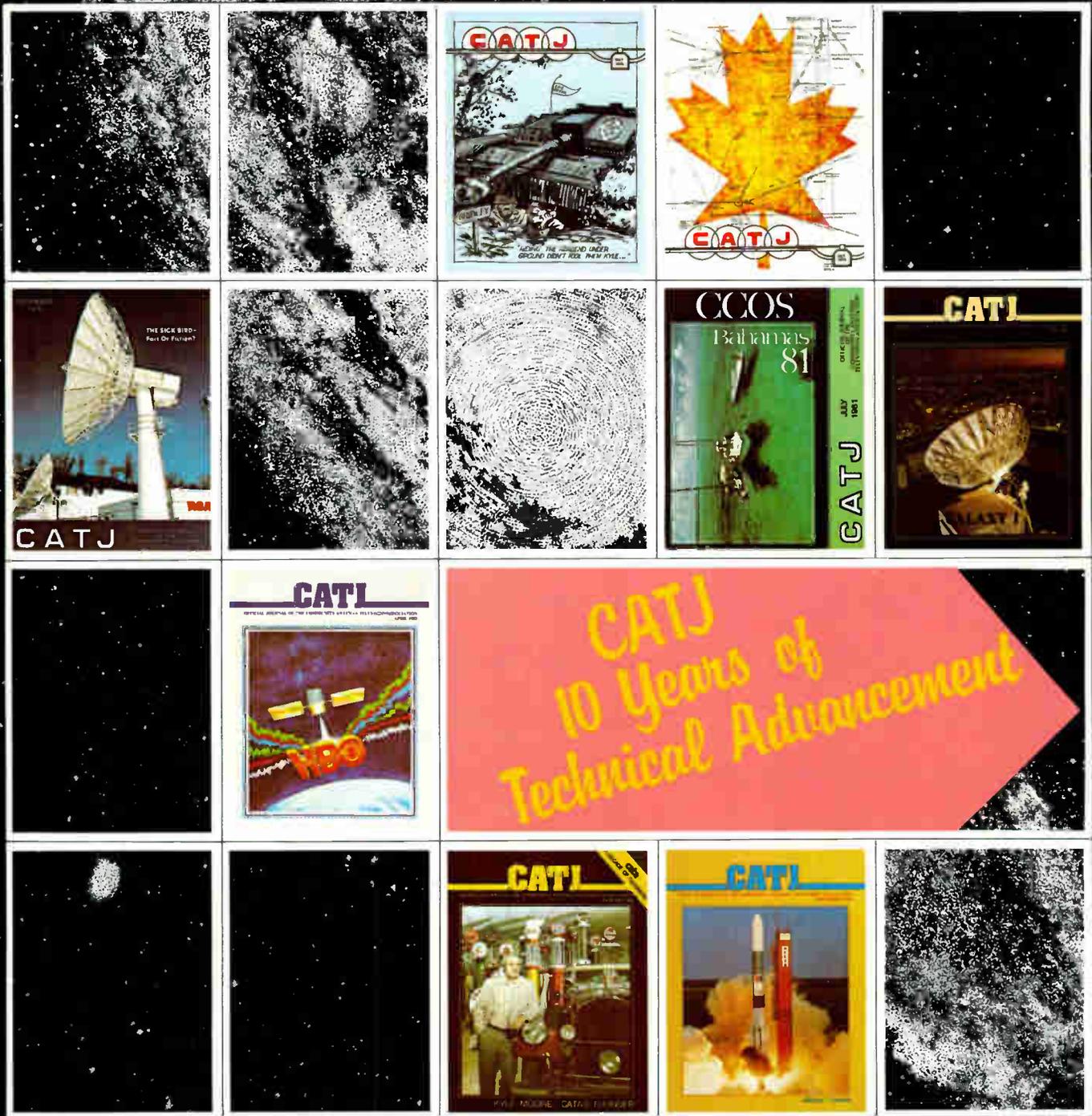


CATJ

A DECADE OF PROGRESS
Cata

OFFICIAL JOURNAL OF THE COMMUNITY ANTENNA TELEVISION ASSOCIATION
MAY 1984





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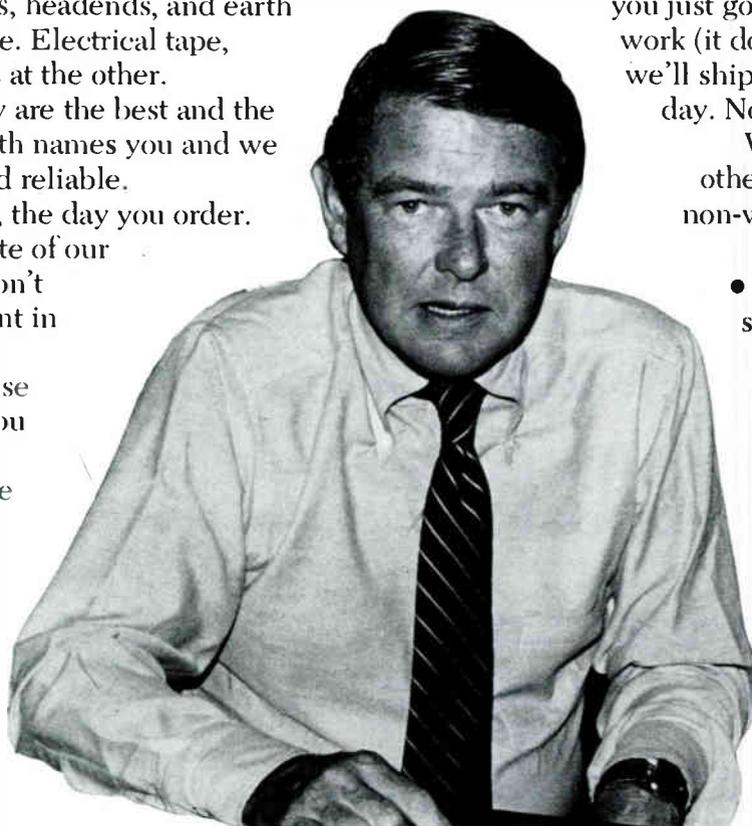
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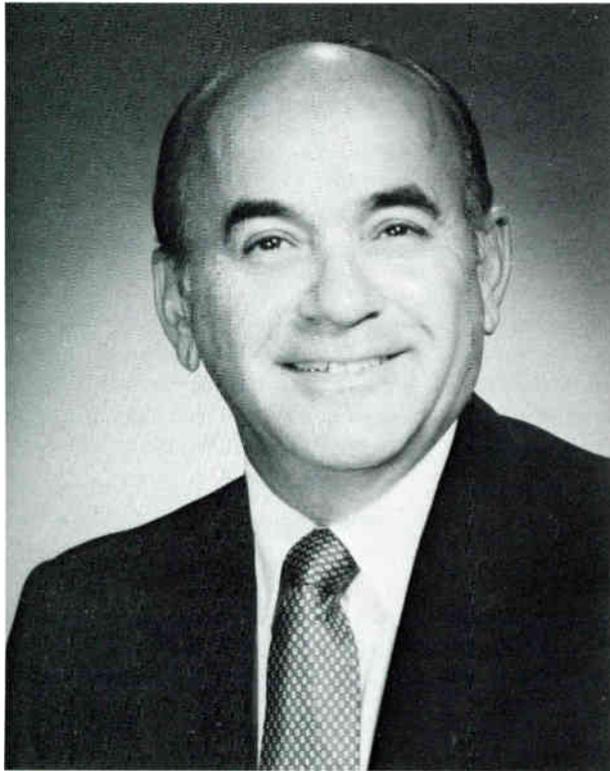


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ON THE COVER

With the May 1974 issue of CATJ distributed at the NCTA convention in Chicago, the ten years of progress began its path to this anniversary issue. CATJ is proud of this record and appreciative to its many supporters over the years for the continued enthusiasm, encouragement, and acceptance, and pledges our continued dedication to the cable industry through this technical vehicle.



Peter Athanas
PRESIDENT OF CATA

CABLE OPERATORS — THE TRUE “CONSUMER’S VOICE”

It's time the cable industry went on the offensive. We have sat back for too long accepting the notion that anyone other than the cable operator could claim to be a representative of consumers, and criticize us for alleged wrongs we have perpetrated on “consumers” and “the public”. Well, enough is enough! It's time we looked these folks straight in the eye and question who they are really representing. We know one thing for sure: cable operators, or at least those running good businesses, are the best “consumer” representatives. We have to be. That's the way we stay in business!

What's gotten me all riled up? Well, as President of the Community Antenna Television Association, I get lots of calls, and I get briefed on lots of “hot” issues that need CATA's attention. One that has been on the “front burner” recently is the problem some of our members are starting to have with so-called “cable ready sets”. Now you all know the problem. It is one the industry has been trying to warn people about for a long time. As a matter of fact, there have even been industry sponsored talks with the television set manufacturers to suggest ways to make sets compatible and

ready for cable installation without, at the same time, confusing the public. Obviously those efforts have failed. So now there are law suits and lots of yelling and screaming in some communities when the cable operator upgrades his system and scrambles all signals to guarantee a minimum of theft of service.

Such a move, you would think, would be welcomed by subscribers and city officials alike. They, after all, lose when theft is rampant. But no, that is not what has happened. Instead the cities are up in arms, the “consumer” groups are pointing an accusing finger at the cable industry and everyone is unhappy. Why? Because some folks bought “cable ready” sets and thought they could get our signals for free by doing so! Because now they will not be able to use the remote control device on their over-priced “cable ready set”, and because some folks still have the mistaken impression that whatever happens with television in their homes, it is cable's fault!

It's time we started fighting back. Ask that “consumer representative” at the next public hearing on the matter where he or she was when folks were being misled by local television retailers about “cable ready sets”! THAT is where the consumer fraud took place — not when the cable operator upgrades his system! Ask them why they are supporting a system that guarantees that many honest subscribers are being asked to pay more for their cable service because the “consumer representatives” are trying to preserve a system that can easily play into the hands of those who are willing to steal the cable service. Everyone else (that is the REAL consumers) wind up paying the cost when there is theft of service! Enough of this nonsense of letting anyone who wants to criticize us get away with wearing the “consumer representative” hat. It simply isn't so!

There are lots of other examples where I think we have let the true consumers, our subscribers, down by letting special interest parties get away with calling themselves the representatives of the “public”, or the “consumers”. Just a few other examples should suffice: Have you ever been in a City Council meeting when a

member of the Council intoned that he or she was just "protecting the citizens" by demanding more services from you? Well it's time we all started asking WHICH citizens? Does it really protect the subscribers to demand that the cable system provide extra access channels or studios or mobile vans or whatever? The fact is that everyone of those demands increases the cost of the system and, therefore, increases the costs to subscribers. Is that "representing the consumer" — CATA doesn't think so, and we don't think the subscribers our members serve think so either. The next time an access enthusiast stands up at a renewal hearing, you might want to point all this out to him or her and the rest of those present — particularly the press. It is time that we let the true "consumers", the folks paying for cable service, be heard in the regulatory process of cable television. Tell your City Council if they start asking you for all sorts of "bells and whistles" at renewal time, that you will figure out the estimated cost of all the things they are demanding and that you will then figure out how much that will translate into for each subscriber. Then offer to poll your subscribers on whether they want to pay the bill for those extra services or not. In most cases the result of that poll will be so predictable that the City Council will suggest you forego the poll. After all, they don't really want all those paying subscribers mad at them!

There's another, even more ironic challenge now taking place to the notion that the traditional "representatives" of the public be allowed to continue claiming that title. In several systems around the country court action has been taken to question the City role in the regulatory process. The argument is that the City cannot be an "impartial" rate regulator when, in fact, the City itself benefits from higher income from franchise fees every time they approve a rate increase! Well, we think this may be taking the challenge a little too far, but at the very least it points out a trend that all cable operators should be sensitive to from now on.

It comes down to this: In almost every case we know of, those who claim to represent the "consumer" or the "public" with regard to cable television are really representing special interest groups. Now we are not saying those special interests are necessarily all bad, or all wrong. It's just that it is now time, particularly with renewals now upon us, that everyone know who is representing what. It may be very nice that a "citizens cable commission" wants access studios and the like for the benefit of the public — but it is also true that in almost all cases those desires are not really shared by those who actually wind up paying the bill — the cable subscriber. Cable operators are in the best position to make sure that reality surfaces. In the long run it will benefit everyone. □

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The Community Antenna Television Journal (CATJ)—ISSN-0194-5963—is published monthly by Television Publications, Inc., 4209 N.W. 23rd, Suite 106, Okla. City, OK 73107. Subscription price: \$22.00 per year, \$26.00 per year Canada, Mexico, and foreign is \$30.00 per year. Second class postage paid at Oklahoma City.

Triple Crown Electronics Inc.

Product Familiarization Program

Continuation of Presentation,
March, 1984

by: Dave Emberson
Vice President - Marketing
Triple Crown Electronics, Inc.

The signal processing described so far has been performed at the actual TV Channel frequency transmitted by the TV or FM station. Because of this, the lower channels are easier to process than the higher channels.

The reasons for this —

- 1) lower frequencies are easier to amplify.
- 2) lower frequency filters perform their function much more efficiently than high frequency filters.
- 3) lower frequency traps are more stable and accurate as the higher frequency traps can change dramatically with physical vibration and change in temperature of the components of which the trap (or filter) is comprised.

Hence, in early Television systems, it was the Low Band channels (channels 2 to 6) which were first provided to the viewers. The actual configuration of a three channel system is shown in figure #6.

This configuration is very similar to figure 5, however, some very minor changes result in much improved performance.

1 - The Band Pass Filters are the "Preselectors" which permit only those desired frequencies to pass easily through the device while the undesired frequencies are rejected.

Input signal from the "desired"

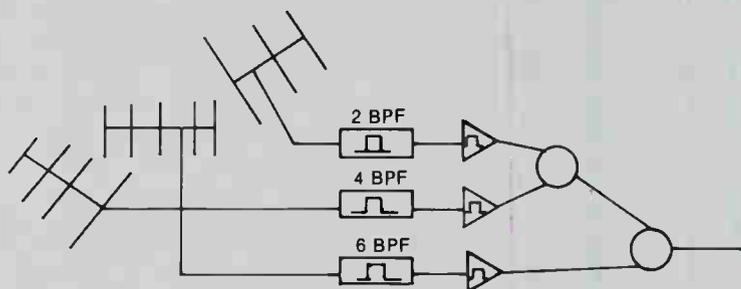


Figure 6

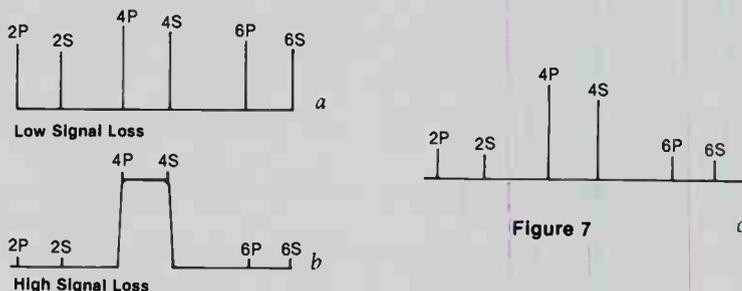


Figure 7

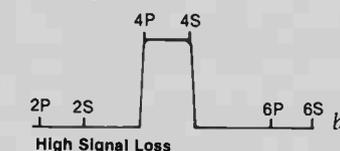


Figure 8

channel 4 antenna shows Ch 4 strongest and channels 2 and 6 slightly weaker (undesired).

(See Fig. 7a)

The electrical response of the Ch 4 Band Pass Filter allows Ch 4 to pass easily.

(See Fig. 7b)

Output signal from the Ch 4 BPF shows the effect that the device had on the levels of Channels 2 and 6 compared to the relative non-effect to the Ch 4 signal levels.

(See Fig. 7c)

Figure 7 shows how the desired antenna signal is enhanced and the undesired signals are reduced (or attenuated) in signal level.

These resulting signal levels are now applied to the Channel 4 amplifier for amplification to the signal level required to feed the television distribution system.

One other minor change is that the amplifiers shown in figure 5 were capable of amplifying all TV signals by the same amount.

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The relative positioning of Ch 2, 4 and 6 in relationship to channels 3 and 5.

(Note: the guard-band between Chs 4 and 5).



Figure 9

In figure 6, the amplifiers have been designed to permit full amplification of the desired channel. The undesired channels are still amplified but to a much lesser degree.

Figure 8 shows how the desired channel is even further enhanced, whereas the undesired channels are further reduced in signal level.

The greater the ratio between the level of the desired channel to those levels of the undesired channels, the better the quality of television picture on the desired channel in the television system.

This same filtering and amplification process is applied to each of the channels, channel 2, channel 4 and channel 6 and in this manner each channel is electrically processed so that the output of each of the amplifiers presents only that channel to the output mixing network.

Only by accomplishing this electrical purification is it possible to minimize the interference among channels in the channel combining process.

In figure 6, the processing and combining of three non-adjacent channels was discussed.

Non-Adjacent channels are Ch 2, Ch 4 and Ch 6. In a similar manner we could have processed channels 3 and 5 but the usual selection was channels 2, 4 and 6 to provide three channels to the system rather than only two.

After the first three non-adjacent channels were occupied, it was necessary to increase the channel capacity to four or five channels.

By simply adding either channel 3 or 5 to the Ch 2, 4, 6 system, a serious interference problem developed regardless of how effective the filtering amplification process.

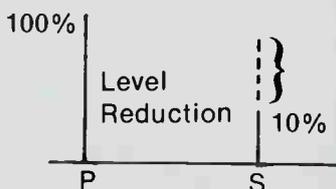
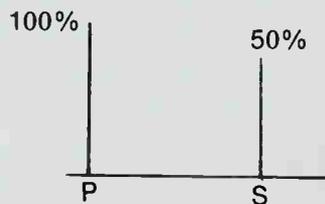


Figure 10

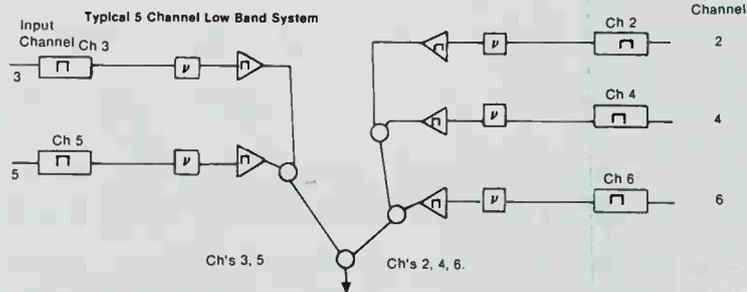


Figure 11

Figure 9 illustrates the channel positions of channels 2, 4 and 6 in relationship to channels 3 and 5. The shaded area is a special "guard-band" which contains no television signals between channels 4 and 5.

Investigation into the cause of the interference between even and odd number adjacent channels revealed that the problem was created by the sound or audio carrier of the lower adjacent channel.

The channel 2 sound would appear in the picture of Channel 3 in the form of small "wiggly" lines which moved in conjunction of the audio content of the channel 2 program.

The same problem existed with Ch 3 sound interfering with channel 4 picture and channel 5 sound interfering with channel 6 picture.

The sound of Channel 4 interfered with Ch 5 picture to a lesser degree, only because the "guard-

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Celeste Rule Nelson:



Celeste Rule Nelson with her husband, Don.

Each month for 1984 we have featured an outstanding personality in the CATA association and this month's honoree is just that. It only seems natural that this immensely independent woman would be one of the driving forces behind CATA, the independent cable operators association.

The following story of her professional and personal growth barely touches the surface of her interests, endeavors, achievements, and admiration felt for her by her many friends.

Celeste Rule Nelson has contributed more to CATA than can reasonably be expected and simplified difficult tasks with her amiable and efficient ways. Many will be surprised to find another side of her in this article, but as her employees, we see, appreciate, (and wonder) at her energy and enthusiasm for each project.

To this vivacious and understanding woman we affectionately dedicate this 10th anniversary issue to her.

CATJ Staff

CATA's First Lady

by Kathleen Sheldon

Long time members of CATA insist that the association is more than an organization of ordinary cable operators. It is a brotherhood of independent thinkers and entrepreneurs who have been fortunate enough to go into a business that keeps them alert, frustrated, discouraged, challenged and interested. Through the association they have fought regulation, shared technical know-how and established enduring friendships.

The person who has looked after the human element in all this is Celeste Rule Nelson, who for more than ten years has been the managing editor of CATJ, has handled CATA's business affairs since incorporation in January 1974, and since the inception of the CCOS program in 1976, has organized these meetings. Through the years of controversy, struggle and growth, she has been the unifying force that held the membership together, the sane voice that kept reminding one and all of CATA's roots.

Kyle Moore, CATA's founder and first president, says it is hard to find the words to express all Celeste has done for the association. "She's so capable," he says. "She can handle anything that comes along. CATA was extremely fortunate to have her come our way."

Recalling the early years of CATA, Kyle says, "When Celeste came on board it took so much pressure off me. She was able to go ahead and take over a lot of the things I was doing at the time."

He adds, "I don't think there is any other woman in cable — none that I know of — that knows as much about cable TV and all the legislative actions on Capitol Hill and the problems that the day to day operators have, as she does."

"We all called her Mama C," said Tony Bickel, now president of Electron Consulting Associates, who was technical editor of CATJ during its early months. "If you had any problems, . . . you just went to (Celeste) and if she didn't have the answer, she knew who did. She was the heart of (CATA and CATJ.) She took care of everything."

"Celeste is a dandy," agrees G.H. "Bunk" Dodson, president of Dorate, Inc. which owns and operates nine cable systems. He adds that one of her strong features is that she cares about people and treats everyone with courtesy and concern. At the same time she is strong and determined. "She's a POWER," says Bunk, and when he says it, you know the world is spelled with capitals. "She's been the backbone of the organization, and when it came to handling the bookkeeping of CATA's business, she was the best," said Bunk who served as CATA's secretary/treasurer until his resignation in July, 1982.

Readers of this magazine know Celeste for her work in the cable television industry, but her interests and activities extend far beyond that. She has developed friendships that endure, not only in the cable industry, but during her years employed in public relations and at a television station, doing volunteer work at Immaculate Conception Church, with the 4-H Club program in Oklahoma, and for the Oklahoma 4-H and FFA Livestock Show held annually in Oklahoma City.

Steve Collier of the Oklahoma City Chamber of Commerce said, "Celeste is a very complex, intriguing woman. I think the thing that strikes everyone about her is her independence, and, as far as I can tell, she hasn't lost any of that in marriage."

Celeste and Don Nelson, a tax accountant and investment counselor, were married just a year ago after a long association, friendship, and romance, and they share many interests and activities. "I know how blessed I am to have Don as he is a most loving, supportive and patient man — he'd have to be to put up with all my projects and activities. My kids have found him a very understanding person, and one on whom they rely and consult with regularly. He knew that with me there were many associates of long standing that were important to me and that they were special to me, so my male friendships of many years are accepted by Don in the most understanding way."

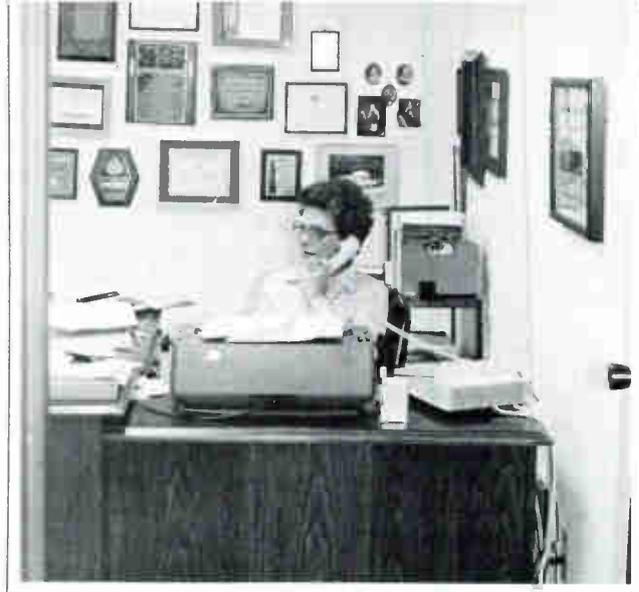
That's a good thing, because Celeste has won the confidence and affection of so many.

Mildred Fox, wife of CATA director David Fox, has great admiration for Celeste and her accomplishments. She expressed the feelings of other CATA members when she wrote: "We have had the pleasure of knowing Celeste since the first CCOS at Sequoyah State Park in 1976. She is a very dedicated person and has devoted many hours to CATA. When operators go in for the convention, everything is set up and swinging into motion. The majority of the people do not realize the hours of endless planning, trips and phone calls which are necessary to have a successful convention. David and I worked with Celeste and Ralph Haimowitz in setting up the 1982 convention at Opryland Hotel. We made four trips down, and that was only a small part of Celeste's involvement in bringing that convention to you. Celeste deserves much praise for setting up at the conventions, the endless hours at board meetings, coping with all the directors that come to her with advice and for advice, and the endless hours of office work for CATA. She will sadly be missed as chief organizer of the convention, in my opinion. She has given ten years of service above and beyond the call of duty."



Celeste and Jay Allbaugh, Executive Secretary of the Oklahoma TV Cable Association, which she has helped through the years of their growth to help them with their membership, newsletters, and conventions.

CATA's Founder, Kyle Moore, and Celeste, always worked closely together with the association business and in planning and implementing CCOS.



The door to her office is always open — to her staff, visiting cable operators, and vendors.

Celeste has always enjoyed meeting a challenge and having a project to complete. She says organization is the key to success, and a great deal of organization was required for her to manage a busy household and develop her career. Her son John Rule says her devotion to her children is the key to her inner drive; that and her religious faith and positive attitude have made it possible for her to keep going during the difficult times as well as the better times. "She takes a blow and gets up and keeps going," says John.

Much of her success is due to the way she relates to people, according to John. She always looks at things from the other person's point of view, and she doesn't dominate the situation, even when she is in a supervisory position. She doesn't say they "have to" do something, he says, "She gets a 'want to' out of people she works with."

Members of her office staff agree, saying that Celeste does not fit the stereotypical picture of a boss at all. Production of CATJ and other projects at TPI are a community effort, with everyone performing the work they do best and taking pride in each other's work. Diane Howard, Celeste's Executive Assistant, said, "More than anything, Celeste is my friend, and the others in the office feel the same way." Her wonderful sense of humor is particularly appreciated by her staff.

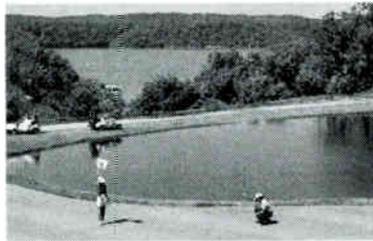
Celeste first started working with the public when she was nine years old. Her father owned a restaurant in El Reno, Oklahoma, and she began by bussing tables and cleaning up. She admired her father and loved working with him, and she credits him with instilling in her the attitudes and philosophies that have helped to see her through the many phases of her life. The restaurant, featuring "down home type cooking" catered to the working people of El Reno, a railroad and agricultural community. All the time she was growing up, Celeste says her father was up at 4:30 every morning, seven days a week, to begin the breakfast preparations for the many railroad men who stopped there before the early train came in. "It was a grueling schedule," says Celeste, "but I never heard my dad complain."

continued on page 20

CCOS 84

TAN-TAR-A

Resort and Golf Club



It's that time again! CATA's annual Cable Operators' Seminar is in the final planning stages as we head toward the meeting date of July 16 through the 18th at the Marriott Tan Tar A Resort on the Lake of the Ozarks in Osage Beach, Mo. It's going to be quite a meeting!

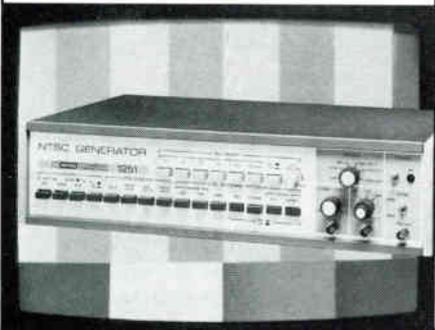
There are several things that have become "standard" at the annual CATA gathering. First is that everyone is confused by the name — maybe we will have to change that some day — but for now let's explain it one more time. CCOS simply stands for the Cata Cable Operators' Seminar. Even if the name does change, one thing that will always stay the same is the intent of the meeting — and that is to get cable operators together to share their experiences and learn from each other. That is why we call it a Seminar rather than a Convention or a Trade Show. It has aspects of both of those things, but there is more — there is a special atmosphere that is hard to describe unless you have been there.

Maybe that atmosphere can best be described as being the way cable conventions used to be in this business. The exhibitors will be there, and the hoopla — but there will be plenty of time to just sit down and chat with other operators about what is really going on in the business. There is an informality, and a family atmosphere that pervades CCOS, and hopefully always will.

Speaking of family, CCOS '84 continues the tradition of being a "family affair". We have chosen a site that will keep the entire family busy while the business meetings are under way. To begin with there is a 98-mile shoreline lake. It, simply put, is gorgeous! There are also several swimming pools at the resort complex as well as tennis and golf facilities and even bowling lanes. You can rent at least

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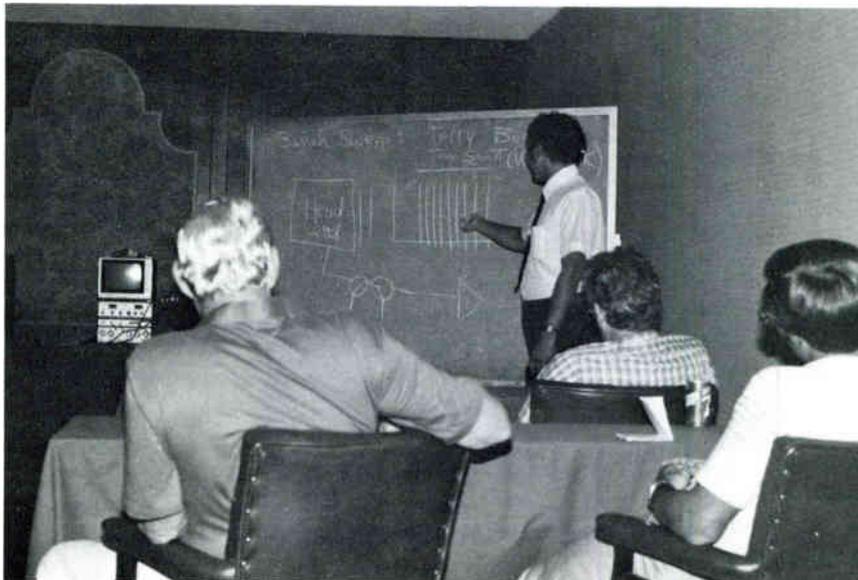
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four different kinds of boats, from an ultra-fast speedboat to a rowboat, there are fishing guides available as well as all the tackle you will ever need to land a big one, and if all that is not enough for your youngster (we hesitate to even mention this), there is an entire electronic game room that is constantly buzzing with activity.

That's all on the recreation side of the ledger. On the business side, things are going to be just as chock full of activity. It will all be starting on Monday afternoon with general meetings on the "hot topics" regarding both technical and legal issues. This will run the gamut from **proof of performance tests to signal leakage to aeronautical frequency use to the legal stuff:** Washington updates on legislation, a discussion of pole attachment strategy, how to take practical steps against theft of service, and the like. And those are just two panels! How are we getting so much information into such a short period of time? Well the panels will just be introductory comments. Each of the experts we have invited to speak on these various areas will then be assigned a specific time to man the "consultant's corner" which will be right on the exhibit floor. They will be there at those times so that anyone who wants more details on the specific area — or who wants some individualized help with a particular problem will be able to

meet with the consultants throughout the remaining CCOS schedule. That way we can extend the help we can give individual members coming to CCOS-84. We're very excited about the "consultant's corner" concept and we trust that lots of operators will make use of it.

Another new concept we will be trying out this year is a "demonstration area" which also will be right on the exhibit floor. At several specified times during the hours the exhibits are open there will be demonstrations of things that directly relate to information provided during panel discussions. For instance there will be two detailed demonstrations dealing with solving signal leakage problems. The idea is to impart both lots of information and at the same time do it in a way that encourages the maximum participation of the folks attending CCOS-84. There is, of course, one more reason for this type of effort: we want to draw as many buyers as possible to the exhibit floor to assure good results for the CATA Associate members exhibiting their wares. Be sure to tell all of your suppliers that you will sign that next contract with them at Lake of the Ozarks, Mo. during CCOS-84! It does not cost you, as a cable operator, any more (and it sometimes costs less) to do your buying at CCOS. It's a good way to support CATA, and the CATA



Associate Members.

What else is planned? Well, there will be panels on advertising, addressability (from both a management and a technical point of view), new revenue sources for cable — including telephone installation, earth terminal installation, and maybe even an idea or two about working with your local telephone company. There will be experts explaining the practical way of retrofitting small earth terminals so that they can “look” at two satellites at once, and an entire session dealing with ways to save money on rebuilding or upgrading — the question being which is the best way to go in your particular situation?

Of course the programmers will also be there, and the panel they will be on is bound to attract a crowd — they have been asked to explain to you, their customers, how far the rate increases will go — and why they are going up in the first place! Rounding out the panels will be one on tiering and sales formats — this one fits in with the entire series on addressability.

As you can see, we are going to have a lot of invaluable information packed into Monday, Tuesday and Wednesday, July 16, 17, and 18. The CATA Board of Directors will be meeting just before the start of CCOS-84 and you will all get a progress report on the

Association at the Annual Membership Meeting to be held Monday afternoon just before the opening reception which will be at the official opening of the exhibit hall. By the way, we expect to have more exhibit space than ever before and we will continue the tradition started several years ago of having informal lunches during exhibit hours. We are not scheduling any “formal” dinners — folks have told us they are really tired of the “rubber chicken” routine — but there will be a special CATA 10th Anniversary Breakfast Wednesday morning where we intend to take a look back at the last 10 years of CATA and honor those who have built it into what it is today.

We hope that you will decide EARLY to register for CCOS-84. There is limited space available. We have no intention of ever getting so big that the informal interaction which is so vital to a successful CATA meeting is lost in the crowd. But that means it is first-come, first-served on reservations. CATA has experienced a great deal of growth recently, and we believe that growth in numbers will be reflected in the attendance this year. Be forewarned! If you have not already gotten your registration material for CCOS-84, call CATA at (703) 691-8875.

See you at Lake of the Ozarks, Mo. — July 16-18, 1984! □



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continued from page 14

When she was twelve years old, Celeste took a job at the movie theater, beginning with the popcorn concession and advancing to cashier as the years passed. During this time she continued to work in the family restaurant, too.

Later, with her college education behind her, Celeste worked for the general manager of the municipal auditorium in Oklahoma City, where her duties included handling conventions and selling booth space, working with the decorators and meeting planners. This early

experience was one of the reasons she was able to step in and do such an excellent job when faced with organizing CCOS for eight years.

Still later, she worked in the agricultural public relations department at Wilson and Company, where she worked closely with the general manager on many community projects. This brought her into contact with people all over the state of Oklahoma, and many of the associations and friendships that developed at that time continue today. During this period of

her life, Celeste married, but continued to work until her first child, John David Rule was born. In the years that followed, four more children were born into the Rule household, and she didn't reenter the job market until the youngest, Richard, started school, although she worked on annual projects with the Oklahoma Cattlemen's Association, coordinating their convention.

With all her children in school, Celeste took a public relations position with KWTU, Channel 9, a CBS affiliate in Oklahoma City, working primarily with the farm department and the production department. "It was a job that I was thrilled to have — each day held something new and my horizon of experience was broadened," says Celeste. These experiences included work on both sides of the camera. She assisted in the production of two daily shows for the farm department and worked on a variety show which included doing on-air interviews and special features. One of her most interesting assignments was to demonstrate women's self defense techniques. To complete this assignment, she and her son John took karate lessons from one of the country's leading Black Belts. "It was hard work," says Celeste, "but over a period of about six months, we did several demonstrations, and the crew gave me a bad time about not fooling with me."

Celeste wanted desperately to work in the news department, but this was the late 1960's, and although the news director often managed to find her for help with his letters and special assignments, no woman was allowed in the news room. In an attempt to keep the union out, the station formed an employees committee to work with an industrial psychologist in improving working conditions, and Celeste was one of five elected station employees on the committee. During her three years on the committee, working conditions in general, and especially for women employees, improved, but, says Celeste, "It didn't happen fast enough for me."

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About a year before she left, the station hired a news director from New York's ABC News to completely revamp the news department. Says Celeste, "Needless to say, he had a different personality from the typical Oklahoman, but the nicest compliment I was paid when I left was that he came up to me and said, 'I sure could use a broad like you in the news department, but I need a year before I can get you.' I couldn't wait a year — we needed shoes, glasses, teeth fixed, etc." No money had been allocated for raises, and Celeste had been offered better paying work at an advertising agency. Still, she regretted leaving Channel 9. "Those had been some of the happiest working days that I had had, and they had come during an especially sad time in my life, so I was thankful for that work."

It was at the advertising agency that she met Bob Cooper whose project at that time was the All Sports Amplifier. His office was just down the hall from the advertising agency, and the owner of the agency had invested in Bob's enterprise, so Celeste's duties included working with Bob. A few years later, when CATA was being formed, Bob called Celeste to offer her a position with CATA and Television Publications. "I guess the rest is history," says Celeste. "When I first came to the office at 4209 NW 23rd, the floors were bare and partial walls were standing; it was a mess, but it was going to take shape." CATJ is still being produced in that original location today, "It is very much another home to me," says Celeste. Some of her antiques decorate the office, along with displays of her art collection and mementos of her career and community work.

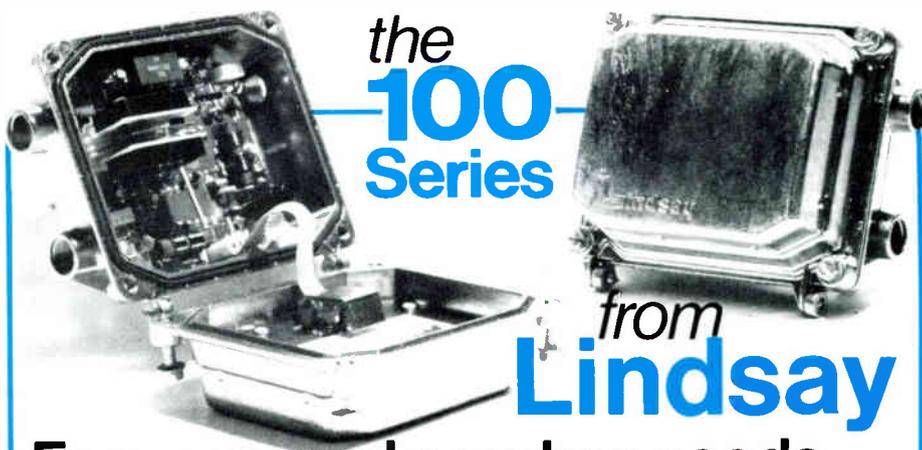
Television Publications Inc., which publishes CATJ, the official journal of CATA, has been equally owned by Celeste and Bunk Dodson since 1978. In addition to CATJ, the company publishes another monthly magazine and produces brochures, ads, menus, newsletters, and other printed materials, and recently

Celeste has called on her broadcasting experience to develop some radio spots for a client. Another planned project is a compilation of work by one of the outstanding artists of Oklahoma City developed into a biography. Celeste and her staff are excited about the next ten years at TPI.

Celeste is convinced that she has the best staff anywhere. "It is wonderful to know that you are surrounded by responsible people and you don't have to look over their shoulder to know that the

job's being done, and done properly!" she says. Her executive assistant, Diane Howard, has been with her for six years, and handles many of the facets of management, "and then gives me the bottom line," says Celeste.

Staff meetings are an important part of the operation. "We listen to each other's point of view, and then arrive at the best decision for the problem," says Celeste. "I try to involve all of them so that it is a unified effort and team spirit. One thing, through my



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early career, too many times I realized that someone was taking all the credit when maybe their effort had been minimal, and, I should just as well admit, it was a man supervisor in every case. I would have been the one who stayed late typing or drafting a presentation, but when it was complete, he got the credit, and, incidentally, the higher salary for the work."

She is quick to add that she is not a feminist, but that she does believe in just recompense for the job, and that she knows there is no successful effort, convention, project or whatever that is accomplished by a lone effort. "There is no such thing as an "I" job," she says, "and our offices at TPI is on the "WE" basis — we work together and we enjoy our plaudits together, and the art department is just as pleased with the smooth-operating computer work that our Lori Biggers does as Diane and I are with an outstanding CATJ or other art project. It's a team effort and that makes for an enthusiasm that you can't buy."

Managing such a busy schedule can be a problem, but Celeste says organization and planning are the key to success. "You have to be able to think of more than one thing at a time and to anticipate questions, problem areas and possible alternatives," she says. "I thought maybe that was something you had to learn, but my art coordinator, Phyllis Crumpler, is a young career woman, and she has a remarkable ability for those things, so maybe it's inborn rather than learned."

Dianna Johnson, assistant art director, has worked at TPI for over three years, and she has been a good addition to the staff, says Celeste. "She is doing some really good work in paste-up and design and does a fantastic job representing CATJ at the conventions or TPI with our clients."

Joyce Meiki, one of the city's most acknowledged graphics designers has recently joined the staff, and Celeste praises the innovative and productive ideas she has been developing for the company and its clients.

"I think my basic approach to work came from my dad, as he worked endless hours all the time I was growing up, retiring from the restaurant business when I was away at college," says Celeste. "I've always wanted it to matter that I lived, so I've wanted to contribute. My dad was such a marvelous man who guided our family through some bad days of the depression. We were fortunate that being in the restaurant business, we were never hungry, but he felt it was our obligation to share our blessings, and many families came to our cafe for food. When he died, strangers came up to us and remarked . . . how generous he had been and how he had saved their family; one man came up to us and told of how my dad had saved their farm from foreclosure. He was a quiet, strong man, whose heart and empathy for others took precedence over himself . . . When he died, I really realized that it did matter he had lived — it mattered to a lot of people by his works for others. So I've not forgotten the wonderful teaching he gave us that we are indeed to live a life of service."

Celeste's parents, John and Alfreda Leonard, both lived to be eighty-four years old and celebrated sixty years of marriage before her father's death. There was Celeste and her sister, Marcella, in the Leonard household. Both girls were "chosen children" says Celeste, and "We've always felt we were so fortunate to have been chosen by our parents and never felt any of the unsettling trauma that so often comes over adopted children." Marcella is five years older than Celeste, and "entirely different" she says. "Marcella was a beautiful child — olive skinned, brunette and blue eyes with the lovely temperament to go with the looks. Then here I was — red haired, freckled face, and likewise the temperament to go with it. I was just onery and noisy."

Today she and Marcella Leonard Hendrix, who lives near Celeste's office, continue to share special



*1983 Honoree
Celeste Rule Nelson
Oklahoma 4-H & FFA Livestock
Show*

moments and memories. "We had wonderful parents who provided us a devout Christian upbringing and a beautiful home and memories," says Celeste. She adds that her mother was a "tiny fireball who was involved in everything at church and school. Everyone loved her and her friends were many."

If there is any truth to Celeste's modest description of herself as a child, then it must be that "onery and noisy" developed into strong and independent, making it possible for her to face the biggest and most important task of her life, raising five children into adulthood alone, against tremendous odds and difficulties. All have college educations and each has developed into a unique, sensitive, caring individual with special talents. Celeste is rightly proud of each one.

John and his wife, Dona Kay, own and operate National Saddlery Company, Inc. in the StockYards area of Oklahoma City. John became interested in leather tooling as a 4-Her and has developed into a very popular and sought after saddle maker. He begins with the best raw materials, and his artistic abilities provide the tooling, ending with saddles most seasoned riders appreciate. Dona Kay, is involved in training her own horses, is a barrel racer, but also works with a lot of young riders, this after she takes care of the office procedures at the store. John is a calf roper by hobby, but in the winter when it's too cold, he uses his free time on oil paintings, another of his talents. While in 4-H, he was a state speech win-

ner, showed steers and horses, and had a grand champion steer. Celeste says John is the rock of the family who devoted his time to his younger sisters and brothers in their activities.

Suzanne, Celeste's oldest daughter, is a Certified Chiropratic Therapist and an enthusiastic student of health. "Because of her rigid health and diet program, we always threaten anyone with ailments with calling Suzanne because she is a naturalist and always has the answer," says Celeste. Suzanne practices at a clinic in Denver, but at the present time she is on a leave of absence, and is living and working with three girl friends in St. Thomas, Virgin Islands. Of her, Celeste says, "She is very much an adventuress and an extremely interesting person, a marvelous cook, and an avid reader and philosopher."

Celeste says her youngest daughter, Cindy is said to be a carbon copy of her mother and, "Now she smiles about that and accepts it as a compliment." Cindy is office manager at a computer software store in Nashville. This store is an investment of Don's and Celeste's, and Celeste says, "While having a business that far away may seem difficult, having Cindy there has provided the stability and confidence." Cindy worked for Don through her high school years and knows his procedures and understands his requirements for bookkeeping and management. Like most of the family, Cindy also has a culinary specialty, her "Hot Sauce" is a very special tomato salsa she has developed, and the recipe is highly

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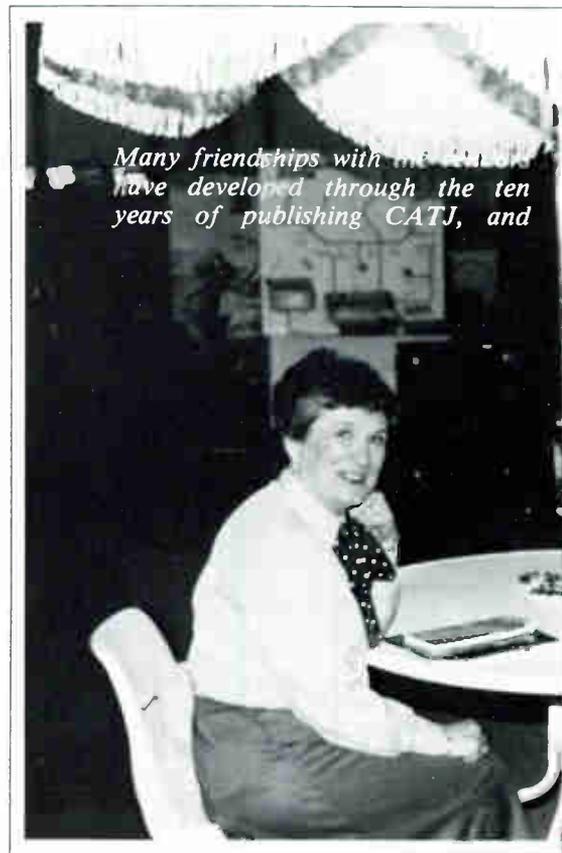
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secret. Restaurants have tried to buy her recipe, but she isn't telling, and is considering commercial production herself.

Both Suzanne and Cindy were active in the 4-H, showing steers, horses and lambs, sewing and canning and doing speeches and demonstrations.

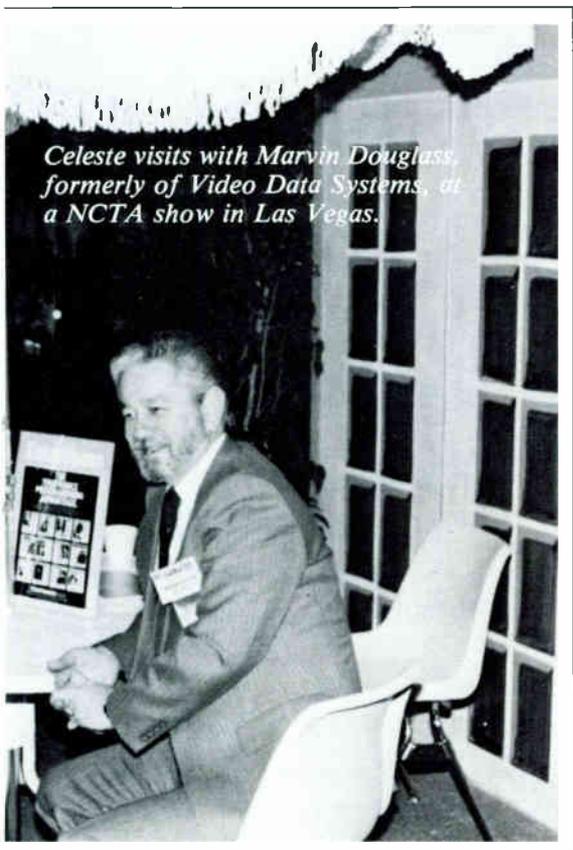
Celeste's son Kevin majored in Hotel and Restaurant administration at Oklahoma State University. A gourmet cook, he is manager of one of the two Cook's Nook stores in Nashville, a gourmet shop where he also does food demonstrations. "A wonderful cook — people beg for his cheesecake," says Celeste. In 4-H where he completed nine years of work, Kevin enjoyed showing steers and lambs. He was the State Winner in Citizenship, represented the state at the National 4-H Congress and is a 4-H Hall of Fame winner.

The youngest member of the Rule family is Richard. He is a bull rider in the Professional Rodeo Cowboys Association, but is currently recovering from a major injury sustained by a bull stepping on him. While at Southwestern University he was on the rodeo team and finished a collegiate champion. During his 4-H years he, too, showed steers and lambs, and he was the State Winner in Citizenship the year after Kevin was and also a 4-H Hall of Fame winner. In high school he was involved in the DECA program and was featured in the 1980 national issue of *Who's Who in High School Students*. He hopes one day to be a champion at the National Finals Rodeo in

Oklahoma City. The whole family is proud of Richard's rodeo skills, particularly his brother, John, who trained and worked with Richard when he was a little boy and took him all over the state to miniature rodeos. Celeste says, "If Richard ever makes the NFR, we'll have to find a new hat size for all of us, but particularly for John."

"Young people have always been in and out of our home," says Celeste. "I never knew just how many would be there for breakfast on a weekend, but I was happy that the kids enjoyed their home and wanted to bring their friends there, too. So there are many friends, both of the children and other young friends, that call me 'MA' — and that name has stuck for many years. Don calls me 'MA' most of the time." Among the many who spent time in the Rule house was a Japanese son, Shinichi, who lived with the family for a summer to gain language skills and exposure to a typical American family, and two boys and a girl who made their home base there for a long time so they could finish school.

Naturally, with her children so involved with the 4-H, Celeste was an active parent with the group. As a leader she coached many members for speech contests and teams for demonstration work. Her approach to these activities resulted in 4-Hers who were always eager and willing to put forth their best effort. She says, "My theory in working with the young people was that we were indeed in competition when we went to contests and shows, but that winning



Celeste visits with Marvin Douglass, formerly of Video Data Systems, at a NCTA show in Las Vegas.

February, 1984

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wasn't the only thing. I'm sure they would repeat some of my 'pearls of wisdom' — a standard, and I'm sure they tired of hearing it: 'You don't have to win; you should do the best you can do.'

Whenever an event was over, she would point out the things they did right and then follow up with suggestions about things that perhaps could have been better done another way or some other constructive criticism. This is the same approach that she uses with her work associates and the many other activities in which she is in a management position, and it is an approach which always gets good results.

Steve Collier, who was the Oklahoma County 4-H agent when Kevin and Richard were members, recalled that Celeste was a very active, interested mother. She was "willing to go the extra mile" he said. It didn't matter whether the work was outwardly visible, Celeste could be counted on to pitch in on anything that was important, from making sandwiches for all the kids to taking the lead in a county fund raising drive. "That's the important part of Celeste Rule," says Steve.

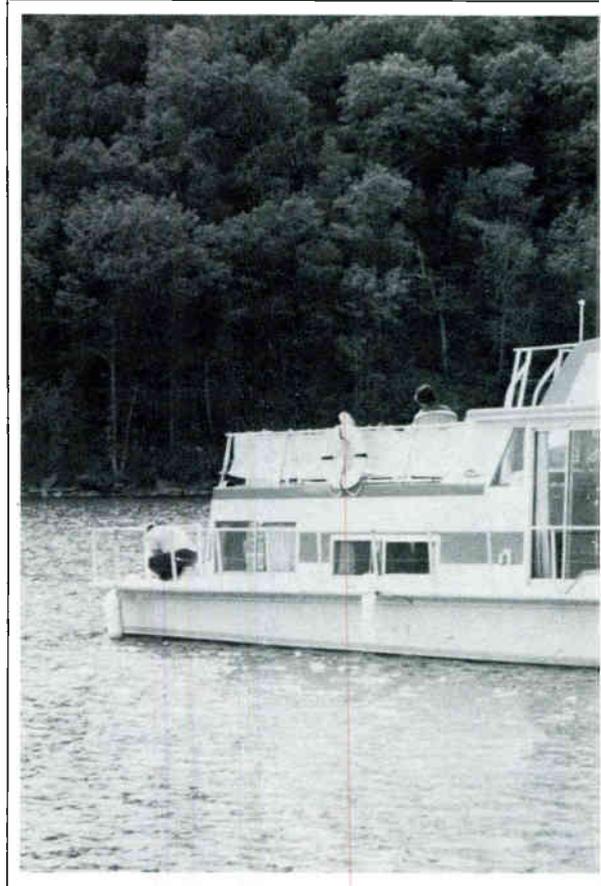
Live Television! Celeste and Variety Show host with a beef cookery demonstration, using microwave techniques.

One of their most pleasureable possessions that the Nelsons love to share with their family and friends — JOINT VENTURE I.

Celeste's volunteer community work didn't stop with 4-H. She is deeply involved with work at her church, Immaculate Conception, and currently serves as president of the church council, another position that makes good use of her excellent planning and management skills.

One of her longest ongoing community activities has been with the Oklahoma 4-H and FFA Livestock Show, which is strictly a junior show (no professionals or purebred herds.) She began with this show 33 years ago, a few years before her first child was born. For the past twenty years, as Office Superintendent of the show, Celeste has seen the event grow tremendously. She says, "When I first started . . . the facilities were meager, and if the snow was blowing, the steers still were shown outside and the hogs . . . (and lambs) in a drafty barn. Now we have air controlled arenas where the show and premium auction are held, and the results of the show have taken on a more sophisticated process. For instance, now carcass information is taken on all winners and follow-up meetings are held to see if the winners chosen are actually the kind of meat specimens that are in demand by the consumer."

Steve Collier now oversees this show through his position with the Oklahoma City Chamber of Commerce. He praises Celeste for her hard work through the years. It's all volunteer work, he says, and while it may not sound impressive on the surface, the fact is, this is "the world's largest junior show with over



5,400 animals and she coordinates records on each animal." Her work also includes organizing staff for the show. Eighteen years ago the trustees of the show began an annual honoree program where one person is designated as honoree of that year's show. Says Steve, "An example . . . of the appreciation others have for her is summed up best, probably, by the fact that in 1983 she was voted the show's honoree. She joined the seventeen others who have been so honored, and all the others were men. I think that's interesting. It's probably a bit chauvanistic to say, but it still shows the tremendous respect others have for her."

Previous honorees have been some of the most outstanding citizens in the Oklahoma business community, and Celeste says, "It was a signal honor for me and my family, and the trophy sits proudly in my office." She adds that she was especially touched by the number of young people who came up to her afterwards to say they appreciated her years of service to the show and that they were glad she was the honoree.

Being the first woman to receive an honor or position is not unusual for Celeste, who says, "At present I am vice chairman of the State Agricultural Youth Council and (the first and only woman to be a) trustee of the Southwest American Foundation, having served on various committees and having served as chairman of some of them. I was the first woman member of the Sirloin Club of Oklahoma two years ago, and can

happily say, a few have since followed my membership."

Through the years she has received numerous awards for her work with the 4-H and the FFA, and an Ambassador at Large Citation by Mayor Patience Latting for work with foreign and out of state visitors to Oklahoma City.

With such a busy schedule of raising children, career and community service, it might seem that Celeste would never have time for fun and recreation, but that isn't the case at all. She enjoys collecting the antiques and art work that fill her home and office. She and Don like the functional type of antiques and have some pieces that date back to the 1860's which they use everyday. Celeste has loved beautiful crystal and china since she was a little girl, and has several assortments of crystal and three sets of china. One of her pleasures is to use these items while entertaining their close circle of friends.

Sewing and cooking are two more of her interests. For her children she is making quilts working with fabrics saved from their childhood. A cookbook is another ongoing project which she hopes to complete and publish someday. Both of her parents were good cooks, but since her father was a professional cook, she and the children learned many kitchen skills from him. "This came in real handy when I was faced with the task of feeding five kids," she says. "I became real inventive with inexpensive meals . . . Those kids ate ground beef in many different shapes and forms, and didn't even



March, 1984

Montgomery Cablevision, Inc.
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Don and some friends on vacation stopped by Nashville during CCOS 82 and joined Celeste at the HBO party. Many CATA members have gotten acquainted with Don through the years as he has attended some of the CCOS meetings and driven the airport shuttles when they were in Oklahoma.

realize it. I tell my son Kevin, who is a gourmet cook, that most people can be gourmet cooks with unlimited funds and supplies for extravagant food products, but a real 'cook' is one who can make a satisfying meal out of meager stock."

Celeste and Don have shared the ownership of a 43 ft. Nautilus Boat called "Joint Venture I" for several years. They keep it docked at a lake in southeastern Oklahoma where they have good times during the summer months with family and friends who are boating enthusiasts. She says, "We have been known to have wall to wall bodies on a summer weekend. We usually beach the boat and use our ski-rig for touring the area or water skiing and have big cook outs on the beach. We really look forward to the summer months as finally Don is through with his tax season; however, summer months have not been always as free for me because of CCOS, so the boating trips were usually cut to just the two day weekend. This summer that can change, and I'm looking forward to more free time."

"Joint Venture" has been the name of several investments which Celeste and Don have. The most recent is their new home. Celeste says, "Don and I had talked about marriage for some time, but we both had children we needed to get settled. When my youngest, Richard, was away at school and about to be situated, even he mentioned that it was time I thought about myself and 'Why don't you and Don get married?' What finally brought it to a head was that our bank officer kept telling us about this wonderful piece of property and house that he had, begging us to make an appointment with him to take us out to look. We finally agreed, just to placate his insistence. Naturally, we fell in love with the beautiful wooded area and the house and decided to buy it."

Instead of keeping it for investment purposes, we decided it was time that we marry and make this beautiful setting our home. Of course, life is never simple or easy. The house needed some remodeling, and about this same time, Don purchased an office building which also needed some remodeling. "That was a hectic time to say the least — I moved to the house and he moved his office the same weekend!! But it all got done, and we're happy with our home and his office. Today, the new iron gate covering the entry to their ten acres reads, "Joint Venture V".

Joint Venture has been the title they have used on several of their investments beginning with the boat, and Celeste says, "With Don, I never know what's around the corner to be VI — it makes life interesting though!"

Life has always been interesting and full for Celeste and she has the marvelous ability to get things done. She took CATJ, an idea that Kyle Moore, Bunk Dodson and Bob Cooper had, and built it into one of the best read and most respected publications in the industry. In looking back over the last ten years, she said, "I am happy to say that times have changed since I began with CATJ in 1974. I remember that I was in a booth at the NCTA in Dallas the next year, talking with an advertiser and was literally ignored in the most rude way by one of the head honchos of another cable publication, and the advertiser went along with it. Another . . . advertiser told me, 'Lady, I don't need you.' A woman dealing in their business was indeed a problem to them and I wasn't welcome."

Celeste set her mind to changing that attitude, and after a few years the situation began to change and, she says, "I felt the respect and acceptance from the vendors I worked with, and feel a close tie to many of them today. One advertiser in the early days told me, 'I can't think of words to say that you would be able to understand' (as a woman, of course) but today he is one of our most loyal and constant supporters. It was a struggle, but Kyle Moore was always behind me, encouraging me, and he stepped in once to set someone straight."

In looking ahead to CATA's future, Celeste said, "As CATA begins its second decade, I hope that they don't lose that personal contact with the members who have provided the heart and courage of the association. The corporate membership structure is very rewarding and important in that they have publicly agreed with the CATA philosophy, but I want the operators who depended on CATA and who donated their funds, sometimes from meager accounts, to continue to be that driving force of CATA — as they have said, "family style cable." There were a lot of the smaller operators who had the faith in us to represent them where they couldn't or where they didn't have the time nor money to travel to Washington, or assist them out of our office. I always instructed my staff that each CATA member was important — I don't care if they had 100 subscribers or 1,000, each was to be treated with courtesy and concern. We always cared about the small operators. I hope they will still have that concern." □

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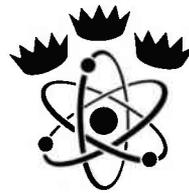
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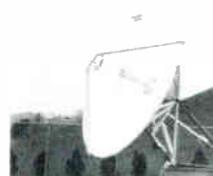
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Reducing Unnecessary Installation & Service Trips

by: Frank Gates

"I took off an entire day from work and sat at home waiting for your people to show up all day long!" or "The installer said that he would need a special drill and someone from the office would call and let me know when he could return!". Sound familiar! Even in a well run, very efficient organization, there are going to be complaints. These complaints should be a clear warning that not only is the cable operator losing public image, hard earned sales and long term revenue, but operational costs are being increased with every complaint.

No access, cancelled and rescheduled installations or service calls take a very expensive bite out of every system's bottom line. The goal of system operations is to recognize what is an acceptable level of uncompleted jobs and then ensure that that level is not exceeded. There are several variables involved in determining what this 'acceptable' level should be and these variables are particular to individual systems. The volume of activity, contract labor, geographic and demographic factors are some key contributing variables. Management's goals for public image and customer satisfaction can vary from one extreme (Let 'em eat cake!), to another (Let's hit 100%!). Two systems in the same town or city might determine vastly different 'acceptable' levels of uncompleted trips based upon the internal business climate of that particular system. What's good for one might be devastating for another.

Whatever considerations determine the 'acceptable' level for your system, it is the job of plant operations to maintain that level. More often than not, common sense management is the best approach to take. Each of the three (No Access, Cancelled and Rescheduled) areas can be minimized through a common sense approach.

NO ACCESS

Everytime that you roll a vehicle and installer or technician to a home, you are spending money. Each time that the job is not completed because the customer is not

home, you are wasting money.

In both Installation and Service, the farther out into the future that the job is scheduled, the greater the risk of the customer not being home for the scheduled appointment. Same day service represents the lowest risk as the customer has made a very fresh commitment to wait at home for a few hours until the installer or technician arrives. Even if your system is staffed and geared towards handling all installation and service on a same day basis, there will still be a percentage of customers that want the job scheduled some time out in the future. These are the high risk appointments and common sense can help minimize missing them.

A reminder telephone call to the customer the day or night prior to the scheduled appointment will pay for itself immensely. There is always someone on the staff who could perform this function. If by calling ahead to all of tomorrow's appointments, you discover that three or four customers must reschedule the appointment for some other time, you have saved three or four wasted field trips. As a field trip can cost from \$25 to \$50 each (or more), you have already recovered the salary spent in placing the telephone calls. The telephone effort also has a strong possibility of clearing service calls that might have been generated by outside system problems which have been corrected and no longer require a trip.

A call ahead program is simply part of the scheduling effort that takes place prior to the call being dispatched to the field. Another part of this scheduling effort that plays a key role in increasing the completion rate is an awareness of the impact that specific time or time window appointments can have. When the customer is promised an AM (morning) or PM (afternoon) call, it is absolutely essential that this commitment is clearly communicated to everyone involved in the scheduling process and field response. This means the Customer Service Representative, the Installation or Technical supervisor, the

Dispatcher and finally the Installer or Technician who is going out to do the job. Any oversight in this process will almost certainly result in a missed appointment. The CSR should know precisely how many of what type appointments can be scheduled for each department and in each geographic area. He or she should know exactly what hours are involved in an AM or PM appointment, and ensure that the customer clearly understands when to expect a visit.

There is also a lot of merit to using very visible flags such as red ink rubber stamps, different colored work orders, separate batches of time appointments to make these jobs stand out from all of the others. Not only will all of those involved in the paperflow internally benefit, but ultimately, the installer or technician will be keenly aware that some of their 10 or 15 jobs for the day call for a specific time or time window. It is very easy in a field environment to miss these types of appointments unless they stand out and are properly routed into the day's work. No matter how effective the support organization has been in scheduling the job, if the field person missed the time requirement, there is another wasted trip. **(And an upset customer).**

After the work has been dispatched into the field, not only does the installer or technician have responsibility to make the proper routing, but in the office, dispatch must constantly monitor the field progress and anticipate delays and other problems which might affect some appointments. Again, common sense is the key. If a technician or installer is running behind in the morning and there are still some open AM calls, the dispatcher should intervene and get another technician or installer to pick up the open call while there is still time. If none is available, it's time to call the customer and explain the delay.

Cooperation and common sense between those individuals that schedule, dispatch, and perform the work is the key to minimizing access problems.

CANCELLATIONS

Cancelled installations hurt! All of the effort dedicated to making the sale is lost forever when the install is cancelled. Cancelled service calls on the other hand are a bonus. One corrected line problem can clear up several pending service calls.

But either way, install or service call, if the trip is made and then cancelled at the door, you are wasting money. Similar to efforts to reduce the no access problem, cancellations are best prevented prior to the job being sent out into the field.

Scheduling is as critical to installation as it is to service. If the marketing effort depends heavily upon impulse buying, poor scheduling can effectively defeat everything by allowing buyers remorse to result in a cancelled installation. In this situation, the call ahead program should include the sales force to not only confirm the appointment but essentially to confirm the sale. This would include any new install, reconnect or upgrade activity.

Scheduled service calls should be reviewed by each areas technical supervisor prior to being sent into the field to ensure that they were not affected by known line problems or outages. These potential calls should be screened over the telephone by a technician in an attempt to clear them without a trip. This applies to those calls that indicate problems (i.e., TV on wrong channel, ch#4 on ch#3) that also might be corrected or cleared over the telephone. One person who can clear 12 to 15 scheduled service calls over the telephone in two hours is as valuable to the organization as a field technician who might spend the entire day clearing these calls at the customers home.

After every effort has been made internally to clear unwarranted service calls and confirm scheduled installs prior to dispatching the job to the field, it is up to the field personnel to prevent cancellations.

A great deal of this effort is public relations. Installers must be trained well enough to avoid cancellations by addressing

whatever concern that might prompt the customer to want to cancel the job. If it is a question of installation charges or billing problems, the installer should either know the correct answer or be able to telephone in from the customer's home and have someone from the office provide an immediate answer.

If the customer tells the installer that they must leave for an hour or two, the installer should be able to deal with that. "Can your neighbor come over and stay with me while I perform the install? Can I call in to dispatch and confirm that I will be able to return later today to do the job?" Installers who welcome customer cancellations with open arms need additional training or closer supervision.

RESCHEDULES

Rescheduled work is almost always a management problem. The main reasons for rescheduling work is lack of time (scheduling and supervision), lack of material or equipment (inventory and supervision), lack of knowledge (training and supervision). As with no access and cancellation problems, there will always be a percentage of the jobs that cannot be completed. The goal of plant operations is again to minimize this to an acceptable level.

If the field personnel are not properly scheduled, there is a great potential for rescheduled work. If too much work is scheduled, or manpower requirements are not available, the time to reschedule the work is not at the doorstep, but over the telephone as soon as it becomes apparent that all of the scheduled work will not be completed that day. If this is first thing in the morning when several field personnel call in sick, don't let the customers wait at home all day and call them at 5:00 pm to reschedule the job.

Lack of material or equipment is not as devastating as overscheduling, but improper handling of this situation can result in excessive rescheduled work. If some of the field personnel are short in some areas of material or equipment, schedule them only for jobs that

they are equipped to perform. Make this a major consideration during the scheduling and routing process. Ensure that those personnel that are properly equipped have enough flexibility to assist those who are in need of the equipment.

Lack of knowledge will surface as the installer who does not understand installation methods well enough to complete the job or a technician that cannot repair any problems outside of the customer's house. In either case, you must be scheduling the workload with these considerations in mind. Until training has taken place, there must be someone available to assist in these situations out in the field. They must be able to assist in a timely manner.

To minimize the rescheduling of work, management must be prepared to overcome improper scheduling, inventory levels and employee skill and knowledge levels. Any expense that might appear to be a savings by taking shortcuts in these areas will most certainly reappear in the final cost of rescheduled work.

COMPLETION RATES

An excellent indicator of how well you are doing in minimizing these non-productive jobs, is the completion rate. If the installation department is completing 80 out of every 100 scheduled jobs, they would be having a completion rate of 80%. The other 20% would be comprised of no access, cancelled and rescheduled work. For most systems, 80% would be a good average rate. Some systems might look at 65% as acceptable or as high as 90% as acceptable, it really depends on your system and goals.

Relying on the completion rate alone can be very misleading. You should know what the no access, cancel and reschedule components are, in detail. A very high completion rate might be the result of underscheduling. You have a very high completion rate but the department overall is producing well below its capabilities. What you have saved by reducing unnecessary trips,

you have lost in production. A true reflection of an installation or service departments completion rate would include:

Total Capability (in jobs)
Number of jobs Scheduled
Number of jobs Completed
Number of jobs No Access
Number of jobs Cancelled
Number of jobs Rescheduled

COMMON SENSE

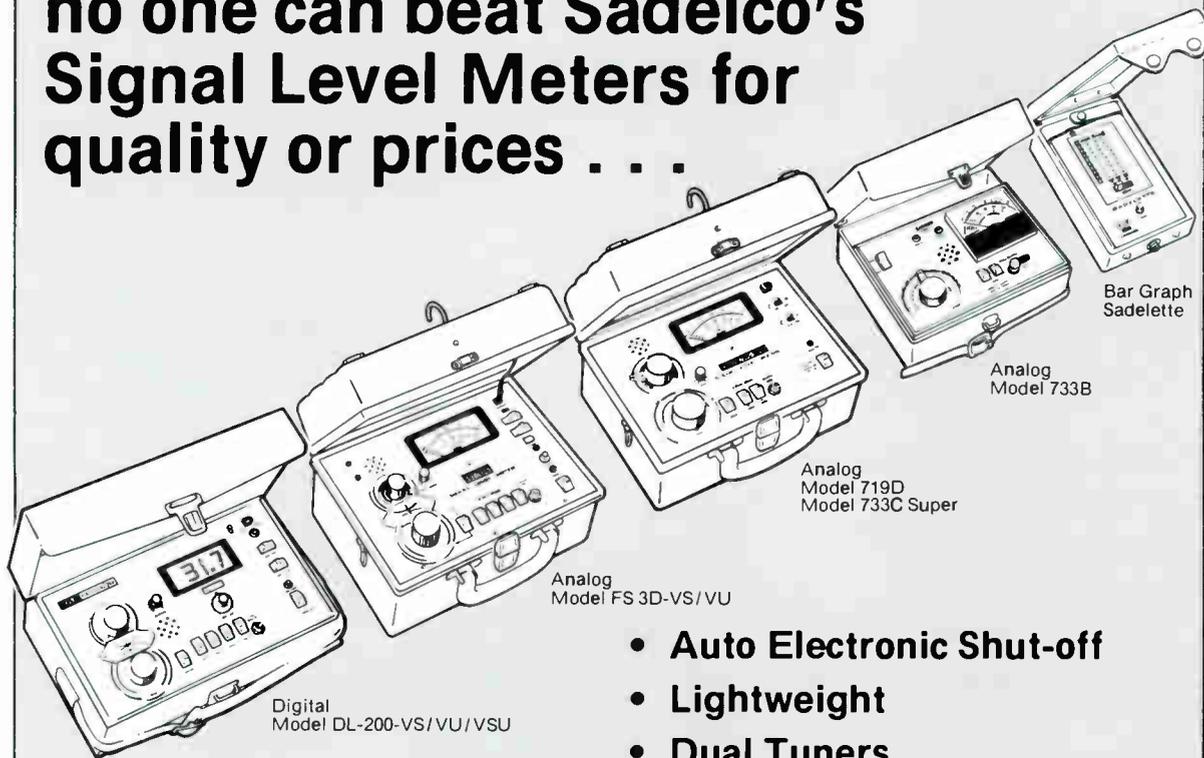
By monitoring the activity closely, you are able to mark progress in reducing unnecessary trips or be alerted to an increase in any area. For example, if the no access rate jumps from 10% to 18% within two weeks, you have a problem. By reviewing each step of the system you will find things like a new employee who is performing the call ahead program and does not fully understand why he or she is doing it. You might find that Service Calls are not being screened closely by the technical staff and calls are being scheduled in areas that have been affected by system problems or outages; when the problem was corrected, the customer was satisfied and did not stay home to meet the technician.

An increase in cancelled installations could result from a salesperson misrepresenting the method of installation and the customer cancels when they see an installer with a drill motor and a 4 foot masonry bit. Without monitoring the cancellation rate closely, this situation could go on for some time without being identified and corrected.

CONCLUSION

If your combined installation and service departments are experiencing a total no access, cancelled, rescheduled rate of 25%, it could represent 15-20% of the real cost of operating these departments. Any reduction in this area will result in more cost effective operation and increased production. Common sense management will assure you that all possible reductions of unnecessary field trips are being made. □

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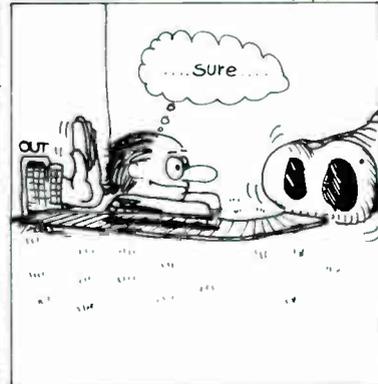
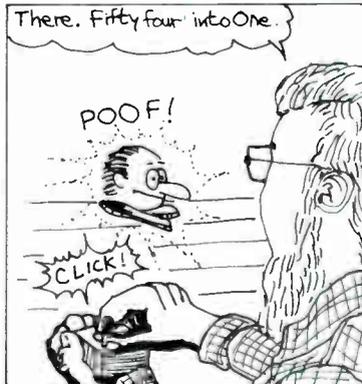
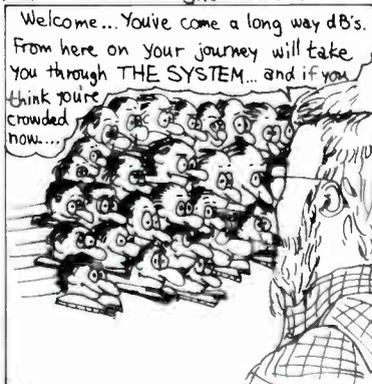
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Circle 27 on page 51.

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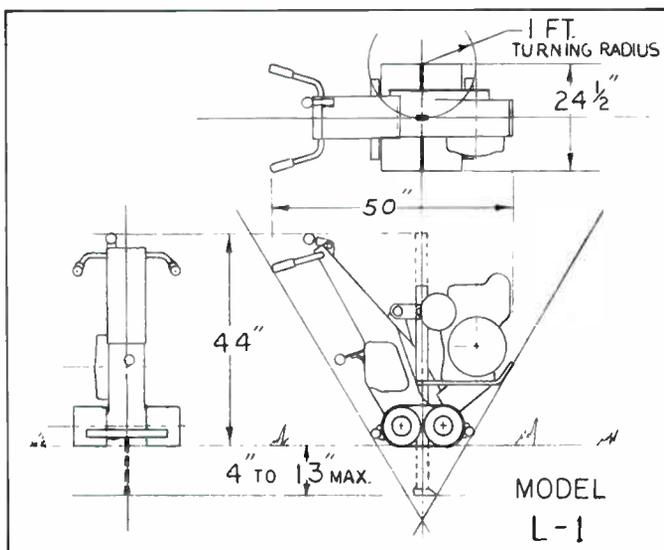
NEW PRODUCT REVIEW

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In this May issue, the tenth anniversary of CATJ, we are happy to salute a company predicated on the same business concepts which formulated CATA and CATJ — a business owned and managed by brothers, Gene and Jerry Ward, and depicting the independent philosophy of business and management — the LINE WARD CORPORATION, located in Buffalo, New York.

This is a small company, but it operates the manufacturing of a very high quality product (and accessories) with the prideful craftsmanship not often found today. The Line Ward product is the "L-1 CABLE LINE LAYER" for underground house drops. This product, having been manufactured for some time by this company in business for over 12 years, is a line layer that is much smaller than other units currently being sold, but has consistently been proven of the highest quality — why? Because from the very first step, LINE WARD will only accept from their supplier/contractors first quality parts, thus being able to provide a product not only well designed, but of the highest quality, which, over a long period of time, has insured the operators greater dependability and very low maintenance. Consequently, this investment in a Line Ward Layer proves an economical and time-saving decision.

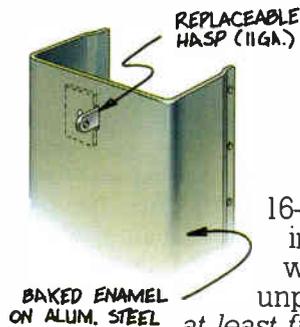
LINE WARD operates mostly by direct sales; however there are a few national and international dealers that handle their product and accessories. The company is proud of their excellent parts service, without back-order delays, and can provide parts by UPS service in just a few days. LINE WARD deals with the owner-operators on a very honest and solid business relationship, stands by their word, and delivers their product as they promise. It is stimulating and refreshing to discover a business still dedicated to honest and straightforward business relationships with their customers. We think you will find their product and its applications very interesting, and we urge that if you are in need of this type equipment, you give LINE WARD serious consideration.

continued on page 36



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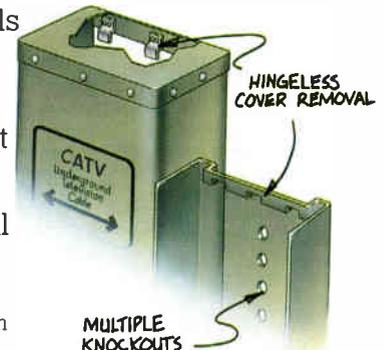
CWY pedestals are easier to service, too; the positive, secure, hingeless cover removal system allows the front cover and top to lift off as one unit, giving you full exposure of the pedestal interior.

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- This **800 lb. total balanced weight 4-wheel drive machine with Tracks** has the blade placed directly in the center of the machine.
- The 16 H.P. Kohler gasoline engine drives the heat treated alloy heavy duty gear train through twin V belts (for shock value).
- The unit is geared to provide a choice of high and low forward speeds, and also a reverse. **All Mechanical Drive - Simple - Efficient.**
- With Tracks, this system allows the machine to match speed to ground conditions to provide a **compensating variable ground speed**.
- The cable laying blade is driven by dual crank shafts located close to the ground, and with its accommodating linkage, causes the blade to oscillate elliptically. This allows the blade to penetrate a great variety of soil types under adverse conditions.
- This has all been accomplished by engineering a **uniquely designed** unit that was built from the ground up specifically for the **buried service industry**.

PERFORMANCE

- The speed of transportation from van to work site is **68 F.M.P. in low gear to 140 F.P.M. in high gear**. When the L-1 is burying service wires it is placing them at a rate of speed between 58 and 98 F.P.M. depending upon soil conditions. **With Tracks**, it is possible to reduce operation in very hard ground to approximately 20 F.P.M.
- The unit will slice the ground, lay the wire, backfill and compact the slot, in one trench-less operation.
- To provide a design for efficiency, (to reduce hand digging) the blade is centered to allow the L-1 to easily tip forward or rearward, to start, and to end the cable run close to the pedestal or building.
- The **24½" width** allows the L-1 to get in between gates and shrubs. (Compare to others). **"Productive-Fast" More Work Per Day.**
- Right angle turns are possible. **The L-1 can easily skirt surface obstacles or buried objects** (in most cases) with no sheath damage.
- **Restoration work is minimal with the L-1**, but the machine can be used additional as a **Tamper** to smooth the cut even more, for additional customer good will (on the trip back to the truck).
- Blades are available in **feed or pull type** which are simply adjustable 6" to 13" by use of a lock handle and a pin. Feed, pull, and ripper blades are available. The **ripper blade** will allow you to get across **driveways** or extra situations.

- To be able to negotiate (in a pinch) extremely difficult or impossible situations, boards spread on the ground for the tracks can extend its range.

TRANSPORTATION

The compactness of this machine (**24½" Wide, 50" Length, 44" Height**) facilitates transporting and handling in a **Van or pickup**. A sensible size compact package. (Compare to others).

HANDLING - SAFETY

The L-1 is a walk-behind-unit and keeps the operator **off** the machine. And since it is a **balanced unit**, that keeps it safe on hillsides. The controls are all in a forward **"OFF"** mode to help the operator act instinctively in a panic situation. **The L-1 has little or no vibration which reduces operator fatigue.** The Retractable Start engine simplifies the operation. The finish is highway yellow.

THE OPERATOR

The choosing of an operator for this unit, like any other machine should be **considered** for his attention to the operation and maintenance as outlined by the manufacturer.

TRAINING

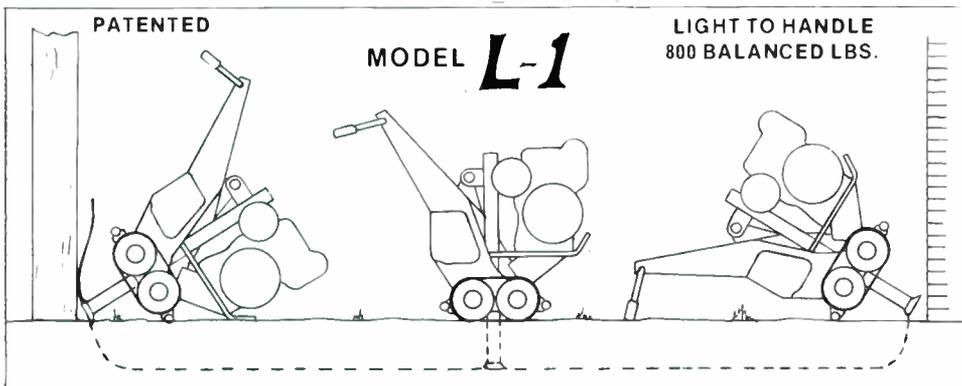
We will have a representative train your operator and people upon delivery of the unit.

SUPPLIER

We try to make the machine available before thirty days from the receipt of your purchase order. We will demonstrate the unit for you at your convenience. Please call (716) 675-7373.

EXPECTATIONS

You can expect outstanding performance and reliability, low maintenance and downtime; all if given the **proper care!** You likely may never go into the Gear Case for major repairs!



THIS NOVEL SYSTEM LETS YOU PUT IN A LINE WITH MINIMUM HAND-WORK

**157 SENECA CREEK RD.
BUFFALO, NEW YORK 14224
(716) 675-7373** □

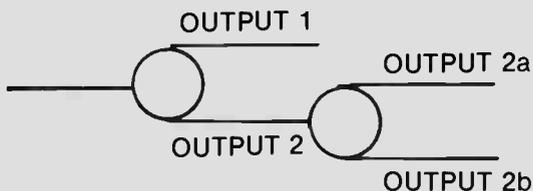
(Continued from P. 10)

is necessary to add more and more TV channels to the system, more and more equipment is necessary to correctly process these signals to prevent interaction and interference among the other channels.

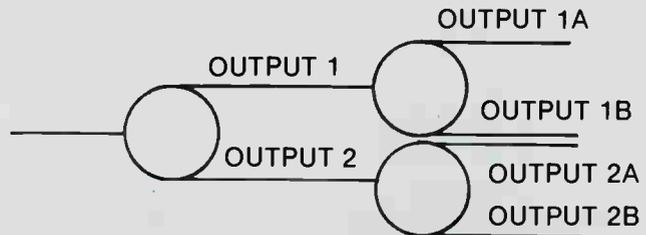
It is necessary to realize that not every channel can be converted to any other channel. Because of the methods employed, certain conversions are "impossible" because the conversion process affects the channel being converted causing interference and picture distortion.

As the necessity arises to even further expand the number of channels on the system, and the use of the High Band Channels is needed, it becomes increasingly difficult to maintain the quality of the pictures mainly due to the inefficiencies of the traps and filters at these higher operating frequencies.

By using these techniques it is possible to re-arrange the channel allocations on the television system so that any television channel can be placed on almost any other "dial position".



A fourth output can be provided by splitting the second output in the same manner as output 1.



Splitters and directional couplers are broad band devices, that is they affect an extremely wide band of frequencies.

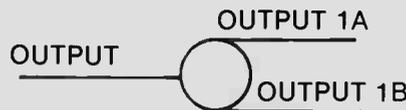
The Directional Coupler, while similar in operation to the splitters are "unbalanced" by special design to permit smaller amounts of signal to be extracted from a source, thereby permitting the maximum amount of signal to pass through the device.

These can be adjusted to provide specific ranges of the signal level being tapped from the main signal.

Both splitters and directional couplers are used to combine the television channels after they have been filtered and amplified.

It is necessary to exercise extreme care in the combining of different signals to avoid interference among the different channels.

Signal attenuators will reduce the signal by fixed amounts which allows the levels to be adjusted in a group of channels to the required levels for system operation.



If three outputs are required, one of the two outputs can be further divided into two equal parts thereby supplying three outputs.

Band pass filters and traps are frequency sensitive devices and affect a specific band of frequencies.

The Band width of such devices can vary from a very narrow range of frequencies to very broad ranges in frequency. This is called "selectivity" and is directly related to how frequency selective the device has been designed and built.

Splitters are used to divide all the input frequencies into two equal parts to provide two signal outputs.

(Continued on P. 48)

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THEFT OF SERVICE OR SIGNAL SECURITY—

A Case For Negative Trapping



By: Peggy Isaacson, Vittek Electronics, Inc.
Broadband Engineering

\$400 million in lost cable revenues. . .10-25% of subscribers estimated to be stealing (at that rate, how many non-subscribers are doing it?!). . .more than a dozen states have enacted legislation pertaining to theft of cable service. . .state and national organizations are publishing handbooks on combatting the problem. . .

The battle against theft of service has escalated over the past year or two. It is an expensive and time-consuming war better fought by the MSO's — who have bigger war chests — than by the independent cable operator. It may also be too much effort for too little return too late in the game — the effectiveness of anti-theft campaigns in actually stopping theft of service has yet to be quantified.

Getting the Horse Back into the Barn

However well they may be conducted, anti-theft campaigns are after-the-fact reactions to the problem of cable piracy. The signal has already been stolen. The system operator must identify the perpetrators, compile documentation to prove the allegations, and prosecute so that the thieves can be penalized. Most of these programs rely on resources frequently unavailable to the independent system operator to activate the key elements of publicity, proof, and prosecution.

Publicity. Print ads and commercials on local television stations can be expensive to produce and to run. While many MSO's are developing publicity packages for their systems to localize and use, the independent operator bears the entire cost of his or her own campaign.

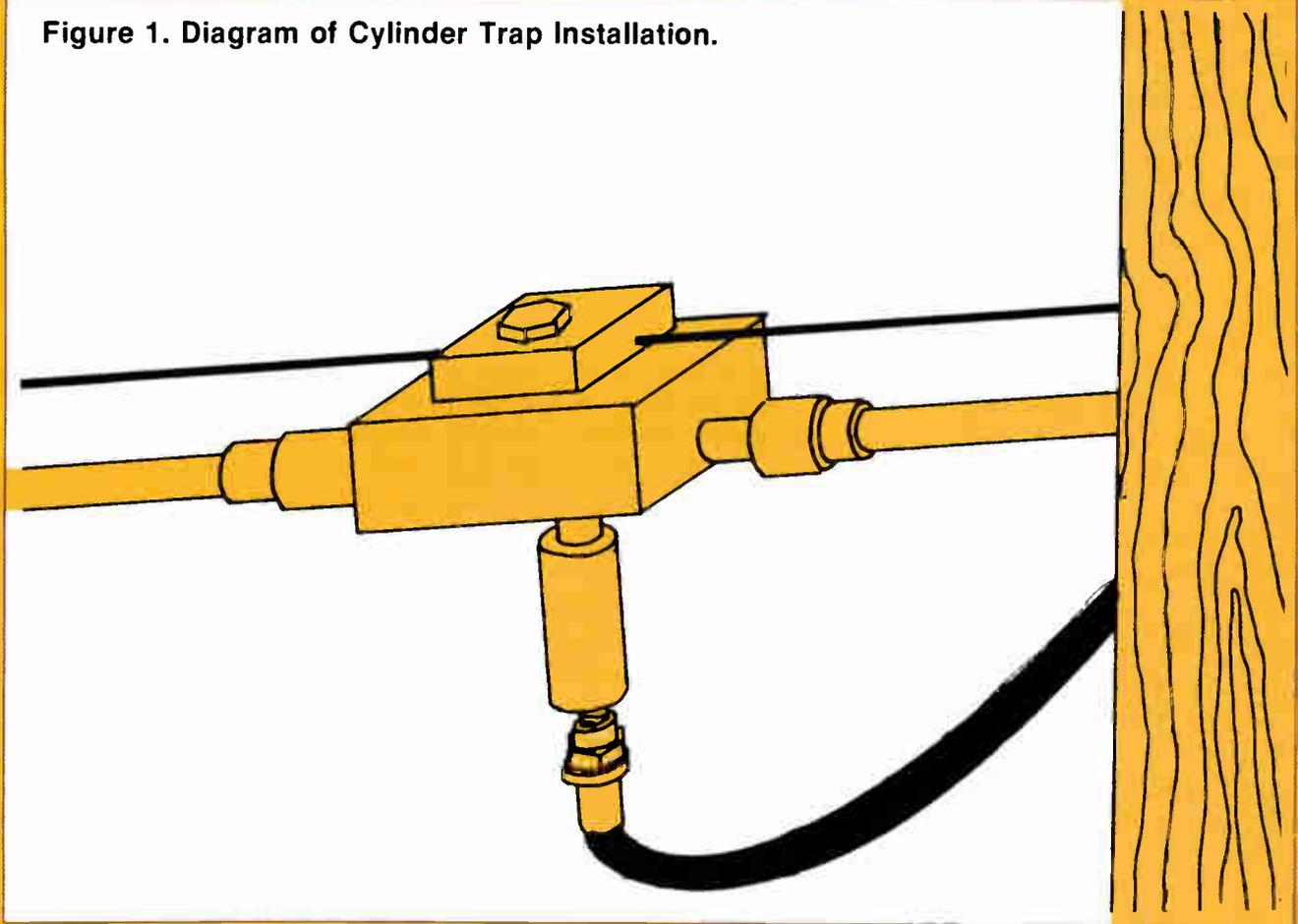
Reaching the right audience can also pose problems for the independent if the franchise area is not served by a local television station or its own newspaper. The operator could spend publicity dollars to educate another system's subscribers!

Proof. The best proof of cable theft is obtained by deploying system personnel or an audit company to the field to identify and document illegal drops. This, however, is not even an option in communities not governed by theft of service legislation.

An additional headache regarding collection of proof of theft is the sensitive issue of employee honesty. It is unfortunate, but true, that people can be bought. Anti-theft campaigns lose their punch upon revelation that system employees have run lucrative side businesses of connecting people illegally for \$25 or \$50.

Prosecution. This is the day (or days, or weeks, depending on court calendars) in court, requiring the cost and time of attorneys, as well as the cost and time of system personnel taken away from their jobs while they testify.

Figure 1. Diagram of Cylinder Trap Installation.



Fighting theft of service is like locking the barn door after the horse is out. . .but if you'd had a good lock in the first place. . .

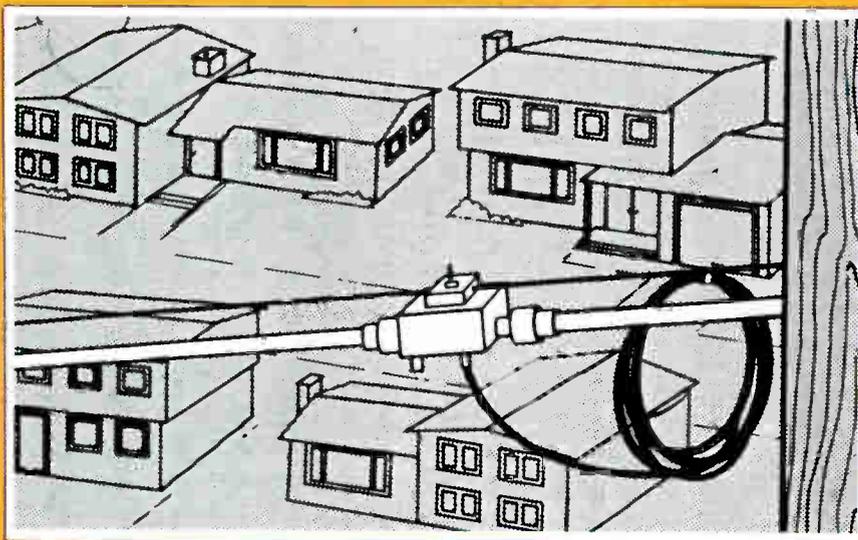


Figure 2. Diagram of Cable Trap Installation.

While no one with any sense disputes the urgent need to develop strong programs to eradicate the theft of service epidemic, it is the premise of this article that the independent system operator can utilize resources more effectively and more profitably by **preventing** theft of service, with currently available technology, to insure signal security.

Keep the Door Locked to Begin With

Restricting the public's access to signals to which they are not entitled is more likely to prevent widespread theft of service than will publicizing successful punitive measures.

When cable signal is allowed to enter the subscriber's home before it is protected, it is vulnerable to converter tampering, VCR experimentation, split-offs to second sets. Scrambled signals fall victim to pirate descramblers, which are still easily obtained by the public. Multi-▶

dwelling units geometrically increase theft problems due to population density.

"In-house" theft is extremely difficult to monitor precisely because it does occur inside the home — a venue to which the system operator does not have easy access.

The key to stopping this theft of service is prevention through securing the signal outside the subscriber's home. The signal is then less vulnerable to tampering, easier to audit, more convenient to service and maintain.

The key to signal security is the negative trap.

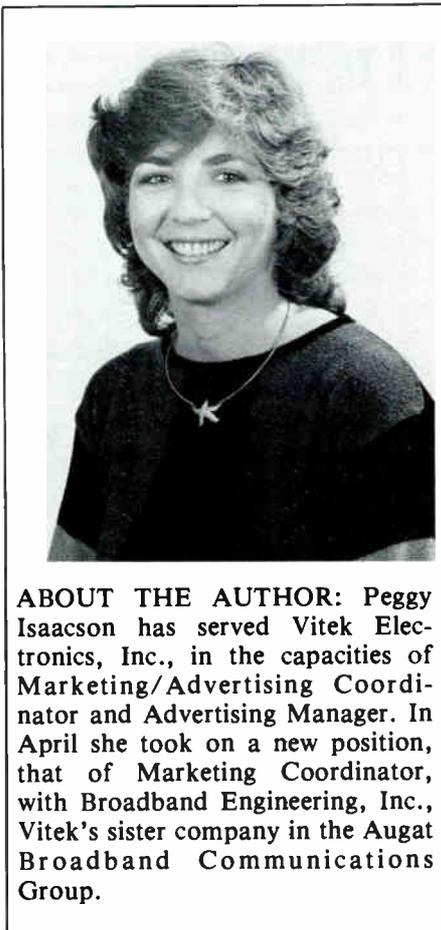
Finding a Good Lock

The negative trap is installed on the pole or in the pedestal just before the subscriber drop. The trap attenuates (also expressed as "denies" or "notches out") the signal on the video carrier, keeping an unpaid-for premium channel out of the home. This equipment is more difficult and inconvenient to tamper with because the would-be thief has to leave the anonymity of home to open a pedestal or to climb a pole. (In the latter instance, the pirate also risks physical harm from falling off the pole, as has happened in one community recently.)

There are two types of negative traps currently available in the industry: the cylinder ("lumped circuit") trap and the cable trap.

Cylinder traps employ filters mounted on printed circuit boards to notch out the signal electronically. The traps are housed in small metal canisters and are screwed into the tap output port (see Figure 1). They are generally available in single channel and tier configurations. Multiple non-contiguous channel requirements (for example, A+C+E, K+M+O) are accommodated by cascading separate traps for each channel.

Cable type traps operate on the 1/4 wavelength stub principal, shorting out the signal by breaking a wire in the core of the trap at specific intervals. No inner electronics are employed in this trap, which allows for single channel, multi-channel, and band configurations in one trap. Cable traps are in-



ABOUT THE AUTHOR: Peggy Isaacson has served Vitek Electronics, Inc., in the capacities of Marketing/Advertising Coordinator and Advertising Manager. In April she took on a new position, that of Marketing Coordinator, with Broadband Engineering, Inc., Vitek's sister company in the Augat Broadband Communications Group.

stalled between the tap output port and the subscriber drop (see Figure 2) and resemble loops of ordinary coax.

Both the cylinder trap and the cable trap can also be used as backup security in systems using scrambling as the primary form of signal security. Notching out the carrier on which the sync information is carried deprives pirate boxes of the data necessary to reconstitute the signal for unauthorized use.

Using the Lock

At this juncture in the development of cable hardware, the most reliable and the most economical form of signal security is the negative trap coupled with a "plain jane" converter. The trap protects the signal outside the home, and the converter, no longer expected to protect the signal, can be purchased inexpensively. This is particularly true for 12-channel systems which do not require the full frequency spectrum and do not offer multiple tiering and expanded premium channel packages.

Systems using scrambling can optimize their signal security by adding negative traps to plant equipment in a program that combines routine system maintenance, trapping and remarketing.

The maintenance segment of the program includes identifying neighborhoods of high churn and premium service cutbacks, such as college towns, young middle class neighborhoods, multi-dwelling units — areas in which theft generally occurs. Office records tell the operator which subscribers are entitled to which pay services, which taps are not fully loaded. A visual audit of the plant will reveal unauthorized drops, more use of a tap than there are billing records for, and tampering in pedestals.

Installation of negative traps at the drops at which signal theft is suspected retrieves the stolen signal. It also provides the system operator with a unique opportunity to remarket the neighborhood. If, prior to trap installation, it is announced that system personnel will be in the area for "routine maintenance", non-subscribers can be canvassed to sign up for cable service; subscribers can be sold an extra pay channel.

The benefits of a negative trapping program are three-fold: (1) installation of traps will tighten up security of cable signal; (2) the remarket campaign can result in increased basic and pay penetration; and (3) a surprising number of signal pirates will "convert" into paying subscribers when they realize they have lost the "free" signal. Not only is the signal secured, but the system operator stands to realize additional revenue at the same time, rather than spending money to track down signal pirates. □

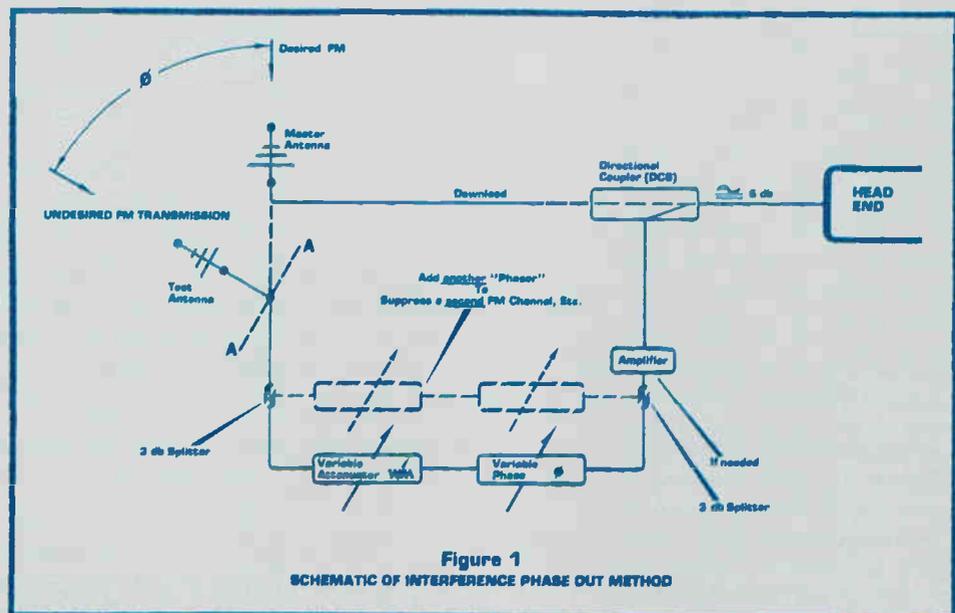
Editor's Note:

Cylinder traps are manufactured by several companies, and among those are two of CATJ's loyal advertisers of many years: Eagle Comtronics and Microwave Filter Company, Inc., Vitek Electronics, Inc., another of CATJ's regular advertisers, is a manufacturer of Cable Traps.

PHASING OUT ADJACENT CHANNEL FM INTERFERENCE



By: Jean Dickinson
Glyn Bostick
MICROWAVE FILTER
COMPANY, INC.



Summary

In this article we will demonstrate the removal of adjacent channel FM interference using the phasing method described in previous articles.

Last Time

We demonstrated the use of the phasing method for removal of channel interference caused by wide band noise sources such as an arcing transmission line insulator or a faulty power line transformer.

Adjacent Channel FM Interference

This type of interference occurs typically when a system receiving a distant FM channel picks up a local FM channel, usually stronger, on the same antenna.

When the undesired FM channel

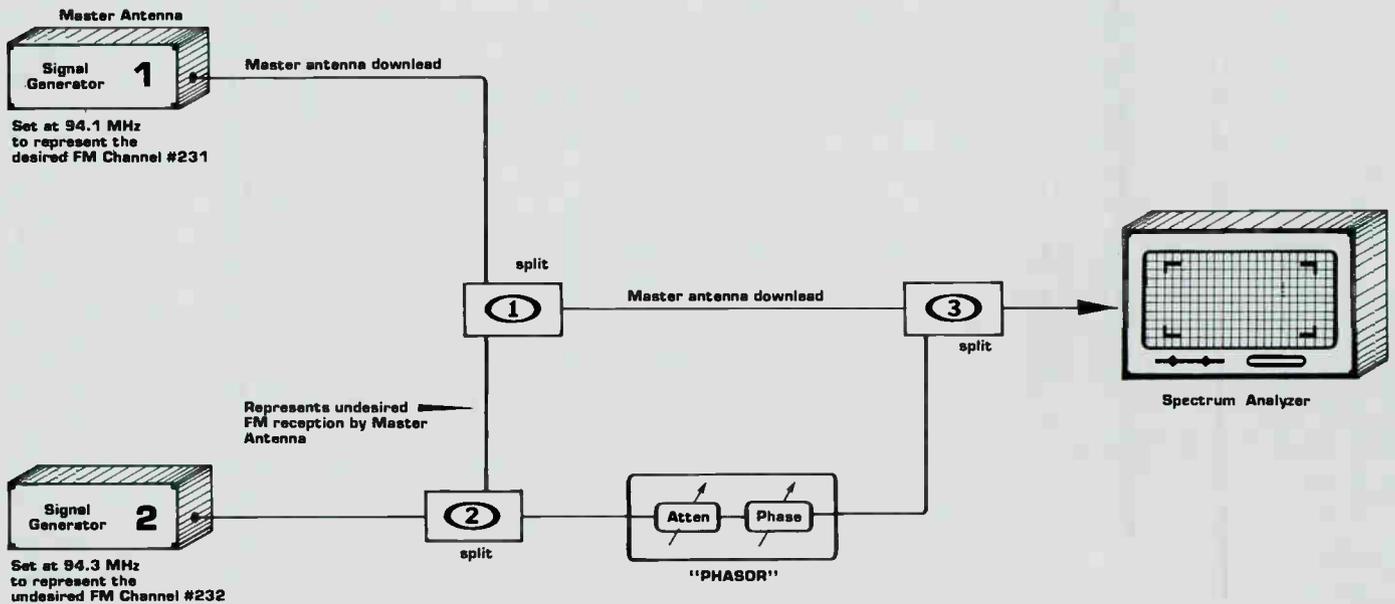


FIGURE 2
BENCH SIMULATION OF ADJACENT FM INTERFERENCE

is not too close in frequency to the desired FM, say 2-3MHz higher or lower, a trap can be cut at moderate costs to knock out the interfering channel and still preserve the desired FM.

However, when the interfering FM is adjacent to the desired FM channel, only .2 MHz away, cutting a trap can be quite expensive plus there would be a problem of

temperature stability because of the notch having to be so narrow.

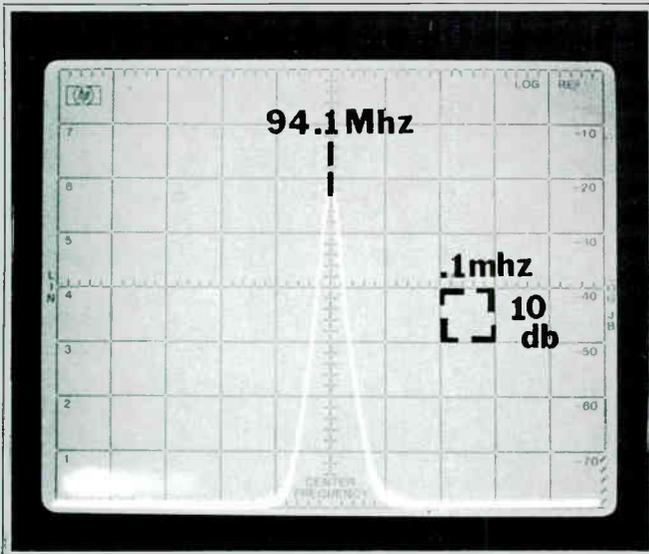
Enter again the phasing method for interference clean up!

The Situation

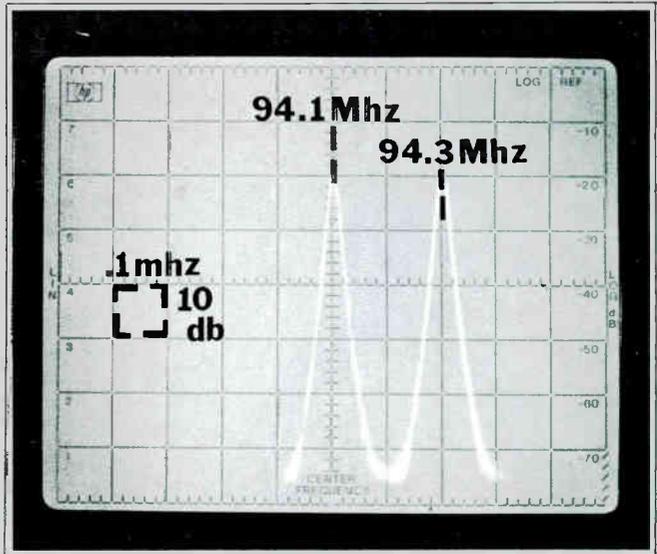
Figure 1 shows the schematic for setting up the phasing method with the test antenna pointed in the direction of the unwanted FM channel's origination. (Note that additional

FM interfering channels can be phased out by the addition of phasers as indicated by the slashed lines in Figure 1.)

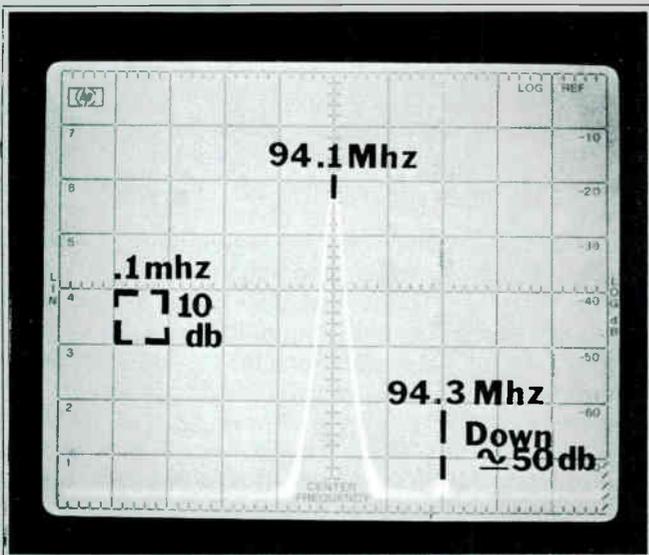
Figure 2 shows the test set-up we used to simulate adjacent channel FM interference using two signal generators. One generator represents our desired FM channel, the other represents the undesired or interfering FM signal.



**Signal Generator Carrier
Represents Desired FM Ch. #231**



**Signal Generator Carrier
Represents Undesired FM Ch. #232**



**Undesired FM Ch. #232 Phased Out
Desired FM Ch. #231 Relatively Untouched**

Figure 3

**Note: Spectrum Analyzer is set
at .1 MHz Horizontal & 10 db
Vertical Divisions**

Phasing Out the Interference

In Figure 3A we see a spectrum analyzer display of our desired FM signal at 94.1 MHz (Generator 1). In Figure 3B, the undesired FM signal is introduced (from Generator 2), .2 MHz higher in frequency at 94.3 MHz.

We now adjust our phaser which consists of a variable attenuator and phase shifter. First the attenuator is

moved towards minimum attenuation until we note an increase or decrease in the strength of the undesired FM signal. At this point the phase shifter is then adjusted to null the interfering signal. These two steps are then repeated until we achieve maximum attenuation of the interfering FM signal. Figure 3C illustrates our success in phasing the undesired adjacent FM signal almost completely out.

Next Time

Pay-Trap Tricks or special things to be done with ordinary negative pay traps.

Acknowledgement

Thanks to Carol Ryan for her work on the word processor, Bill Louise for the bench simulation and photos, John Greatrix for the illustrations and Chris Bostick for the filter cook sketch. □



The 'How To' Of The 'Who To' . . .

“How to select who to execute your marketing and sales program.”

By: Bob Cull
Cable Marketing Services

If we were to say that the cable industry is 10 years old, you would dismiss it as either a typographical error or as an error by someone uninformed. Well, we hope you keep reading long enough for us to explain ourselves, because that is precisely how we look at the industry. Actually, the concept of serving a remote community with television signals through cable is only slightly younger than television itself, and has been around for at least 30-plus years. But for the first 20-odd years of its existence, cable service to remote areas was considered a success simply by delivering a few signals to its subscribers.

Only in recent years has cable been transformed from an uncomplicated necessity in remote areas to a highly sophisticated and complex package of entertainment and information services. Moving from no competition, the industry now competes for entertainment dollars and against high-quality, diversified off-air programming. In a manner of speaking, it's a new ball game — so new in fact that the industry as we know it has only completed its first decade. To reach any other conclusion could be compared to saying that the criteria for production, performance, quality and marketing sophistication is the same for a 1984 Ford LTD fully-loaded as it was for a Model A. The basic concept may still be there but the application of that concept is so dramatically different as to almost defy kinship. In fact, the similarities between the cable industry and auto industry are at least conceptually striking. In both cases, the early industry was characterized by fairly simple technology serving one specific purpose. Too, prices were typically reasonable, choices were few to none (“you can have any color so long as it's black”), and there was little competition. As you look at either industry today, the

choices have become numerous, there is competition everywhere, the technology has advanced dramatically and customer buying decisions are based on highly complex mixing of need, desire, cost, and personal values.

By this time we hope you are beginning to nod your head in agreement, since we are laying this track to provide direction for the remainder of the article. Using this premise as a starting point, we want to discuss some of the implications for the industry, how these implications affect cable marketing in general and how this relates to the growth of professional marketing and sales firms. Finally, we will offer some of our ideas relating to the need for, and selection of, professional marketing and sales organizations.

Implications

We feel that one characteristic which is different when comparing the auto industry and cable television is the velocity of technological innovation. Certainly, all technology is evolutionary, but if it moves slowly enough, the industry is always able to maintain a labor pool of qualified individuals to stabilize the transition and capitalize on its opportunities. An exploding technology and rapid introduction of new services, on the other hand, typically means there are few qualified individuals to lead the charge. The initial result will be near-chaos with multiple starts and stops, high turnover and marginal effectiveness.

The result, in a cable marketing sense, is that you have a few people, truly qualified, trying to serve a dynamic, exploding industry with immediate and sizeable needs. American ingenuity and a “find a need and fill it” mentality have resulted in the birth of a

sizeable number of cable TV sales and marketing companies. These companies have the ability to serve several different clients during any particular period, thereby multiplying their impact and serving industry needs in a greater sense than would be possible if these same individuals were employed within the industry.

There are no readily-available figures on the exact number or size of marketing companies, but they have proliferated at an increasing rate over the last several years in answer to the continuing growth of the industry and the explosion of new services. The demand for their services comes from basically two facts: (1) operators often lack the experience necessary to plan and execute a complex marketing program; and, (2) operators need qualified professional help at certain times but do not want the obligation of year-round overhead in order to satisfy a peak-period need. While this may be a slightly oversimplified view of why such marketing firms exist, it provides the seeds for what becomes a fairly complex decision process to determine where, when, and how to use outside professional services, not to mention selecting the right company. But, before we begin to approach these issues, it might be helpful to nibble around on the issue of who can benefit from the services of a marketing and sales company.

The Who

When we first developed our company, advice on the most likely candidates for our services came from clients and associates in the industry. This advice ranged from extremely small rural independents up to independents with 10-15,000 homes. Little mention was made of MSO's of any size, and no mention was made of the "biggies". Since that time, we have developed an extensive clientel which is both urban

and rural, both large (60,000 passings) and small (less than 1,000), and includes independents as well as several firms in the top 20 MSO's.

Our experience, then, tells us that those who need such assistance have an infinite variety of faces, and do not fit easily into any one category. This may stem from the universality of the technology and simultaneous expansion of services in systems of all kinds. In other words, "The Who" may be you! It is absolutely you if you have no in-house marketing capacity and either have expanded services or anticipate doing so.

The Why

We have already touched on why sales and marketing organizations exist, which is a part of the reason why operators need such services. But, in the most basic sense, a cable system is no different than any other business. It would be unwise for the shoe store owner to invest heavily in inventory if there was no plan, knowledge or skills in place to sell the shoes. Probably one of the most perplexing situations we have found is where an operator has spent several million dollars in physical plant and technology, and then hesitates to spend a small percentage of that amount on an intensive, professional marketing and sales campaign.

But, aside from the need to obtain a return on your investment, professional marketing and sales companies are there when you need them and gone when you don't. Some companies provide account maintenance services which will extend the association and provide off-site support services, reinforcement and corrective action on a continuing basis. Thus, you have the opportunity not only to obtain peak-period assistance, but less intense, more economical services in the long term. ▶

Layer 1

Unlock the door, answer the telephone and be able to write.

Layer 2

Unlock the door, answer the telephone, be able to write, and answer a few questions like:

"What is HBO?"

"How much does it cost?"

Layer 3

Unlock the door, answer the telephone, send mail, make telephone calls, make sales calls and answer a few questions like:

"Why should I pay for television when it's free?"

"Explain the difference between Cinemax and HBO."

"What are Lifetime and Nickelodeon?"

"Why should I allow all those dirty movies in my home?"

Layer 4

Unlock the door, answer the telephone, send mail, make telephone calls, make sales calls and respond to:

"Get the _____ off my front porch!"

"Cable TV is a communist conspiracy."

"I'm going to the City Council."

"I've never watched television and don't intend to start."

"We don't own a TV."

Figure 1

“. . .Numbers. . .are important but there are many variables beyond the control of the outside firm which can affect the outcome.”

The When

The number of different times when marketing and sales services may be desirable could be at any number of key points in the life of a franchise. The need could be as early as initial sales in a new build, at the point of transition to remarket, well into a tough remarket phase, or at the point of expansion of services or pricing and packaging changes. While we cannot define specifically when you should consider retaining the services of a marketing and sales firm, we will attempt to provide some obvious and not-so-obvious yardsticks by which to measure the need. Any of the following may apply:

1. ***New Build*** - Reasonable people can disagree about the advisability of using an outside direct sales and marketing company at this stage. Some would argue that you shouldn't pay anything for the "lunatic fringe" which is going to take the service away from you, while others would argue that a professional sales team would achieve deeper new basic and pay penetrations to that group than other methods.
2. ***Transition to Remarket*** - Typically one of the most startling experiences in the life of a cable operation is when it can no longer add subscribers simply by opening the doors. In a staff meeting someone may observe that net gain has slowed, stopped or gone backward for several weeks or months, and that the same old tools don't have the same old magic. At this point the operator may consider the decision to call for marketing help to reestablish momentum.
3. ***Heavy Remarket*** - As with the transition phase, this situation often requires specific intervention in order to either hold your own or make some progress on the numbers. In both of these stages, you often find that your current sales organization — if one is in place — simply does not possess the knowledge, enthusiasm or sales skills necessary to move the product in a resistant market. This may be the same group which performed extremely well when the marketplace was "softer" and less resistant. Remember that your marketplace is made up of increasingly tougher layers of

subscribers, and each layer is more difficult than the last. (See Table 1).

4. ***Rebuild and Expansion*** - This circumstance typically offers a real opportunity to mix the intensity of a direct sales and marketing effort with the excitement and interest created by the time when subscribers are likely to be confused and need patient, methodical, explanations about the effect of the changes in their viewing opportunities, costs and value. Also, expansion will always offer an opportunity to penetrate more deeply with pay and interest some of the non-subscriber universe in trying the new services.
5. ***Eroding or Stagnant Numbers*** - Regardless of your stage of development, you may be faced with a situation where the numbers are slipping and there is a need for new faces, new approaches, skills, programs, and new results.

There will be other reasons or stages at which you might be interested in acquiring the services of an outside sales and marketing organization, but this list covers at least some of those points.

“. . .professional marketing and sales companies are there when you need them and gone when you don't.”

The How

This section will actually deal with two "How's," with one being addressed to the selection of an outside firm and the other on how to work with them once you have chosen. We don't profess to have any magic formula for the first one, but we might offer some thoughts and suggestions. Points you may want to consider are as follows:

1. The most obvious beginning would be to talk with an associate in the industry whose opinion you trust and who has enough experience with outside sales and marketing companies to be knowledgeable.
2. We think it is important to pick a company whose dominant business and overriding consideration is marketing and sales oriented. There are companies whose primary emphasis is technical, either in construction or installation, and who have added sales and marketing to the other activities. Then, there are other firms which base the success of their companies on their performance in marketing and sales and which venture not much further than a converter installation or possibly a tap

audit away from their main purpose. The more intensive specialty and experience typically provides a complete, results-oriented campaign.

3. Don't mistake a technical innovation or change for a technical problem. For example, a converter roll-out has converter installation as one of its main objectives. But, it makes a big difference to train sales people how to install converters as opposed to sending an installer. Being in the home represents an excellent opportunity to discuss new services, and a sales person is trained to capitalize on the opportunity.
4. Don't expect to find the perfect company. If you ask any of us if every customer we have ever had is totally happy, we would respond by asking you the same question. The answer to both questions would be obvious, and would be the same. The key here is probably to look for customer satisfaction in general on most issues and in a sizeable majority of their associations.
5. Focus on critical performance issues which are likely to determine success or failure, rather than on the numbers associated with each project. Numbers, or results, are important but there are many variables beyond the control of the outside firm which can affect the outcome. It may be more impressive to increase basic penetration and pay-to-basic ratios only a few points in a retirement area than it is to double those numbers in an affluent, family-oriented community where off-air signals cannot be received. Results can also be affected by economic conditions, pricing, recent marketing or sales activity, political climate and many, many others.

Now, if we tell you to be extremely cautious about using statistical information as a yardstick, then a legitimate question might be "okay, wise guy, what do we look for?" First, let us say that there is nothing easy

“. . . a 'Find a need and fill it' mentality has resulted in the birth of a . . . number of cable TV sales and marketing companies."

about conducting a comprehensive sales and marketing program. Done properly, it is hard work over long hours at odd times facing a lot of obstacles and rejection. Given these facts, we would recommend that you be concerned about issues along the following lines: (1) Does the company "skim" the market or do they manage the turf conservatively toward achieving established percentages?; (2) How much training do their people receive and what is the

quality of that training?; (3) How strong is their commitment in terms of willingness to work long hours and do more than the required minimum?; (4) How good are their problem-solving skills in terms of dealing with problems in a timely and efficient manner?; (5) Do they approach misunderstandings from a fair and reasonable posture of mutual interest or as an adversary?; (6) Do they appreciate operator problems and work to achieve solutions which take these into account?; (7) Do they deal honestly with you and your customers?; and, (8) Do the principles in the company have substantial experience in the cable industry and/or other qualifying backgrounds?

The list could be even longer, but you can probably see that the drift is toward work habits, commitment, cooperation and credibility, and away from factors which may not yield valuable insight.

“. . . it's a new ball game - so new in fact that the industry as we know it has only completed its first decade."

We promised in this section to deal with a second "How?". That is, how to work with an outside firm once they have been selected. Assuming you have done a good job in the selection process, they will want to spend some time understanding your policies, procedures and other relevant information, as well as preparing your staff for the intense campaign which is to follow. You have hired them for their ability and knowledge, so enjoy stepping aside while the company begins the execution phase. Monitor both the numbers and the quality of their work, and insist on fairly frequent meetings to work out the rough spots (and there will always be some in the early going). Listen to their advice and opinions on those issues for which they have particular qualification, and realize that it is the goal of both parties to maximize subs and pay ratios within your universe. Lastly, recognize that their business is no different from yours in the sense that their people must make a reasonable living, the company must make a profit and they have the standard fare of personnel and other business problems.

Summary

We hope that the information we have provided, while somewhat lengthy, will be of some help as you begin the process of selecting a sales and marketing organization. These companies exist because there is a need — and as with cable systems — some are better than others. The selection of such a company by the numbers may or may not yield a good decision. But, mixed with experience, credibility, commitment and attitudes toward work, your selection should be a good one. □

Definitions -

Signal Processing - The handling of RF signals (TV or FM) by which they are amplified, filtered, attenuated and combined in preparation for application to a television system.

Stability - The ability of a frequency tuned device to maintain its performance regardless of physical vibration, temperature variation or any other detrimental condition.

Pre-selector - The use of a filter (Usually Band Pass) preceding another device (either amplifier or converter) for the purpose of selecting specific frequencies to be presented to the secondary device.

Electric response - Is the electrical shape of the pass band of a band pass filter or the electrical shape of the reject band of a band reject filter or trap device.

Signal Levels - The electrical strength of a particular carrier (or frequency or band of frequencies) which are used to measure and compare the relative signal components of television or other radio signals. Usually measured in Micro Volts (millionths of a volt or decibels (ratio) dB, or decibels referenced to one thousand micro volts (absolute) dBmV.

Desired Signals - Those signals which are of the frequency required and wanted for use in the television system.

Undesired Signals - Those signals which are other than the frequencies desired. Signals which interfere with, or otherwise degrade the quality of the "desired" signal.

Distribution System - That part of the television system which distributes the television signal to the viewer's television receiver, providing the necessary amplification and splitting of the signal to provide quality pictures.

Combining - The mixing together of two or more frequencies or signals (often referred to as mixing network) in a manner which results in the least loss of picture quality.

Non-Adjacent - A combination of all even or all odd TV Channels which results in a full 6 Megahertz space between TV Channels such as 2,4,6 or 3 and 5.

Adjacent - All Channels are presented sequentially such as 2,3,4,5 and 6.

Channel Capacity - The number of Channels carried on a television system or the number of Channels the television system is "capable" of carrying.

Guard-band - An area of the frequency spectrum which has been specifically allocated for purposes other than television broadcast.

Channel Positions - That part of the television band that certain signals would occupy. (ie: Channel 8 off-the-air has been placed on Channel Position 3)

Dial Position - A physical description of the tuning mechanism (channel selector) position which eliminates confusion between Actual Channel and Channel Position. (ie: A reference to Channel 14 could be UHF Channel 14 on some Channel Position other than mid-band Channel 14 (or Channel Position A)).

Lower Adjacent - That frequency or signal which is located in the next lower channel (ie: Lower Adjacent sound carrier of Channel 3 picture carrier would be Channel 2 sound).

Upper Adjacent - That frequency or signal which is located in the next higher channel (ie: Upper Adjacent picture carrier of Channel 3 sound carrier would be Channel 4 picture).

Channel Sound Trap - A very sharply tuned (High Q) trap designed specifically to reduce the sound (or aural/audio) carrier level to the correct level (usually 15dB below picture carrier level).

Signal Channel Amplifier - An amplifier in which the amplification stages have been "tuned" to accentuate a specific band (or range) of frequencies, usually, 6 megahertz in bandwidth.

Converter - An amplifier device which combines the input TV Channel with another second frequency from an oscillator to produce a TV signal in another TV band which is more convenient to process within the television system.

Pre-amplifier - An amplifier device which acts as a signal "booster" to amplify weak signals to higher signal levels more compatible with the requirements of following system components. □



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 D6—CATV hardware
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 D8—CATV test equipment
 D9—Other

Manufacturers

M1—Full CATV equipment line
 M2—CATV antennas
 M3—CATV cable
 M4—CATV amplifiers
 M5—CATV passives
 M6—CATV hardware
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 M8—CATV test equipment
 M9—Other

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S1—CATV contracting
 S2—CATV construction
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D4—CATV amplifiers	M4—CATV amplifiers	S4—CATV software
D5—CATV passives	M5—CATV passives	S5—CATV billing services
D6—CATV hardware	M6—CATV hardware	S6—CATV publishing
D7—CATV connectors	M7—CATV connectors	S7—CATV drop installation
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D9—Other	M9—Other	S9—Other

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Washington Update

Steve Effros, Executive Director, CATA

H.R. 4103

IS IT STILL THE
BEST CHOICE FOR
THE CABLE
INDUSTRY?

A
CATA
POLL

The telephone calls coming into the CATA Headquarters in Washington are predictable these days. Everyone wants to know what is happening with the Cable deregulation bill in the House of Representatives — H.R. 4103. Some of the callers are members very anxious to learn what they can do to help pass the legislation. Of course CATA has been working toward that goal, as has the rest of the cable television industry for quite a long time now. Other callers, predictably, are asking why we continue to support the legislation given the fact that it has been changed so much since the first efforts of deregulation several years ago. They question whether the bill still has enough in it of benefit to the cable television industry to make it worth the effort. They worry about the things we would necessarily have to give up in order to get a compromise bill. In this issue we will look at where the bill is now, what the good and the bad points are, what the arguments for and against continuing to support the bill are, and then we will ask you to tell us what we should do.

We know that this is not the usual way things are done in the industry — most industries for that matter. But that's what CATA is all about. We would like to hear from all of our members in the next few weeks to learn what you want us to do regarding H.R. 4103. Clearly, it is a close call either way. Lots of cable operators are giving us feedback on both sides of the issue and it is now time that everyone knew where things really stand so that you can make up your own minds.

Naturally, we have to start right out with a caveat. And that is that it will be impossible to print this newsletter with the absolutely latest information. Things are happening very rapidly at this point, and by the time this gets printed and mailed you can be sure that several aspects will have changed already. We will try to give you all the “variations on a theme” so that you can at least get as much of an idea of what is going on as anyone else in the industry!

Let's start with the current situation. As of this writing, despite what you may have read in the trade press in the last few weeks, negotiations between the cable industry negotiators and the negotiating team from the National League of Cities and the U.S. Conference of Mayors are still going on. It is true that formal meetings for negotiations ended in a deadlock about two weeks ago. That happened on the fourth round of formal negotiations. The “script” was fairly predictable. The two sides had settled most of the “side” issues. That is, most of the details had already been gotten out of the way and they finally came down to the two “biggies”: rate regulation and renewal. Now if you have been reading your CATAcable every month you will not be surprised to learn that those were the two key points in the legislation. We have been saying it over and over for months! Well, apparently the city negotiators haven't been getting their copies, because what they ultimately did, after many hours of negotiations, was to give an ultimatum to the cable folks — basically they said “we will give you a watered down renewal provision in the bill, but you have to agree to roll back the decision the FCC recently made on rates and allow the cities to regulate rates not only of basic, but also of tiers! Well, Jim Mooney and Tom Wheeler started

packing their bags. Rightfully so. They told the city officials that it appeared there was nothing really left to talk about since that proposal was simply not at all acceptable. The cable negotiators were right on target. They knew that that sort of proposal would be rejected out of hand by a vast majority of the cable industry — CATA definitely included. The city officials were in shock. We had been telling them for many months now that this bill, while very much desired by the cable industry, was not “holy grail” to us. That it would not be the end of the world for the cable industry if the bill did not get passed. As a matter of fact, some of us have been making the point for some time now that the bill is as important, if not more important for the cities! This is particularly the case since the recent FCC decisions clearly taking rate regulatory authority away from the cities for anything other than must carry signals and public, educational and governmental access channels.

Of course there is another major worry for the cities — antitrust cases that are being filed in record numbers against them — and some of them are now winding their way through the Courts, and the cities are losing! So they have plenty to worry about, and plenty of reason to want this bill. They apparently didn't believe that until the cable team walked out of the negotiations. It was at that point that they told the cable side they would come back with a written proposal within a week. And that is what has happened.

Now the written proposal was not all that great either. It still did not satisfy the needs of the cable industry to deal with the major topics of rate regulation and renewals. However it came a long way. It was at that point that the NCTA Board met. They had some decisions to make. They could have decided to

simply abandon the negotiations. After all, the cities had precipitated a “take it or leave it” situation. Or, as they ultimately decided, they could give their negotiators yet another set of guidelines and instructions for how much more latitude they might have in seeking a negotiated settlement.

So, as of now, the talks are still under way, and the indications are that there now appears to be a better than even chance that they will be successful. Here are the main trade-offs they are talking about: in the area of renewals, the renewal standards would remain, however Court review would be something less than a complete new look at the award, or lack of award of the franchise. In other words, “de novo” review is out, but whatever replaces it would allow the Court to take a look at the entire issue, not just the procedural aspects. Depending on the detailed language, which has not been released, this would appear to be sufficient from our point of view.

In the area of rates, the discussion centers on some form of grandfathering for all systems which have rate regulation of things other than basic in exchange for some sort of overall guarantee to the cable operator that there can be a minimum rate increase on a yearly basis of at least 5 percent or the regional CPI or some portion of it, whichever is greater.

Now if all of this sounds like greek to you that is understandable. We are at the end of a very complex process and we are dealing in some detailed decision making. But the details can be extremely important. So stick with us while we go through all this. — The bottom line is that the rate and renewal details are what the entire agreement is now hanging on. There is little question but that some operators consider a “reasonable expectation of renewal” — which will be in any bill the cable industry would support, to

be the most important section of the bill. If those provisions are substantially retained then they will recommend that the bill continue to be supported, regardless of what other compromises are made.

On the other hand, there are operators who consider the rate provisions to be all important. They, at the moment, are having a very difficult time with the bill because the FCC in its recent “Nevada” decision, reaffirmed a position very favorable to the cable industry. Those operators are wondering why we should give up anything to H.R. 4103 since the FCC has basically already given us what we needed? Now that's a very good question. The answer, from our point of view, is that no matter how good the FCC decision may appear to be it can never be more than just a decision by the FCC! That means it could change, or it could be overturned by the Court. It would appear that a legislative solution to our problems, although not giving us everything we seek, is better in the long run than relying on the FCC or the Courts.

It is that last statement which must be carefully mulled over by every cable operator. To be sure there are some bad aspects of legislation — particularly this legislation. We are agreeing to an ultimate franchise fee in every community of five percent of gross revenues. We are agreeing to a set amount of access channel requirements regardless of the fact that many in the industry, CATA included, believe that access provisions constitute a violation of our First Amendment rights.

Further, the legislation establishes a new EEO enforcement bureaucracy. We do not oppose EEO, but we sure as heck oppose government bureaucracies interfering with our business! On the positive side, while it is not likely that this legislation will include the

provisions on data transmission that we would have liked, (see past issues of the CATAcable for a full explanation of why not) it apparently will continue to have provisions relating to telephone/cable cross ownership which are very important. It will also specifically spell out the relationship between franchising authorities and cable systems, it will limit the franchise bidding wars that have so badly injured the industry in the past few years, and it will regularize the renewal and rate regulatory processes as we have already indicated.

So is it worth our continued support? Well, of course we will all reserve final judgment pending any ultimate agreement that might be reached by the negotiators — and a detailed look at that agreement. It should be pointed out that even if both sides do ultimately reach an agreement that does not mean that the cable industry as a whole needs to “go along”. Your voice, aside from the negotiating team and the

NCTA Board of Directors, can still be heard on the subject. And suffice it to say that if there is a serious disagreement, that will have a major impact on the ultimate chances of the bill. You are NOT without a voice in this process! Clearly, since the negotiators, to date, we believe, have been properly and very responsibly representing the interests of most cable operators we would hope that any agreement they might finally “sign off” on would be to everyone’s best interest. We will not have to simply trust them on that.

In general, however, we must say that the industry negotiators have done a remarkable job, whether this bill gets through or not. They have been getting constant input from not only the NCTA Board, but CATA and other industry sources as well and we believe that they have reflected that input well. It has put them in some very difficult positions, but none of us ever thought this effort was going to be an easy one!

So there you have it. By the time you read this an “agreement” may have already been announced, or the talks could have collapsed, in which case the industry will probably try to get H.R. 4103 considered by the full Commerce Committee without change (a much more difficult process with very limited chance of success, but worth the effort in any event). In either event we would appreciate the benefit of your thoughts on which way we should go from here. Give the CATA Office a call (703) 691-8875. Let us know your thinking on this subject. Needless to say, should there be an agreement, or even if we have to forge ahead without one — or decide to abandon the effort, the decisions and actions are likely to be initiated in the next thirty days. Things are going to start happening very rapidly from here on out with regard to federal deregulatory legislation. If you do not participate in this CATA poll please don’t say later on that we didn’t ask! □

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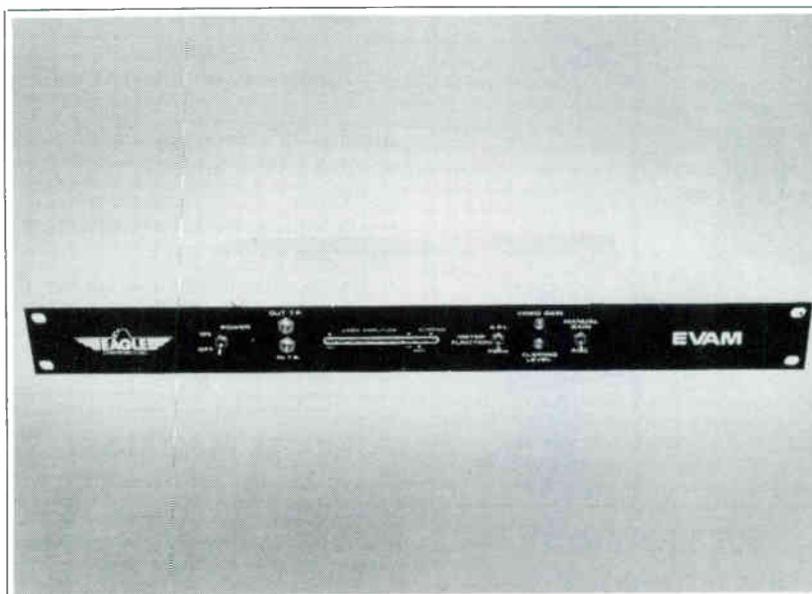
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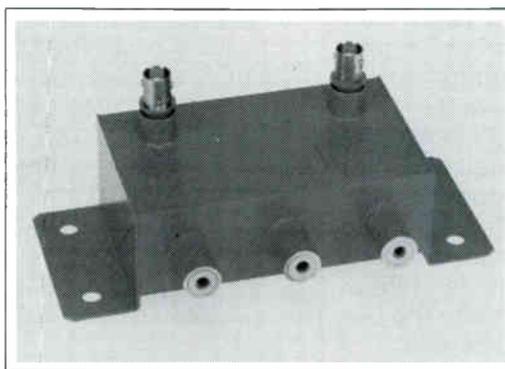
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