

TECHNICIAN ENGINEER

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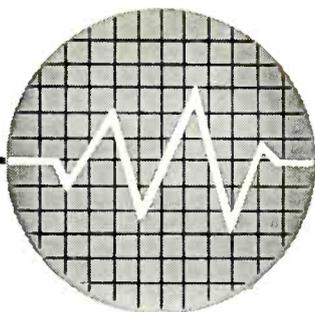
NATIONAL CIVIC FEDERATION 1896

The National Civic Federation, organized in Chicago in 1896, was one of the first and most significant efforts toward bringing capital, labor and the public together for the purpose of maintaining industrial peace. By the turn of the century it was a nationwide movement with such figures as Grover Cleveland and Harvard's Charles Eliot among those representing the public; Charles M. Schwab, John D. Rockefeller, Jr. and August Belmont representing employers, and John Mitchell of the Miners, James O'Connell of the Machinists and James Duncan of the Granite Cutters representing labor.

Mark Hanna, industrialist, and Samuel Gompers, AFL chieftain, were leaders in the movement which resulted in numerous labor agreements. The Civic Federation prevailed during the "honeymoon" period of labor and management and while it did not last, the efforts toward a three-way attempt to achieve labor peace and tranquillity can be chalked up as a landmark of labor.



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TECHNICIAN ENGINEER

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 ALBERT O. HARDY, Editor

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the cover Three KOMO-TV engineers—Fred Fowler, Bob Moore and John Van Voorhees—all members of Local 77, Seattle, Washington, “shoot the moon” for their big Northwest video audience. Their “shots” appear on newscasts and a special public service program is planned. (For a full story of the project turn to Page 9.)

index For the benefit of local unions needing such information in negotiations and planning, here are the latest figures for the cost-of-living index, compared with 1960 figures: March, 1960—126.1; March, 1961—127.5.

COMMENTARY

(The following is excerpted from an address by Henry Ford 2d, chairman of the board of the Ford Motor Co., to the Minneapolis Junior Chamber of Commerce:)

I am concerned as I am sure many of you are, at a recent chain of events that could arouse broad popular distrust and that could revive old and worn-out hostilities toward American business and industry. Too fast and too close together for comfort we have had a series of falls from grace involving some of our oldest and most respected business firms. As a director of one of the electrical goods manufacturers, and as the chief executive officer of an automotive manufacturing business, my concern is more than academic.

In addition to price-fixing convictions in the one industry and conflict-of-interest charges in the other, congressional committees, in still other industries, have turned up evidence of widespread collusion between corrupt unions and equally corrupt management.

In such a decade, America needs more than ever before an atmosphere of mutual trust and confidence among such major elements of our society as industry, labor, and government. Without that confidence, we will not only be far less effective in meeting the goals of our country, we will present to the world at large the image of a quarrelsome, divided and possibly corrupt society. World communism could not ask for a better gift than this.

No doubt there are those who will say that it is neither necessary nor wise for us to wash our business linen in public, that by talking about these things we will draw attention to them and, by so doing, foster the impression that things are much worse than they actually are.

I don't agree. I think what has happened has very grave implications for all of us in business. . . .

The New Frontier Chairman of the Federal Communications Commission, Newton Minow, shook the complacent foundations of the National Association of Broadcasters at that organization's recent national meeting in Washington, D. C. Mincing no words, he told the assembled heads of stations and networks what was wrong with broadcasting, especially as it affected the public interest. His speech, which attracted much attention and support, is printed below (with only a few introductory paragraphs deleted):



NEWTON
MINOW

'Ask Not What Broadcasting Can Do For You . . .'

GOVERNOR COLLINS, Distinguished Guests, Ladies and Gentlemen:

Thank you for this opportunity to meet with you today. This is my first public address since I took over my new job. When the New Frontiersmen rode into town, I locked myself in my office to do my homework and get my feet wet. But apparently I haven't managed to stay out of hot water. I seem to have detected a certain nervous apprehension about what I might say or do when I emerged from that locked office for this, my maiden station break.

* * * * *

It may come as a surprise to some of you, but I want you to know that you have my admiration and respect. Yours is a most honorable profession. Anyone who is in the broadcasting business has a tough row to hoe. You earn your bread by using public property. When you work in broadcasting you volunteer for public service, public pressure, and public regulation. You must compete with other attractions and other investments, and the only way you can do it is to prove to us every three years that you should have been in business in the first place. I can think of easier ways to make a living. But I cannot think of more satisfying ways.

I admire your courage—but that doesn't mean I would make it any easier for you. Your license lets you use the public's airwaves as Trustees for 180,000,000 Americans. The public is your beneficiary. If you want to stay on as Trustees, you must deliver a decent return to the public—not only to your stockholders. So, as a representative of the public, your health and your product are among my chief concerns.

As to your health: let's talk only of television today. 1960 gross broadcast revenues of the television industry were over \$1,268,000,000; profit before taxes was \$243,900,000, an average return on revenue of 19.2 per cent. Compared with 1959, gross broadcast revenues were \$1,163,900,000, and profit before taxes was \$222,300,000, an average return on revenue of 19.1 per cent. So, the percentage increase of total revenues from 1959 to 1960 was 9 per cent, and the percentage increase of profit was 9.7 per cent. This, despite a recession. For your investors, the price has indeed been right.

I have confidence in your health, but not in your product. It is with this and much more in mind that I come before you today.

One editorialist in the trade press wrote that "the FCC of the New Frontier is going to be one of the toughest FCC's in the history of broadcast regulation." If he meant that we intend to enforce the law in the public interest, let me make it perfectly clear that he is right—we do. If he meant that we intend to muzzle or censor broadcasting, he is dead wrong.

It would not surprise me if some of you had expected me to come here today and say in effect, "Clean up your own house or the government will do it for you." Well, in a limited sense, you would be right—I've just said it. But I want to say to you earnestly that it is not in that spirit that I come before you today, nor is it in that spirit that I intend to serve the FCC.

I am in Washington to help broadcasting, not to harm it; to strengthen it, not weaken it; to reward it, not punish it; to encourage it, not threaten it; to stimulate it, not censor it. Above all, I am here to uphold and protect the public interest. What do we mean by "the public interest"? Some say the public interest is merely what interests the public. I disagree. So does your distinguished president, Governor Collins. In a recent speech he said, "Broadcasting, to serve the public interest, must have a soul and a conscience, a burning desire to excel as well as to sell; the urge to build the character, citizenship and intellectual stature of people, as well as to expand the gross national product . . . By no means do I imply that broadcasters disregard the public interest . . . But a much better job can be done, and should be done." I could not agree more.

old fare not enough

And I would add that, in today's world, with chaos in Laos and the Congo aflame, with Communist tyranny on our Caribbean doorstep and relentless pressure on our Atlantic alliance, with social and economic problems at home of the gravest nature, yes, and with technological knowledge that makes it possible, as our President has said, not only to destroy our world but to destroy poverty around the world—in a time of peril and opportunity, the old complacent, unbalanced fare of Action-Adventure and Situation Comedies is simply not good enough.

Your industry possesses the most powerful voice in America. It has an inescapable duty to make that voice ring with intelligence and with leadership. In a few years, this exciting industry has grown from a novelty to an instrument of overwhelming

impact on the American people. It should be making ready for the kind of leadership that newspapers and magazines assumed years ago, to make our people aware of their world.

Ours has been called the jet age, the atomic age, the space age. It is also, I submit, the television age. And just as history will decide whether the leaders of today's world employed the atom to destroy the world or rebuild it for mankind's benefit, so will history decide whether today's broadcasters employed their powerful voice to enrich the people or debase them.

If I seem today to address myself chiefly to the problems of television, I don't want any of you radio broadcasters to think we've gone to sleep at your switch—we haven't. We still listen. But in recent years most of the controversies and cross-currents in broadcast programming have swirled around television. And so my subject today is the television industry and the public interest.

more than one hat

Like everybody, I wear more than one hat. I am the Chairman of the FCC. I am also a television viewer and the husband and father of other television viewers. I have seen a great many television programs that seemed to me eminently worthwhile, and I am not talking about the much-bemoaned good old days of Playhouse 90 and Studio One.

I am talking about this past season. Some were wonderfully entertaining, such as *The Fabulous Fifties*, the *Fred Astaire Show*, and the *Bing Crosby Special*; some were dramatic and moving, such as *Conrad's Victory* and *Twilight Zone*; some were marvelously informative, such as *The Nation's Future*, *CBS Reports*, and *The Valiant Years*. I could list many more—programs that I am sure everyone here felt enriched his own life and that of his family. When television is good, nothing—not the theatre, not the magazines or newspapers—nothing is better.

But when television is bad, nothing is worse. I invite you to sit down in front of your television set when your station goes on the air and stay there without a book, magazine, newspaper, profit and loss sheet or rating book to distract you—and keep your eyes glued to that set until the station signs off. I can assure you that you will observe a vast wasteland.

You will see a procession of game shows, violence, audience participation shows, formula comedies about totally unbelievable families, blood and thunder, mayhem, violence, sadism, murder, western badmen, western good men, private eyes, gangsters, more violence, and cartoons. And, endlessly, commercials—many screaming, cajoling, and offending. And most of all, boredom. True, you will see a few things you will enjoy. But they will be very, very few. And if you think I exaggerate, try it.

Is there one person in this room who claims that broadcasting can't do better?

Well, a glance at next season's proposed programming can give us little heart. Of 73½ hours of prime evening time, the networks have tentatively scheduled 59 hours to categories of "action-adventure", situation comedy, variety, quiz, and movies.

Is there one network president in this room who claims he can't do better? Is there at least one network president who believes that the other networks can't do better? Gentlemen, your trust accounting with your beneficiaries is overdue. Never have so few owed so much to so many.

Why is so much of television so bad? I have heard many answers: demands of your advertisers; competition for ever higher ratings; the need always to attract a mass audience; the high cost of television programs; the insatiable appetite for programming material—these are some of them. Unquestionably, these are tough problems not susceptible to easy answers. But I am not convinced that you have tried hard enough to solve them.

I do not accept the idea that the present over-all programming is aimed accurately at the public taste. The ratings tell us only that some people have their television sets turned on

and of that number, so many are tuned to one channel and so many to another. They don't tell us what the public might watch if they were offered half a dozen additional choices. A rating, at best, is an indication of how many people saw what you gave them. Unfortunately, it does not reveal the depth of the penetration, or the intensity of reaction, and it never reveals what the acceptance would have been if what you gave them had been better—if all the forces of art and creativity and daring and imagination had been unleashed. I believe in the people's good sense and good taste, and I am not convinced that the people's taste is as low as some of you assume.

My concern with the rating services is not with their accuracy. Perhaps they are accurate. I really don't know. What, then, is wrong with the ratings? It's not been their accuracy—it's been their use. Certainly, I hope you will agree that ratings should have little influence where children are concerned. The best estimates indicate that during the hours of 5 to 6 p.m. 60 per cent of your audience is composed of children under 12. And most young children today, believe it or not, spend as much time watching television as they do in the schoolroom. I repeat—let that sink in—most young children today spend as much time watching television as they do in the schoolroom. It used to be said that there were three great influences on a child: home, school, and church. Today, there is a fourth great influence, and you, ladies and gentlemen, control it.

If parents, teachers, and ministers conducted their responsibilities by following the ratings, children would have a steady diet of ice cream, school holidays, and no Sunday School. What about your responsibilities? Is there no room on television to teach, to inform, to uplift, to stretch, to enlarge the capacities of our children? Is there no room for programs deepening their understanding of children in other lands? Is there no room for a children's news show explaining something about the world to them at their level of understanding? Is there no room for reading the great literature of the past, teaching them the great traditions of freedom? There are some fine children's shows, but they are drowned out in the massive doses of cartoons, violence, and more violence. Must these be your trademarks? Search your consciences and see if you cannot offer more to your young beneficiaries whose future you guide so many hours each and every day.

living by the numbers

What about adult programming and ratings? You know, newspaper publishers take popularity ratings too. The answers are pretty clear: it is almost always the comics, followed by the advice to the lovelorn columns. But, ladies and gentlemen, the news is still on the front page of all newspapers, the editorials are not replaced by more comics, the newspapers have not become one long collection of advice to the lovelorn. Yet newspapers do not need a license from the government to be in business—they do not use public property. But in television—where your responsibilities as public trustees are so plain, the moment that the ratings indicate that westerns are popular there are new imitations of westerns on the air faster than the old coaxial cable could take us from Hollywood to New York. Broadcasting cannot continue to live by the numbers. Ratings ought to be the slave of the broadcaster, not his master. And you and I both know that the rating services themselves would agree.

* * *

You are not only in show business; you are free to communicate ideas as well as relaxation. You must provide a wider range of choices, more diversity, more alternatives. It is not enough to cater to the nation's whims—you must also serve the nation's needs. And I would add this—that if some of you persist in a relentless search for the highest rating and the lowest common denominator, you may very well lose your audience. Because, to paraphrase a great American who was recently my law partner, the people are wise, wiser than some of the broadcasters—and politicians—think.

As you may have gathered, I would like to see television

improved. But how is this to be brought about? By voluntary action by the broadcasters themselves? By direct government intervention? Or how?

Let me address myself now to my role not as a viewer but as Chairman of the FCC. I could not if I would, chart for you this afternoon in detail all of the actions I contemplate. Instead, I want to make clear some of the fundamental principles which guide me.

First: the people own the air. They own it as much in prime evening time as they do at 6 o'clock Sunday morning. For every hour that the people give you—you owe them something. I intend to see that your debt is paid with service.

Second: I think it would be foolish and wasteful for us to continue any worn-out wrangle over the problems of payola, rigged quiz shows, and other mistakes of the past. There are laws on the books which we will enforce. But there is no chip on my shoulder. We live together in perilous, uncertain times; we face together staggering problems; and we must not waste much time now by re-hashing the cliches of past controversy. To quarrel over the past is to lose the future.

Third: I believe in the free enterprise system. I want to see broadcasting improved and I want you to do the job. I am proud to champion your cause. It is not rare for American businessmen to serve a public trust. Yours is a special trust because it is imposed by law.

Fourth: I will do all I can to help educational television. There are still not enough educational stations, and major centers of the country still lack usable educational channels. If there were a limited number of printing presses in this country, you may be sure that a fair proportion of them would be put to educational use. Educational television has an enormous contribution to make to the future, and I intend to give it a hand along the way. If there is not a nation-wide educational television system in this country, it will not be the fault of the FCC.

Fifth: I am unalterably opposed to governmental censorship. There will be no suspension of programming which does not meet with bureaucratic tastes. Censorship strikes at the tap root of our free society.

Sixth: I did not come to Washington to idly observe the squandering of the public's airwaves. The squandering of our airwaves is no less important than the lavish waste of any precious natural resource. I intend to take the job of Chairman of the FCC very seriously. I believe in the gravity of my own particular sector of the New Frontier. There will be times perhaps when you will consider that I take myself or my job *too* seriously. Frankly, I don't care if you do. For I am convinced that either one takes this job seriously—or one can be seriously taken.

license not sacred

Now, how will these principles be applied? Clearly, at the heart of the FCC's authority lies its power to license, to renew or fail to renew, or to revoke a license. As you know, when your license comes up for renewal, your performance is compared with your promises. I understand that many people feel that in the past licenses were often renewed *pro forma*. I say to you now: renewal will not be *pro forma* in the future. There is nothing permanent or sacred about a broadcast license.

But simply matching promises and performance is not enough. I intend to do more. I intend to find out whether the people care. I intend to find out whether the community which each broadcaster serves believes he has been serving the public interest. When a renewal is set down for hearing, I intend—wherever possible—to hold a well-advertised public hearing, right in the community you have promised to serve. I want the people who own the air and the homes that television enters to tell you and the FCC what's been going on. I want the people—if they are truly interested in the service you give them—to make notes, document cases, tell us the facts. For those few of you who really believe that the public interest is merely what interests the public—I hope that these hearings will arouse no little interest.

The FCC has a fine reserve of monitors—almost 180 million Americans gathered around 56 million sets. If you want those monitors to be your friends at court—it's up to you.

Some of you may say,—“Yes, but I still do not know where the line is between a grant of a renewal and the hearing you just spoke of.” My answer is. Why should you want to know how close you can come to the edge of the cliff? What the Commission asks of you is to make a conscientious, good faith effort to serve the public interest. Every one of you serves a community in which the people would benefit by educational, religious, instructive or other public service programming. Every one of you serves an area which has local needs—as to local elections, controversial issues, local news, local talent. Make a serious, genuine effort to put on that programming. When you do, you will not be playing brinkmanship with the public interest.

one hand on the net

What I've been saying applies to broadcast stations. Now a station break for the networks: You know your importance in this great industry. Today, more than one-half of all hours of television station programming comes from the networks; in prime time, this rises to more than three-fourths of the available hours. You know that the FCC has been studying network operations for some time. I intend to press this to a speedy conclusion with useful results. I can tell you right now, however, that I am deeply concerned with concentration of power in the hands of the networks. As a result, too many local stations have foregone any efforts at local programming, with little use of live talent and local service. Too many local stations operate with one hand on the network switch and the other on a projector loaded with old movies. We want the individual stations to be free to meet their legal responsibilities to serve their communities.

I join Governor Collins in his views so well expressed to the advertisers who use the public air. I urge the networks to join him and undertake a very special mission on behalf of this industry: you can tell your advertisers, “This is the high quality we are going to serve—take it or other people will. If you think you can find a better place to move automobiles, cigarettes and soap—go ahead and try.”

Tell your sponsors to be less concerned with *costs per thousand* and more concerned with *understanding per millions*. And remind your stockholders that an investment in broadcasting is buying a share in public responsibility.

The networks can start this industry on the road to freedom from the dictatorship of numbers.

But there is more to the problem than network influences on stations or advertiser influences on networks. I know the problems networks face in trying to clear some of their best programs—the informational programs that exemplify public service. They are your finest hours—whether sustaining or commercial, whether regularly scheduled or special—these are the signs that broadcasting knows the way to leadership. They make the public's trust in you a wise choice.

They should be seen. As you know, we are readying for use new forms by which broadcast stations will report their programming to the Commission. You probably also know that special attention will be paid in these reports to public service programming. I believe that stations taking network service should also be required to report the extent of the local clearance of network public service programming, and when they fail to clear them, they should explain why. If it is to put on some outstanding local program, this is one reason. But, if it is simply to carry some old movie, that is an entirely different matter. The Commission should consider such clearance reports carefully when making up its mind about the licensee's over-all programming.

We intend to move—and as you know, indeed the FCC was rapidly moving in other new areas before the new administration arrived in Washington. And I want to pay my public respects to my very able predecessor, Fred Ford, and my colleagues on the Commission who have welcomed me to the FCC with warmth and cooperation. We have approved an experiment

with pay TV, and in New York we are testing the potential of UHF broadcasting. Either or both of these may revolutionize television. Only a foolish prophet would venture to guess the direction they will take, and their effect. But we intend that they shall be explored fully—for they are part of broadcasting's New Frontier.

The questions surrounding pay TV are largely economic. The questions surrounding UHF are largely technological. We are going to give the infant pay TV a chance to prove whether it can offer a useful service; we are going to protect it from those who would strangle it in its crib.

As for UHF, I'm sure you know about our test in the canyons of New York City. We will take every possible positive step to break through the allocations barrier into UHF. We will put this sleeping giant to use and in the years ahead we may have twice as many channels operating in cities where now there are only two or three. We may have a half dozen networks instead of three.

I have told you that I believe in the free enterprise system. I believe that most of television's problems stem from lack of competition. This is the importance of UHF to me: with more channels on the air, we will be able to provide every community with enough stations to offer service to all parts of the public. Programs with a mass market appeal required by mass product advertisers certainly will still be available. But other stations will recognize the need to appeal to more limited markets and to special tastes. In this way, we can all have a much wider range of programs.

Television should thrive on this competition—and the country should benefit from alternative sources of service to the public. And—Governor Collins—I hope the NAB will benefit from many new members.

Congo coverage

Another and perhaps the most important frontier: television will rapidly join the parade into space. International television will be with us soon. No one knows how long it will be until a broadcast from a studio in New York will be viewed in India as well as in Indiana, will be seen in the Congo as it is seen in Chicago. But as surely as we are meeting here today, that day will come—and once again our world will shrink.

What will the people of other countries think of us when they see our western badmen and good men punching each other in the jaw in between the shooting? What will the Latin American or African child learn of America from our great communications industry? We cannot permit television in its present form to be our voice overseas.

There is your challenge to leadership. You must reexamine some fundamentals of your industry. You must open your minds and open your hearts to the limitless horizons of tomorrow.

I can suggest some words that should serve to guide you:

"Television and all who participate in it are jointly accountable to the American public for respect for the special needs of children, for community responsibility, for the advancement of education and culture, for the acceptability of the program materials chosen, for decency and decorum in

production, and for propriety in advertising. This responsibility cannot be discharged by any given group of programs, but can be discharged only through the highest standards of respect for the American home, applied to every moment of every program presented by television."

"Program materials should enlarge the horizons of the viewer: provide him with wholesome entertainment, afford helpful stimulation, and remind him of the responsibilities which the citizen has towards his society."

These words are not mine. They are yours. They are taken literally from your own Television Code. They reflect the leadership and aspirations of your own great industry. I urge you to respect them as I do. And I urge you to respect the intelligent and farsighted leadership of Governor LeRoy Collins, and to make this meeting a creative act. I urge you at this meeting and, after you leave, back home, at your stations and your networks, to strive ceaselessly to improve your product and to better serve your viewers, the American people.

I hope that we at the FCC will not allow ourselves to become so bogged down in the mountain of papers, hearings, memoranda, orders, and the daily routine that we close our eyes to the wider view of the public interest. And I hope that you broadcasters will not permit yourselves to become so absorbed in the chase for ratings, sales, and profits that you lose this wider view. Now more than ever before in broadcasting's history the times demand the best of all of us.

We need imagination in programming, not sterility; creativity, not imitation; experimentation, not conformity; excellence, not mediocrity. Television is filled with creative, imaginative people. You must strive to set them free.

Television in its young life has had many hours of greatness—its Victory at Sea, its Army-McCarthy hearings, its Peter Pan, its Kraft Theaters, its See it Now, its Project 20, the World Series, its political conventions and campaigns, The Great Debates—and it has had its endless hours of mediocrity and its moments of public disgrace. There are estimates that today the average viewer spends about 200 minutes daily with television, while the average reader spends 38 minutes with magazines and 40 minutes with newspapers. Television has grown faster than a teen-ager, and now it is time to grow up.

What you gentlemen broadcast through the people's air affects the people's taste, their knowledge, their opinion, their understanding of themselves and of their world. And their future.

The power of instantaneous sight and sound is without precedent in mankind's history. This is an awesome power. It has limitless capabilities for good—and for evil. And it carries with it awesome responsibilities, responsibilities which you and I cannot escape.

In his stirring Inaugural Address our President said, "And so, my fellow Americans: ask not what your country can do for you—ask what you can do for your country."

Ladies and Gentlemen:

Ask not what broadcasting can do for you. Ask what you can do for broadcasting. I urge you to put the people's airwaves to the service of the people and the cause of freedom. You must help prepare a generation for great decisions. You must help a great nation fulfill its future.

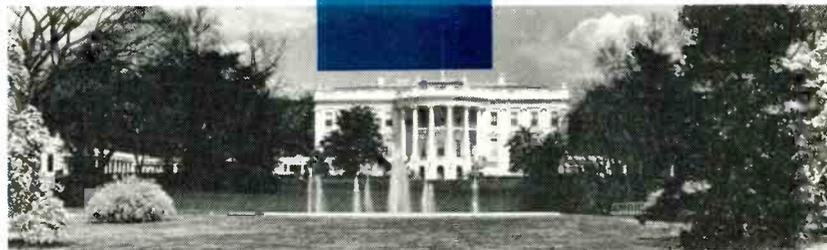
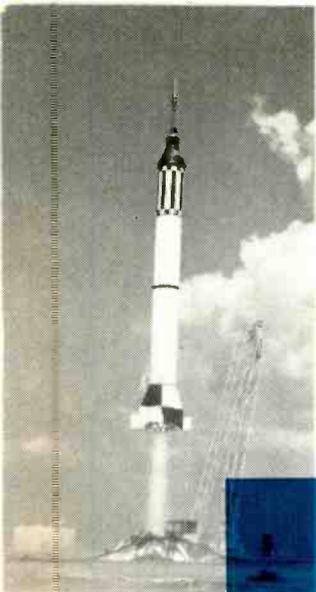
Do this, and I pledge you our help.

Business Warned About Hiring Away Top Union Leaders

The Michigan Business Review, published by the University of Michigan School of Business Administration at Ann Arbor, told employers recently they aren't as bright as they often think they are in hiring away a top union leader with the idea that they are buying labor peace.

"The notion that if you can't lick them, pay them to join you, generally doesn't work," the Review warned.

"When the union officer steps into personnel management he checks his influence with labor at the door, and is likely to be resented. Why not? In the union's eyes he's at best an opportunist, at worst a traitor. If you decide to hire a talented union officer for your personnel department, make sure you are hiring him for his ability and not for his influence. Then put him where he isn't asked to deal with his former associates."



Busy Day in the White House

The climax of a long, hard, legislative fight came on the morning of May 5 in President Kennedy's office when he signed the minimum wage bill into law.

It was an exciting and tumultuous time as the corps of White House reporters and photographers, dignitaries from organized labor, Congress, and the Department of Labor gathered to watch the ceremonial signing of the measure which will raise the nation's minimum wage to \$1.25 over a period of the next three years.

The air was electric in the White House. At Cape Canaveral, Florida, Commander Alan Shepard was strapped into the space capsule atop a towering Redstone missile, waiting for clouds to clear away from his intended landing area. A direct wire was being kept open from the Cape to the White House. As dignitaries from organized labor began to gather in the reception room off the lobby in the West Wing, talk was mixed between the pending space shot and the new law which had occupied the minds and energies of these leaders of labor for so long. They were joined by legislators who had lent their efforts to pushing this principal New Frontier legislation into law. There was Rep. Adam Clayton Powell, New York, chairman of the House Labor Committee; Rep. James Roosevelt, California, sponsor of the bill in the House; Rep. Alvin E. O'Konski, California, co-sponsor of the bill; Sen. Pat McNamara, Michigan, sponsor in the Senate; Sen. Mike Mansfield, Montana, Senate majority leader;

Sen. Hubert Humphrey, Minnesota, Senate majority whip; Sen. Winston Prouty, member of Senate labor committee and member of the Senate-House conference committee; Rep. John McCormack, Massachusetts, House majority leader.

The legislators and labor officials stood and chatted in groups in the reception room and were joined by Secretary of Labor Arthur Goldberg with several aides, all smiles and happy since the last legislative hurdle had been cleared.

Word came to the waiting corps of newsmen that the man-into-space shot had been put back until 10:30 and shortly thereafter the word was passed that the signing ceremony was about to begin. Some fifteen "sound men" filed down a long hall to the President's office to man their recording equipment. They were followed by an even greater number of movie cameramen. Close behind their heels came a hurrying contingent of about 15 still cameramen wielding every conceivable type of camera from tiny 35mm "candid" to big four-by-five Graphics. Then, finally, there were about a dozen newsmen with their pads and pencils.

As this solid phalanx of newsmen clustered outside his door, President Kennedy saw them and, with a wide grin, said:

"The President says to wait outside!" This was to allow the dignitaries to file in behind his desk before the horde of newsmen jammed into the room. As the labor leaders and legislators grouped around the big

Presidential desk, flashbulbs started a flickering staccato of lightning flashes. As is customary with major bills where there are many interested parties, the President used a succession of pens in signing the bill. He would write, perhaps, one letter of his name with one pen, then another letter with a second pen, and so on; sometimes only putting a period down with one pen. Every time he would put his pen hand to the paper, another barrage of flashlights would flicker.

Meanwhile newspaper cameramen jockeyed for position with muttered imprecation: "Down in front!"; "don't shove!" and other byplay as they strove to get the pictures their editors would require.

After he had completed signing the bill, President Kennedy stood up and said:

I want to express my great satisfaction in signing the bill to extend the minimum wage to \$1.25 an hour, to extend the coverage to 3,600,000 people today who are not covered by this most important piece of national legislation.

This is the first time since the Act came into existence under the administration of President Franklin Roosevelt in 1938 that we have been able to expand the coverage. I don't believe that there's any American who believes that any man or woman should have to work in interstate commerce, in companies of substantial size, for less than \$1.25 an hour, or \$50 a week. That itself is a very minimum wage, and I therefore want to commend the members of the Congress in the House and the Senate, the Chairmen of the Subcommittees, who were particularly involved, under the leadership of the House and Senate, for their untiring efforts.

I also want to commend the leaders of organized labor, the AFL-CIO, who are here today with Mr. Meany, for their long interest. Every member, pretty much, of their unions is paid more than \$1.25, but they have been concerned about unorganized workers who have been at the bottom of the economic ladder; who have not benefited from the growing prosperity in this country as a nation over the long number of years and who need our help.

This does not finish this job, but it is a most important step forward, and as a former member of the Senate who was particularly interested in it, I must say that I am delighted to sign it. I congratulate those who worked for it. They are one group of our citizens who deserve our assistance more, and I think that we can move from this improvement into greater gains in the months and years to come.

As soon as he said his last words, the newsmen dived for the doorway. They rushed to soundproofed telephone cubicles in the press room, where they gave a description of the ceremony to re-write men at their newspapers and wire services. The photographers hurried out to give their films to waiting messengers who sped away to processing laboratories.

After a few more handshakes and goodbyes, the labor leaders and the legislators left President Kennedy alone in his office. In another few minutes he and Mrs. Kennedy were watching on television, along with millions of other Americans, as Commander Shepard roared into outer space in his capsule. And still a little while longer he was talking to the astronaut on radio-telephone after he had been brought aboard the aircraft carrier "Champlain."

It was quite a busy and historic morning at 1600 Pennsylvania Avenue.

THE FRONT COVER

West Coast Members 'Shoot The Moon' For Wide Audience

Engineers at KOMO-TV in Seattle, Washington, are exploring new frontiers in scientific research and at the same time providing startling and exciting television for Pacific Northwest viewers.

In addition to their regular duties at Channel 4, the crew members have been aiming their cameras toward outer space and capturing some amazing close-up video tape recordings of the Moon, Venus, Jupiter and the Sun.

The project was headed by Studio Engineer Fred Fowler and Cameraman John Van Voorhees, assisted by Crew Chief Bob Moore; Floor Director Jerry Cronk; and Announcer Dick Thompson.

The electrifying (no pun intended) tapes were made using the station's high-powered telescopic lens, adapted for the television camera by KOMO-TV Engineer Howard Moses. The special lens used for the station's coverage of hydroplane races and other major sports events, has a focal length of 300" and coupled with a standard studio lens, a magnification of over 200-power.

The crew planned the project well in advance, and on March 27 between 7:30-8:00 p. m. weather conditions were ideal for the "moon shot" project. The moon was almost full (a full one being too bright for best photographing), the sun at an angle to cause shadows and the atmosphere clear.

The men braced the television camera up on one side, locked it in place, and let the moon move across the screen by the rotation of the earth.

One remarkable shot of the underside of the moon shows a mysterious black object shooting out and disappearing into the atmosphere. Other photos show clearly the moon's rugged terrain of craters, mountains and seas.

Encouraged by their success, the crew decided to try for other celestial bodies. On subsequent dates, they recorded some rare close-ups of Jupiter, Venus and the Sun.

The first of these exclusive shots were shown on KOMO-TV's "Gateway" and on Channel 4 newscasts. With the accumulation of more and more recordings, KOMO-TV planned a special half-hour program, "Moving Worlds in Space" around the crew's accomplishments.

Among the immediate viewer responses were those of scientists at Boeing Airplane Company, who claim that this television first has far-reaching scientific value. According to Dr. Richard Shorthill, who is conducting lunar research for Boeing, this is the first sequence scanning of the moon in almost 30 years. William G. Tank, a meteorologist studying atmospheric turbulence for Boeing, expressed vital interest in the shots taken of Venus, recording the scintillation caused by upper air turbulence.

LeRoy Collins, former governor of Florida and capable chairman of last year's Democratic National Convention, was recently elected president of the National Association of Broadcasters. He delivered the keynote address to the 39th Annual Convention of NAB, this month, in Washington. It was his first report to the membership, and we "covered" it, so that we may keep abreast of managements' views on the future of the industry. Below, we reprint excerpts from his significant speech:

LEROY
COLLINS



'As A First Step, We Should Come To Terms With Ourselves.'

MR. CHAIRMAN, members of the board of the National Association of Broadcasters, delegates and guests—my fellow broadcasters:

May I express first my deep appreciation to all of you for the opportunity to serve as your president.

I am grateful for the confidence of your selection committee, and of your boards. I am grateful also for the magnificent cooperation I have received from our boards and committees, from our headquarters staff and from the rank-and-file members of NAB throughout the land.

You have been understanding of my limitations of inexperience. And you have given me warm encouragement in my determination to help develop a spirit of more positive progress for broadcasting.

It is a pleasure to welcome all of you to our 39th annual national convention. We are especially pleased to have you here in Washington, the site of our NAB headquarters.

* * *

We are engaged in a business having such overriding effect upon the social and economic progress of our nation's people that we cannot in good conscience make our decisions only on the basis of the bottom line of the balance sheet.

Today, broadcasting in America is one of the major factors in the nation's life. Beyond dispute, it is the most powerful and extensive medium of mass communication ever devised.

Yet, the ironic truth is that, within broadcasting and without, it still does not command the recognition and prestige it should deserve.

I propose that we remedy this.

As a first step, we should come to terms with ourselves. Do we have a professional status?

We know, of course, that to say we are professional people will not make it so.

It has been aptly said that a profession reveals maturity when it becomes *responsible* for the adequate preparation, the competent performance and the ethical behavior of its members.

Beyond this, I feel that if we recognize our unique position—a private enterprise entrusted with the stewardship of perhaps the nation's richest natural resource—and set out to serve the public interest with enthusiasm and dedication, we will be regarded as the profession we are.

And what is more, in my judgment, it is this path—and this path only—that in the range of time is going to assure broadcasters of the maximum return on their considerable investments—and even their survival as a free enterprise.

To earn greater respect—to develop adequately your full potential—more of you broadcasters *must take sides*. You must help Americans and others to understand better this complex, rapidly-changing world and show them how they can become more significant parts of its movement.

This, of course, requires the development of greater skill and that high sense of objectivity and public dedication which is the hallmark of statesmanship. Your voice must be great as well as strong—so great that beyond soothing people it will stir them; beyond entertaining people it will challenge them; beyond praising right it will damn the wrong.

Around Washington these days, as international tension has mounted, one hears disturbing talk born on the winds of expediency and anxiety.

It goes something like this: We are in a life-or-death struggle with communism, and before it is too late we must realize that we must fight fire with fire. It is being said over the bourbon-on-the-rocks that even if it means the abandonment of some of our ideals and concepts of freedom, the ends will justify the means.

Indeed, we are in peril. But that kind of approach will put America on the rocks.

must not sacrifice values

We cannot defeat communism by trying to act as the communists act. We must be true to ourselves as Americans above all else. We must sacrifice, but let us not start by sacrificing the values that make us strong.

The times demand not that we be unAmerican, but more American; not that we hide our ideals, but that we hold them out for more to see and understand; not that we be less free, but more free.

Of course, one should not question that our exercise of the freedom to report news and comment upon it must be responsible.

But we will do a dreadful disservice—not only to broadcasting but to the American people and our government—if we allow our journalistic integrity and independence to become the pawn of any government, even our own, and even if it is 100-per-cent right in its motives.

The necessity for a free press—and now free broadcasting—in democracy is that it serves as a completely independent

means for supplying the people, from whom all power springs, with the information upon which they base their decisions.

A democracy can remain no freer than its communication media.

I hope we never see that day when the lamp of liberty burns so low that American journalism lowers its own stature by lending itself to the exigencies of the moment, becoming the unquestioning handmaiden of any governmental policy, worthy or unworthy.

the abuses and the codes

And I want to emphasize that we have, through the NAB Codes, the means—the proper and the sound means—for correcting and preventing abuses within our medium. If, however, we should fail to make our Codes a stronger and more vital force, we will have only ourselves to blame if the governmental controls we want to avoid are imposed upon us.

While we have made much progress with our Codes, I think it imperative that we make additional and substantial increases in station support for both Codes.

I call upon all members of NAB not only to subscribe to the Codes but to become active participants in their development and enforcement.

In our relations with the public generally, we still have our critics, of course. Some of this criticism is not only unfair but also in bad faith. Some is well-intended but badly informed.

Against such criticism we are making healthy headway. The intelligent and patient efforts of the Television Information Office, for example, have proved of great help with highly intellectual opinion-makers.

But among the broad rank-and-file of Americans—that vast, impossible-to-classify, often inarticulate bulk of our broadcast audience—we are all aware of the greatest potential source of dissatisfaction. These are the people who, in the last analysis, are our greatest allies; without them we simply cannot succeed.

And among these people I know you will agree there is also a certain air of expectancy. They, too, are waiting—and listening and watching—for broadcasting to measure up to the full stature of its mighty potential.

We dare not let these people down.

* * *

We must be on top of every situation that presents a peril or opportunity. We must maintain the initiative, be the prime mover in our environment, and to do this we must be in full charge of our own house.

In my first report to your boards in Palm Springs, I said I was amazed at how broadcasting had come to allow an outsider—the rating services—to become master in its own house. I continue to feel very strongly about this.

Too much of broadcasting is too dependent upon ratings in the determination of programming policies and, for that matter, pricing policies.

We get all hot under the collar about the thought of government stepping in and telling us how to run our business—and I am with you every step of the way on that—and yet we turn right around and permit outside agencies to encumber our decisions by a maze of statistics built from scanty facts, the accuracy of which has never been adequately established.

We talk about keeping broadcasting a free enterprise, but I am wondering how free and how enterprising can an industry be that permits this to happen.

Now, I am not charging the rating services with corruption or bad motives. But what I have trouble digesting is that we have no way of knowing up to this time how near what they report approximates the truth about actual broadcast audiences.

radio's brighter future

Radio has held the loyalty of the nation's audiences, despite the expansion of broadcast facilities and stepped-up competition from the print media. The proof is evident in the record sale

of sets in recent years, in total advertising revenues and in the growing reliance placed upon the medium for news and information.

The importance of the smallest among our membership entities must never be overlooked. More than 31 per cent of our radio members, for example, are small market stations—in many cases representing the prime source of news and information for countless thousands of our citizens. The swift maturing of radio as a news medium beginning at the time of World War II gives promise of its bright future in the changing times ahead.

There has been an awful lot of trial-and-error in radio since the advent of television, and a costly road it has been for most radio stations.

I do not believe anyone now has the answers, but I know just as surely as I am standing here that with better research we can find a much brighter future for radio in this country.

In the next 10 years, it well may be that broadcasting will be unrecognizable from what it is today.

I would hope that these changes will be for the better. I firmly believe they can be provided we make the effort, as a profession, to take control of the forces of change.

Too often, this industry in the past has reacted to outside stimuli, has allowed external forces to impose changes on it.

We are now big enough, mature enough, and, I would hope, far-sighted enough to reverse that trend.

Yes, change there is going to be, and we must put our best brains to work on analyzing the ingredients of and channeling new courses for that change. We must become its master, if we are to avoid becoming its servant—or even worse, its victim.

We can, if we apply ourselves as a profession, shape our own destiny. And this is the catalytic role I propose for NAB.

composite service

I have no obligation, no commitment to any individual broadcaster or segment of the broadcasting industry. I am as free as any man could possibly be.

I shall endeavor to serve what I see as the “composite broadcaster,” and by that I mean the broadcasting profession as an entity—not any one of its component parts.

It is the duty of NAB to serve all of broadcasting, but we should never forget that the foundation—by law, the very essence—of broadcasting is the holder of the broadcast license.

You, the licensee, have been given the stewardship for this medium. And you should say to those who seek to utilize that medium—for whatever purposes—that you are responsible for its standards.

My prime responsibility is to you.

I am here to fight your battles, to defend your interests, and to advance your cause.

No station is too small, no licensee's problem too big, for NAB to ignore.

I make you three promises:

One, that you probably never will agree with me on all counts—for my job is to represent that “composite broadcaster,” who by definition is not any single one of you, but rather all of you rolled into one; and

Two, that I will strive to the utmost to cause you to feel prouder with each passing day that you are a broadcaster.

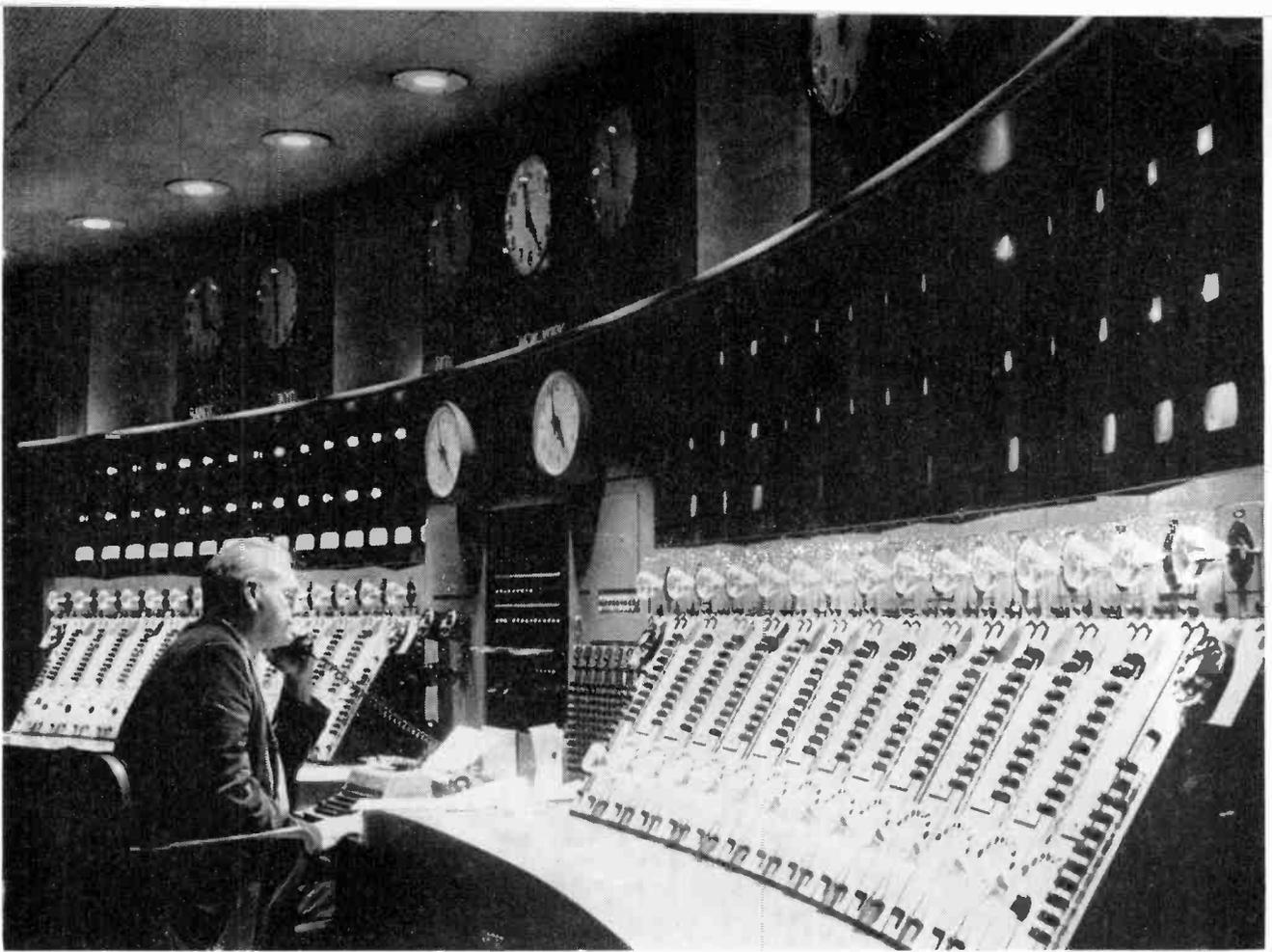
Three, that you will always know where I stand.

We are going to have some active and, necessarily, some stormy times ahead. If you do not approve of the course I have outlined for NAB, I want you to say so. And now is the proper time.

If you do approve, I want your support—your active support, not just your acquiescence.

If you want someone gently to paddle NAB's boat into the stagnant pockets of still water, then you do not want me.

But if you want NAB to get out in the mainstream of American life and shoot some of those rapids in order to get this industry really on the move, then I say, “Climb aboard. Let's weigh anchor and get underway!”



The master control board of the Voice of America in Washington, D. C., can handle 26 programs simultaneously.

LATEST REPORT ON **VOA**

THE VOICE OF AMERICA, today, has less program hours and weaker signals than Communist radio stations, but it has a bigger listening audience than the Reds.

That's the gist of a report made, this month, by Henry Loomis, director of VOA, at the 15th Annual Broadcast Engineering Conference in Washington, D. C.

Loomis told the conference that Uncle Sam now ranks fourth in the number of broadcast hours, with about 620 hours per week in 36 languages. The Soviet Union, meanwhile, ranks first, broadcasting more than 1,000 hours weekly.

Loomis said Communist China has achieved a surprising stature. Radio Peiking, he said, now has 690 hours of propaganda programming each week, and has risen from 6th place to second place in the space of two years.

Mr. Loomis said that the Voice must maintain overseas relay stations, because its present system of international broadcasting will not reach into areas of international importance.

"In creating overseas relay stations," he said, "we run into a terrific stumbling block. The Federal Communications Commission will not allow any foreign broadcaster to transmit from this country, so when we ask for space in an overseas nation, we are often asked for a reciprocal agreement. This, of course, is impossible."

Mr. Loomis also discussed problems encountered in transmitting Russian language programs behind the Iron Curtain. He said that the jamming of VOA schedules varies almost from week to week. At times, he said, it is "100 per cent of our schedule and at other times, as low as 10 percent."

The VOA director said international broadcasting constantly is on the increase.

Citing the birth of new nations in Africa, Mr. Loomis said "a new nation must do four things as soon as it receives its independence."

"First, it secures a seat at the United Nations," he said. "Then, it puts up a steel mill, followed by an airline that loses money. After this has been set up, the

The Reds Use 2,000 Transmitters Trying To Jam US Broadcasters

new country puts a high-powered international broadcast station on the air, for the sole purpose of leading its nearby neighbor nations down the path of righteousness."

Mr. Loomis said "traffic is terrific" now in overseas broadcasting and "it's now a question of who can shout the loudest, and force the little guy off of the air."

The Voice of America is now building a new transmitting station in Greenville, North Carolina. With this new facility, international broadcasts will be transmitted directly to overseas target areas without the requirement of a relay station. "This," said Loomis, "we hope to have on the air shortly."

There are also plans for an overseas relay station at Monrovia, Liberia.

Loomis remarked that "the Voice of America has the largest overseas audience, and it is getting larger. We have terrific competition and it is getting larger. And, we have problems, and they too are getting larger."

Voice of America programs beamed behind the Iron Curtain are being jammed by nearly 20 times as many transmitters as the VOA uses, so eager are the Communists to block off this free medium.

This fact and other data were presented to the conference by George Jacobs of the Voice of America's engineering management office.

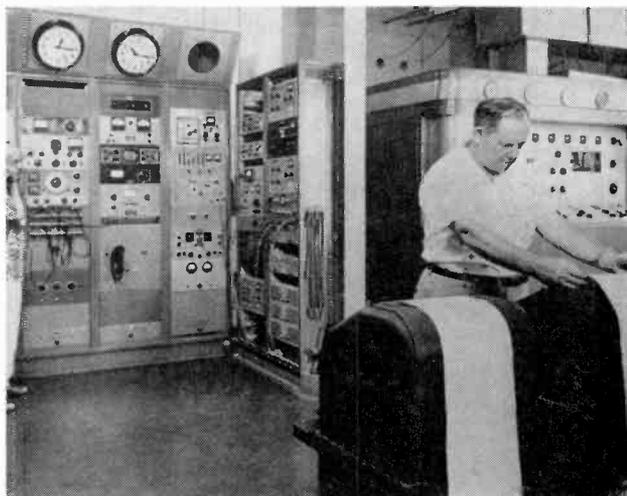
Jamming of Russian-language programs is just one of the things raising havoc with overseas transmissions of the broadcast service of the U. S. Information Agency.

The Voice of America also has problems with a segment of the earth known as the auroral zone. It acts like a blotter and absorbs short-wave broadcasts before they can reach target countries.

VOA uses a feeder system of broadcasting to get around this. That is, it uses 30 high-power transmitters in the United States to feed programs originating in its Washington, D. C., studios to relay-transmitters located overseas.

The relay stations rebroadcast the programs to those areas which are unable to receive direct broadcasts from the United States. There are 47 transmitters at nine relay points overseas. The most powerful station has a one-million watt voice, or 20 times more powerful than the largest commercial station now operating in the United States.

VOA also uses the latest scientific advances in antennas to reach great distances with existing power and cut into that territory being jammed by the Communist governments of Russia, China, and the Satellite countries.



The interior of a VOA relay base at Honolulu, Hawaii. This array of equipment receives programs from the U. S. mainland and retransmits them to audiences in the Pacific islands and Far East.

TENTH ANNUAL

Radio—TV—Recording

PROGRESS MEETING



Hotel Leamington
Minneapolis, Minnesota

August 15, 16, 17, 1961



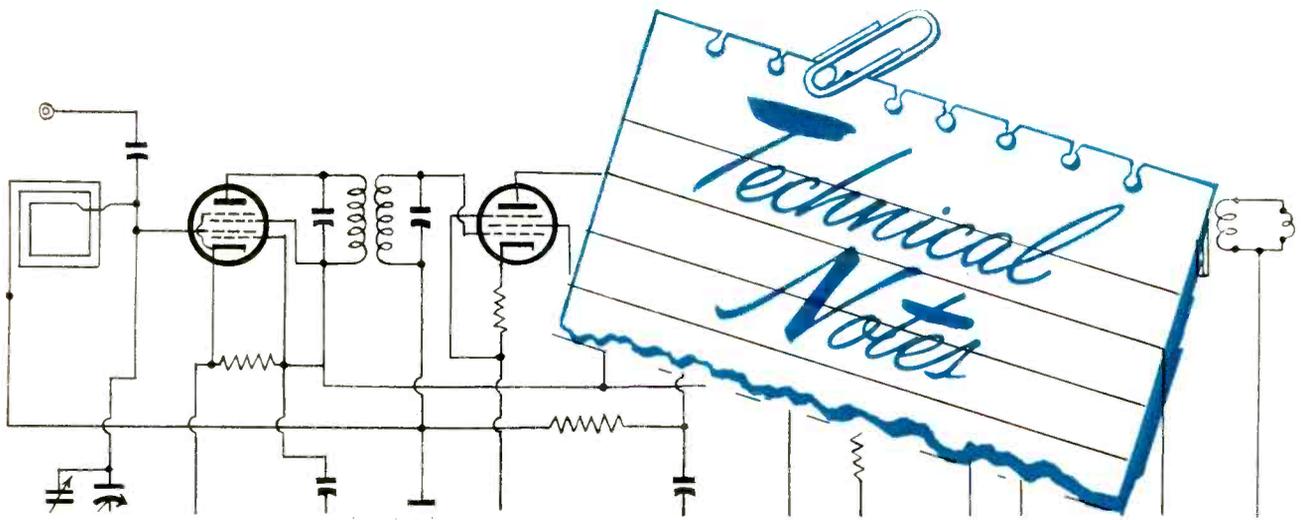
Hotel Reservation Material
Is Being Sent Each Local Union.



Your Local Should Be Represented.



News • Information Exchange • Discussion
Statistics • Advice • Fellowship



Satellite Requested

The space communications plans of American Telephone and Telegraph Corporation are at the stage where all that is needed is the launching vehicle, and the permits to get some satellites into orbit.

AT&T President Frederick Kappel told a big stockholders meeting in Chicago, last month: "We are ready to move. What we are seeking today—and have been seeking for several months—is for some branch of the government to provide facilities for launching experimental satellites that we would be glad to pay for."

He observed that the Federal Communications Commission has already assigned frequencies for experimental use of the AT&T space communications system. The Commission has acknowledged "that the earliest realization of a commercial system is a national objective," he added.

If some Federal agency would provide the launch, the first private experimental space communications satellite would be ready to orbit by Christmas, stockholders learned. A worldwide service, using approximately 50 satellites, would be in operation in three or four years, it was predicted.

AT&T wants no monopoly in space satellite communications, Mr. Kappel said, indicating that the firm would be willing to allow other communication firms to participate and share costs in the venture.

An operating continuous service system linking the U. S. and Europe could be established using 20 to 25 satellites. Mr. Kappel said, with 50 "birds" providing complete worldwide service. The space system would supplement, not replace, the rapidly expanding cable and radio systems now in use. The AT&T satellites would orbit within a few thousand miles of the earth, hence a larger number are required, he explained. This is more feasible now than proposals for fewer but more carefully positioned satellites at 22,000 mile orbit, a feat that is more difficult to achieve at the present, he said.

To End TV Roll-over

A new ABC engineering development may put an end to roll-over and picture instability that results when ABC-TV makes quick switches between cross-country origination points. The signal synchronizing system may have worldwide significance with the growth of international television. More immediately, it will be used to achieve heretofore impossible visual effects.

The new switching system will utilize the Federal government's universal time signal, which is transmitted around the world on very low frequencies and is already used by space scientists and laboratories at many points of the globe.

Initial use of the system will be between the network's New York and Los Angeles television facilities.

Non-broadcast VTR

A new videotape recording unit for non-broadcast use and designed exclusively for closed circuit educational, industrial and military TV use, has been announced by Ampex, pioneer in the VTR field. The equipment, incorporating radical innovations, will sell for about half-price of standard broadcast units (roughly in \$20,000 area) but is not geared to meet FCC's exacting specifications for on-air use.

Block-Building Units

A single-cubicle 1,000-watt VHF high-channel TV transmitter has been developed by General Electric Company to provide stations with new operating economy and flexibility for gradual power growth.

It was shown as part of G-E's 2,400-square-foot Broadcast Equipment exhibit at the annual convention of the National Association of Broadcasters May 7-10.

The transmitter offers broadcasters the base for a low-cost block-building approach to a 35,000-watt VHF

high-channel transmitter for telecasting at maximum commercial power.

A second cubicle can be added to the 1,000-watt unit to form a compact 5,000-watt transmitter, a self-contained model that represents a reduction to two cubicles from the three required in older models.

The 5,000-watt transmitter can be used as the driver for the Company's recently-announced three-cubicle 35,000-watt VHF high-channel amplifier, making it economically feasible for many more stations to increase their effective radiated power to the 316,000-watt limit.

The G-E amplifier—Type TF-14-A—is the first of its type in the broadcast industry with a driving power requirement of less than 5,000 watts.

Development of this combination offers new economy to stations for maximum-power operation because of increased efficiency in use of power, reduction from three to two cubicles in the 5,000-watt driver and use of a small number of low-cost tubes.

The complete 35,000-watt transmitter for maximum-power telecasting—designated by General Electric as Type TT-51-B—also is a compact unit. With each cubicle measuring four feet in width, the total transmitting package extends about 20 feet. It is 34 inches deep and 83 inches high.

A more noise-free picture is made possible with d-c filaments, which assure an improved signal-to-noise ratio. And a unique triplex cavity with three parallel tubes gives the amplifier higher capabilities and increased reliability.

The amplifier's visual and aural cubicles carry identical radio frequency circuits. Therefore, most components for these two cubicles are interchangeable, requiring a smaller spare parts stock.

Tiny TV Sets Forecast

Pocket color TV sets about the size of today's transistor radios will be with us in the 1970's, the Radio Corporation of America forecast recently in a New York exhibition.

RCA displayed mock-ups of TV sets it believes will be on the market in 10 years or so. All models were based on the anticipated development of a thin picture tube, which would be four or five inches deep at the most.

An RCA spokesman told the press that his company has developed a small black-and-white tube which is only two inches deep, but the picture is of very poor quality and production of the tube is expensive.

All sets in the '70's will receive broadcasts in color, RCA predicted.

Among the mock-ups displayed for public consideration were a pocket-sized combination TV with a four-inch screen and AM-FM *stereophonic* radio reception:

a "book-sized" personal set with a timer for automatically tuning in programs; an "attache case" model which can be used by traveling salesmen to display sales messages recorded on video tape; an "intercom" model which can be used in the home to keep track of children's activities via miniature TV cameras or, in pairs, for communications between executives and their secretaries. (Days of "the brave new world" approach.)

Gamma Rays See Flaws

The Rauland Corporation, a subsidiary of Zenith Radio Corporation, and Picker X-Ray Corporation recently announced a new gamma ray image intensifier system that detects minute flaws in four inch thick steel and other dense objects, and projects images of the flaws on a TV screen.

Used in conjunction with the Picker Orthicon Camera and "Cyclops" Cobalt 60 unit, the new Rauland intensifier tube will permit an assembly linetype of continuous inspection of dense materials which heretofore could be inspected only by gamma ray photographs, and of other materials which could not be inspected without destroying them.

With the gamma ray image intensifier system, an operator sitting in his control room could watch on a TV screen the slabs of steel as they move along a conveyor, determine the exact location of each defect, and shear off only as much steel as is necessary to cut off the flawed section. Experimental studies have indicated that this method of visual inspection can effect substantial economies. Development work on such a system is now in progress.

In solid fuel rockets it is vitally important that the fuel be properly packed to insure uniform burning. At the present time, inspections of finished rockets are made by gamma rays and photographic film. Experimental studies are scheduled to determine what advantages and economies might be effected by visual inspection with the intensifier system.

Other potential applications are in nuclear reactors for such purposes as observing the passage of molten metals through pumps and pipes, and in general for inspection of castings and other metal objects that are too dense for X-ray study.

In operation, gamma rays from Cobalt 60 will be directed through the material being inspected to a thin metal plate at one end of the new Rauland tube. Here some of their energy is transferred to electrons of low enough intensity to produce a fluoroscopic image, which is intensified by the tube to produce a picture at the other end about 1,000 times brighter, sufficient to provide a clear picture on a remote TV screen or to be viewed directly through an optical system.



STATION BREAKS

32 Million Destitute

"Some 32 million Americans are still living at or below the threshold of poverty." That statement comes from a leading magazine of the business world—*Fortune*, which sells for \$1.25 a copy. In its March issue, the magazine says further that the 32 million figure, even though it's down sharply from past years, "is too many in a country whose 1960 gross national product reached \$503 billion."

Moreover, most of these 32 million are poverty-stricken "in good times as well as bad"—though the problem has been intensified by the current recession, *Fortune* makes clear.

The magazine reports that President Kennedy spotlighted the situation when, "as his first executive action on becoming President of the richest nation on earth," he doubled the quantity of surplus foods being dis-

tributed to some three million neediest Americans.

Great poverty, *Fortune* asserts, is to be found not only in the slums of great cities, but in the "so-called distressed areas." *Fortune* vividly describes the bleakness and the suffering in some such areas, particularly the coal mining regions and some railroad towns of Kentucky, Pennsylvania, West Virginia and other states in the Appalachian mountain country.

The Double Standard

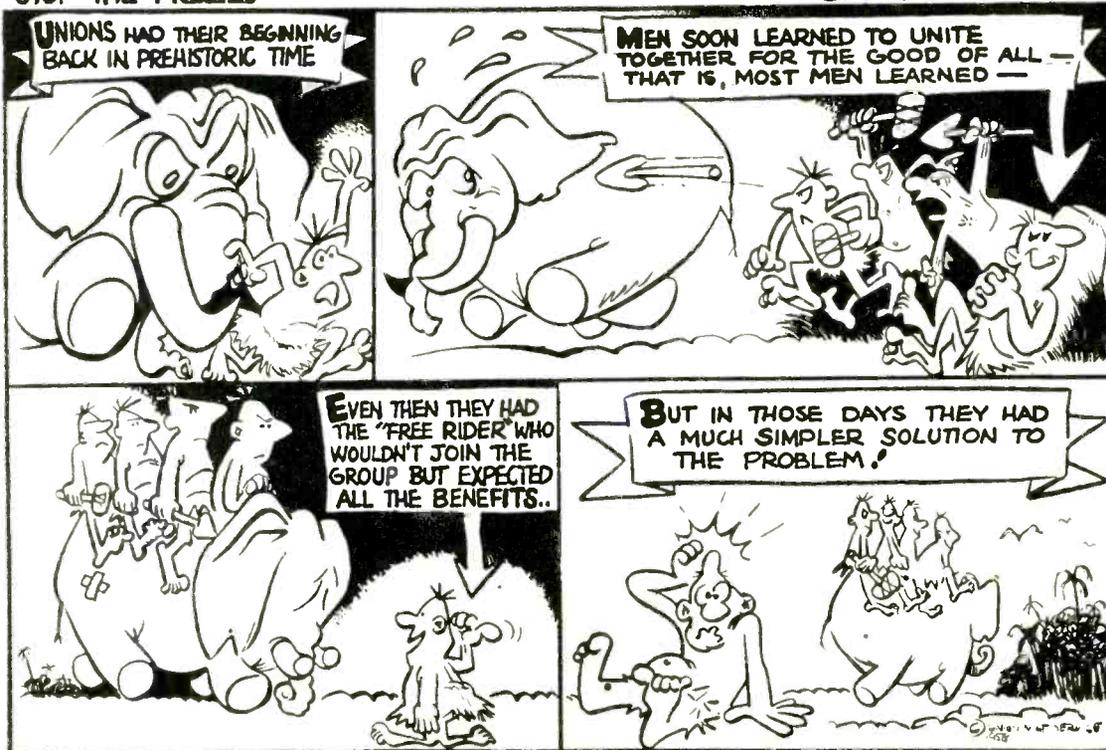
Apparently it's ok for union officers and members to be exposed to publicity for allegedly illegal acts, but big business thinks its own officials should have special treatment.

Gerhard A. Gesell, an attorney for the General Electric Co., declared in Philadelphia recently that if states and municipalities—which paid through the nose as a result of GE's price-fixing and bid-rigging—got the list of witnesses in grand jury proceedings, it would be like "showing them to the world." (PAI)

STOP THE PRESSES

910

BY EATON



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