass is offering a software system designed for use with Bell's Dimension SMDS users. The system will provide users with a full set of management reports, including extension, department, division and corporate summary and can also give network analysis reports. The system is called

Potpourri continued:

Info-Call and is written in ANS COBOL. Telephone Management Systems also has a software system compatible with Northern Telcom's SL-1 Switch.......

GTE Automatic Electric has introduced the GTE-60, a new PBX with 60 lines. Microprocessor control and time division switching results in a design which reduces console size, increases reliability and provides ease of maintenance. The attendant's console is comparable in size to a regular telephone set. The GTE-60 also offers built-in diagnostics and 40 plus standard and optional features....

If you are involved in any way with data communications, you may want to obtain a copy of Facilities, Networks and Systems Design by Dixon Doll. He begins with two introductory chapters on regulatory issues, terminology and basic network concepts and facilities, then goes on to describe common carrier services and tariffs, terminals, protocols, etc. Cost is $26.95. Write: John Wiley & Sons, One Wiley Drive, Somerset, N.J., 08873.....

If you haven't already, please do yourself a favor and read the excellent article on International Telecommunications by Robert Angliss, Executive Vice President of RCA Global Communications, which appears in the May issue of Communications NEWS.....

Our inspirational quote for this month comes from me: "HELLLLLLLLLLLLL!!!!"

See you next month.....

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Bits & Pieces

Brochures for the 7th Annual ACUTA Conference were mailed last week. If you did not receive one, or if you would like one to give to some one else, please contact: Elwyn Hull, University of Utah 106 Orson Spencer Hall Salt Lake City, Utah 84112 (801-581-6000)

The program looks great, very exciting and interesting. Be sure to get your reservations in early!

Come on now Dorothy, you really must share Mal with the rest of us... At St Louis last year, Mal Reader, Dorothy Heinecke, Doug Brummell and Doug's wife.....
Virginia View
Mike Grunder, Virginia Tech

"Some Thoughts on a Public Utilities Commission Hearing"

Well, it really wasn't a hearing. A meeting is more like it---informal at that. And it's not really the public utilities commission. In Virginia it's called the State Corporation Commission (SCC). A little classier title, I think.

The meeting was held in Richmond around a long narrow table in a "library" that was only half full of books. The Commission had three people in attendance, the telephone company two. There were two of us from VPI and one interested party from another agency. Not a capacity crowd.

The question at hand dealt with a tariff filing which would make the cost of point to point, four-wire circuits (same premises, different building) 12 times greater. The tariff also included a new $880.00 one-time charge for un-loading the circuit, when necessary.

We use these circuits for data transmission around campus and it was our contention that the new rates were just a bit high given their current cost ($1.40) and the cost of Centrex Service (about $10.00 per line over 1,000).

The telephone company held that they were not making money on either offering and that the new rate merely reflected the actual cost of providing the service. To support this, C&P had a rather impressive set of detailed figures on how the cost was calculated; very difficult to argue with.

A compromise of sorts was reached. The new tariff would be allowed to stand but a key change would be made to the existing private line tariff; and, that change would allow us to continue ordering and using the current type circuits at the old rate. A victory, at least until the next general rate hike.

Some thoughts: C&P's tariff expert was just that. A very impressive performance. (I didn't realize they really weren't making money). I knew as soon as he began explaining his cost figures, we were lost. How can a user refute such things? Is it within anyone's power to fully comprehend the vast amount of data they have at their disposal?

Given these vast resources and the complexity of the issues, can even the regulatory agency keep a good handle on it all? The SCC people I dealt with were very helpful and seemed knowledgeable; although, one gentlemen did have a difficult time remaining neutral during the meeting.

I hold the naive opinion that the whole tariff should be re-written in understandable English. Is this possible? I've had occasions where the tariff has been misinterpreted and where interpretations differ depending on who one talks to. (I think the phase of the moon has something to do with it, also).

Making piece-meal changes to the tariff has its advantages, but how many people missed this filing simply because it was relatively insignificant and small scale? Does this piece-meal

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Virginia View continued:

strategy make the whole process easier on the telephone company? Perhaps too easy???

A couple of tentative conclusions present themselves. First, this was a great learning experience for me; I would urge everyone to get his feet wet the next time an opportunity presents itself. The utilities commission and telcos can not be expected to listen if no one is making noise. Second, I think there is a real need, on a state-wide level, for a tariff information "clearinghouse" so that everyone, large customer or small, is informed of and understands upcoming tariff changes. Ideally, this "clearinghouse" would also represent or argue for customers during a rate hearing.

In Virginia, we have a state agency called the Virginia Public Telecommunications Council. It oversees telecommunications procedures and policies in Virginia and would be the logical place for this function. Unfortunately, it does not fulfill this need at this time.

In states where such an agency does not exist, users need to set up channels of communication and organize themselves. Perhaps ACUTA could play a role in the development of such an idea.

I have been told on a number of occasions, that the squeaky wheel gets the grease. In order to be most effective in rate cases, there should be as many knowledgeable and informed squeaky wheels as possible. In the long run, if you will allow me one more cliche, our best defense is a well prepared offense.

***************

ACUTA WELCOMES THE FOLLOWING NEW MEMBERS:

REGION 1:
Mrs. M. Jeanne Welch
Central Mailing, Uni of Rhode Island
Kingston, Rhode Island 02881
401-792-1000

REGION 2:
W. Brent Sutton
Southern Bell Telephone Company
501 W. Franklin Street
Chapel Hill, N.C., 27514
919-933-5421

REGION 3:
Wayne C. Kay
Physical Plant Div., Ohio University
Athens, Ohio 45701
614-594-5511

James J. Lyhout
Northwestern University, 910 Uni St.
Evanston, Illinois 60201
312-492-3741

REGION 5:
Larry Savage, Manager Administrative Svcs.
Oklahoma State University, Physical Plant
Stillwater, Oklahoma 74074
405-624-7172

M. O. Bridges, Jr., Director General Svcs
The Uni of Texas Health Science Ctr-Dallas
5323 Harry Hines Blvd, Dallas, Texas 75235
214-688-2504
Better hurry! Get your reservations in and join the whole gang in Snowbird. Eleyn

All Acuta Members!
Four Times the Throughput
None of the Errors

Supermux Statistical Multiplexing

You're not getting the most out of those expensive telephone lines if you're not using the Timeline 780 Supermux. Conventional time division multiplexers cut data communications costs by replacing multiple lines with just one. The Supermux statistical multiplexer does the same thing, only four times better.

Under microprocessor control, the Supermux assigns bandwidth dynamically, without wasting any on idle terminals. Transmission costs drop to as low as one-third of what they would be with conventional TDM's and as low as one-thirtieth the cost of a system without multiplexers.

Four times better because the Supermux is smart, smart enough to detect transmission errors, smart enough to correct them, smart enough to save data so when a line is hit, the data is just sent again, all completely transparent to your present system. The Supermux is even smart enough to report on how your entire network is performing — lines and modems, even remote, unattended multiplexers.

There's no need to shop — Infotron multiplexers are the best and you don't have to take our word for it. In 1976, and again in 1977, Infotron scored first in Datapro's survey of multiplexer users.

Infotron multiplexers mix dial-up and dedicated, synchronous and asynchronous, DDS and conventional inputs. They heal themselves, grow with your network and don't become obsolete! Hundreds of Timeline 180 and Timeline 240 conventional multiplexers have been upgraded, in the field, to Timeline 780 Supermux performance. Infotron takes care of your data and your investment, too.

Infotron Systems Corporation
Cherry Hill Industrial Center, Cherry Hill, NJ 08003
800-257-8352  609-424-9400

In Europe: Infotron Systems Ltd.
Systems House, Poundbury Road
Dorchester, Dorset DT1 2PG England
Telephone: Dorchester (0305) 66016  Telex: 417276
MEMO TO: Fellow ACUTA Members
FROM: Ruth Michalecki, Editor
SUBJECT: Help wanted ad

We have been asked to run the following ad for Syracuse University. Because of the space problem with ACUTA NEWS this month and because of the importance of timing with this ad, we have decided to handle it in this manner.

PROFESSIONAL HELP WANTED:

Director of Telecommunications and Mail.

Plan and manage the telecommunications and mail systems of a large University, including the development and implementation of projects to improve service.

Supervise mail and telecommunications staff.

Requires an associate's degree or equivalent, plus at least 5 years experience in the planning and supervision of telecommunications systems, preferable for a large institution. Considerable knowledge of telecommunications systems necessary.

Salary: mid-teens, plus excellent fringe benefits package.

Send resume and salary requirements to:

Personnel Office
Syracuse University
Skytop Road
Syracuse, New York 13210

Syracuse University is an Equal Opportunity/Affirmative Action Employer.

June, 1978
ACUTA INTERCONNECT QUESTIONNAIRE

Has your boss ever asked you how many universities and colleges have installed their own telephone systems? Or, how many of these systems are being operated successfully? Or, how may interconnected universities and colleges would not do it again, if given a chance? If your boss has asked (or is likely to) and you aren't sure how you would answer, read on!

As professional communications managers, most of us have vital interest in staying abreast of recent industry developments with respect to ownership of telephone, television, and data communications systems. In an atmosphere of rising communications costs, interconnect of customer owned equipment presents us with an alternative to leased Telephone Company and/or vendor provided equipment.

In an effort to establish the degree to which ACUTA membership has made or will make the swing away from leased communications systems, we need your comments. Even if you do not as yet own all of your communications equipment, your input is solicited in order to put the interconnect issue in its proper perspective.

If you are interested in comparing your "interconnect agenda" with that of other ACUTA members, please take a minute and fill out the following questionnaire. Please return it by July 31, 1978 to:

Brooks White
Telecommunications Officer
UCLA, GSS 210
405 Hilgard Avenue
Los Angeles, CA 90024

The results will be tabulated and appear in an upcoming issue of ACUTA News.

1 - Does your institution own any communications equipment, i.e., television, telephone, radio, data communications equipment? ☑ yes ☐ no

2 - If no to #1, has the decision been made to purchase any communications equipment within the next two years? ☐ yes ☑ no

3 - If no to #2 is this because: ☐ a) interconnect costs are too high, ☐ b) quality of interconnect equipment is too low, ☐ c) vendors are unreliable, ☐ other (please comment further in space below)
4 - If no to #2, and you have answered #3, please return your questionnaire.

5 - If yes to #1 and #2, does your institution own or plan to purchase within the next two years:

a) television equipment _yes _no. If yes, what type of equipment, i.e., switches, monitors, cable plant, etc.? ________________________________

b) telephone equipment _yes _no. If yes, what type? ________________________________

c) radio equipment _yes _no. If yes, what type of equipment, i.e., pocket pagers, transmitters, mobile equipment, etc.? ________________________________

d) data transmission equipment _yes _no. If yes, what type of equipment, i.e., modems, terminals, coaxial cables, etc.? ________________________________

6 - If yes to all or a portion of #5, please answer the following questions pertaining to each of the equipment categories you noted. Copies of this sheet may be made if you own more than one category of equipment. Please check one category per sheet only and answer the remaining questions accordingly.

________ television equipment
________ telephone equipment
________ radio equipment
________ data transmission equipment

a) What were your approximate hard dollar savings, if any, experienced (or anticipated) through ownership vs. your former lease arrangement?

b) What subjective benefits, if any, have you experienced or do you expect to experience?
c) If you have owned your system sufficiently long enough to comment, what is your overall assessment of your ownership experience: ___ glad we did it, ___ no opinion, ___ disappointed in the results.

d) Some of the more common pitfalls to ownership are listed below. Please select the responses that best apply:

1) The ownership contract we made with the vendor was ___ thorough, ___ too loosely worded, ___ just right, ___ other (please comment)

2) The bid specifications we developed were ___ thorough, ___ too loosely worded, ___ just right, ___ other (please comment)

3) Maintenance is provided by ___ owner, ___ outside firm, ___ other (please comment)

4) The vendor's overall representations were ___ accurate, ___ partially accurate, ___ totally inaccurate, ___ other (please comment)

5) Insurance costs with the owned equipment were ___ higher, ___ lower, ___ the same.

6) Finger pointing (fixing responsibility for maintenance) between competing vendors ___ occurred frequently, ___ occasionally, ___ seldom, ___ never.

7) Can your vendor be relied upon to replace damaged equipment in emergencies ___ always, ___ occasionally, ___ seldom, ___ never?

8) The equipment capacity has been adequate for the growth we have experienced ___ always, ___ mostly, ___ partially, ___ never.

9) Equipment performance is ___ superior, ___ about the same, ___ inferior to that formerly offered via a lease arrangement.

10) Overall public relations is ___ improved, ___ about the same, ___ deteriorated as compared to the period of our former lease arrangement.

11) Installation intervals of equipment are ___ shorter, ___ about the same, ___ longer than with our previously leased system.

12) Quality of equipment installation is ___ better, ___ the same, ___ poorer than with our previously leased system.
13) The equipment requires ___ more, ___ the same, ___ less administrative time than with previously leased system.

14) The cost of moving equipment is ___ more, ___ the same, ___ less than with previously leased equipment.

15) The equipment requires ___ more, ___ the same, ___ less user training than with previously leased equipment.

e) Other comments you would care to make. __________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Thank you. Please return your completed questionnaire to:

Brooks White
Telecommunications Officer
UCLA, GSS 210
405 Hilgard Avenue
Los Angeles, CA 90024

NAME OF RESPONDENT

UNIVERSITY OR COLLEGE

ADDRESS

NUMBER OF STUDENT ENROLLED