

# TECHNICIAN ENGINEER

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INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS — AFL-CIO



### PRELUDE TO THE CLOSED SHOP DOCTRINE Commonwealth v. Hunt — 1842

Chief Justice Shaw of the Massachusetts Supreme Court in 1842 handed down a decision which appeared radical at the time—a decision which marked a prelude to the later developing doctrine of the closed shop and union security practices.

The case involved the members of the Journeymen Bootmakers Society of Boston who had agreed to refrain from working for any person who employed a non-member journeyman. The bootmakers were charged as criminals, but Justice Shaw could see no criminal action. He said, "The legality of such association will . . . depend upon the means to be used for its accomplishment." While the decision was by no means a complete victory for labor, it represented a change in climate with respect to the oppressive conspiracy laws of pre-Civil War days.

The case, while lost in the files of labor antiquarianism, may be said to be an early landmark of labor.

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RADIO, TV and RECORDING

# TECHNICIAN-ENGINEER



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The INTERNATIONAL BROTHERHOOD of ELECTRICAL WORKERS

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## ... the cover

The new WAVE Radio and Television Center in Louisville, Ky., showing the mosaic sidewalks and 135-foot relay tower at the studio end of the S-T link to the transmitter atop Bald Knob, 10 miles away across the Ohio River in Indiana. The relay tower uses only a reflector, with three dishes on the roof—an STL 2,000 megacycle, 10 watt Sarkes Tarzian, and a 7,000 mc. 1 watt RCA.

Members of Local 1286 are employed at this progressive station. Station technicians and engineers have been IBEW members since the mid 1940's.

## commentary

A powerful and lavishly financed propaganda campaign is a major weapon of big business and its reactionary political allies in their current assault on the labor movement.

The scope and effectiveness of this campaign underscored the growing need of improving communications between unions and their members and between the labor movement and the rest of the community.

There is a need for wider support, greater circulation and improved readership of AFL-CIO publications and those of affiliated unions and subordinate bodies.

There is a need for an expanded and improved trade union press on the state level. There is a need for fuller use of radio and television, through both free time and purchased time.

To meet these needs a closer working relationship must be achieved among the AFL-CIO, its affiliated unions and the state and city central labor bodies in their public relations and publications activities, internal and external.

—From an AFL-CIO Convention Resolution.

## the 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 1958 figures: August, 1959—124.8; August, 1958—123.9.



A small 43-by-25-foot studio in the new WAVE building, used for programs with small, fixed sets.

## *Custom-Built in Louisville*

*Dedication of  
new WAVE  
building is  
scheduled for  
October. Local  
1286 members  
will be busy*

WAVE Radio and WAVE-TV moved into their new Radio & Television Center, at 725 South Floyd Street, in downtown Louisville, on Friday, Saturday and Sunday, July 17, 18 and 19th. The move was made from the old building, half a block away at Preston and Broadway, and took place with no interruption of radio and television schedules.

The WAVE Incorporated general offices were moved to the new building at the close of business Friday, July 17. On Saturday, July 18, the music and recordings, film department, television props and art department were moved, from 8:00 a. m. until about 8:00 p. m. After sign-off Saturday night, electrical equipment and the news operation were moved. Starting Sunday, all radio and television operations originated from the new building.

The new WAVE Radio & Television Center is a one-floor plan structure, with full basement, totalling 75,000 square feet of floor space, on a 1.8 acre site. The exterior is of metal panel and brick, of fireproofed construction. Facilities include two television studios—one 65 x 45 feet, the other 43 x 25 feet; a radio studio 28 x 22 feet; three announce booths; three control rooms, including TV central control; a film room and viewing room. A ramp permits autos, trucks and other large objects to be driven into the large TV studio and property storage areas. There is a complete electrical kitchen for use on TV.

The offices and workshops are designed in a square around the studios, so that all programming materials and personnel are immediately adjacent and can feed directly into the programming chain in the most efficient manner. General offices occupy a space 92 x 49 feet, and in addition, there are conference rooms, lounges, dressing rooms, a newsroom, music department, art department and carpentry shop. A 135-foot relay tower is used to get the video signal from WAVE-TV studios to the transmitter atop Bald Knob, 10 miles away in Indiana.

Not only is the new WAVE structure efficient—but it utilizes modern design and decoration in an attractive and artistic manner. Designed by architect Read Henry, the building is landscaped with plantings along Floyd Street, in a walled courtyard off Jacob Street and the parking lot off Jacob, with trees and plants of several varieties, including ginko, magnolia and oak. The sidewalk and courtyard are paved in pink and grey aggregate sections comparable to the mosaic walks along Copacachan Beach in Rio. The stainless steel WAVE logo was designed by WAVE artist George Tuell.

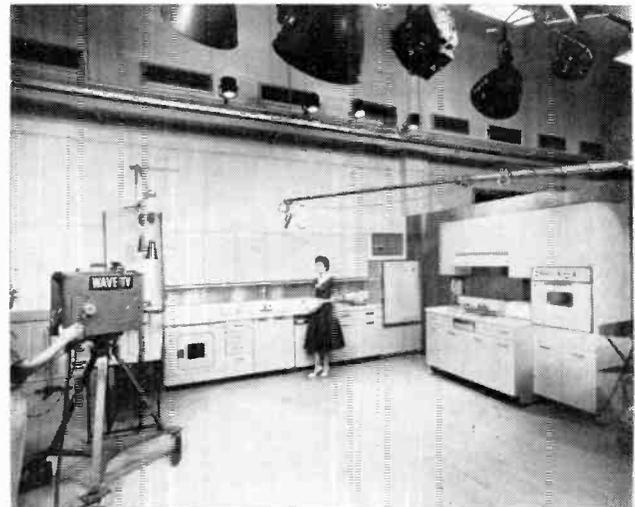
The lobby is decorated by a 5 x 10 foot welded brazed metal sculpture by Mrs. Judith Brown, of New York. There are modern paintings in the main conference room, the president's office, the lobby and the staff lounge by Frenchmen Bernard Gathelin, Jason Schoener and Olivier Debre, by New Yorker Cleve Gray, and Louisvillians Eugene Leake and Martin Shallenberger. A commissioned sculpture work by Englishman John Prangnell, an assistant professor in sculpture at the University of Louisville, will be completed in the Fall, and placed in front of the WAVE building on Floyd Street; it will be a female figure symbolizing communications.

The dedication will be marked October 23 by the joint radio-telecast of an original opera commissioned by WAVE, Inc., "Beatrice," by Lee Hoiby. The opera will be staged by the Kentucky Opera Association, and recorded by the Louisville Orchestra. A native of Wisconsin, the 34-year-old Hoiby received critical acclaim last summer when his first opera, "The Scarf," was produced in Italy, and again last winter when it was produced at New York's City Center.

The president of WAVE, Inc., George W. Norton,



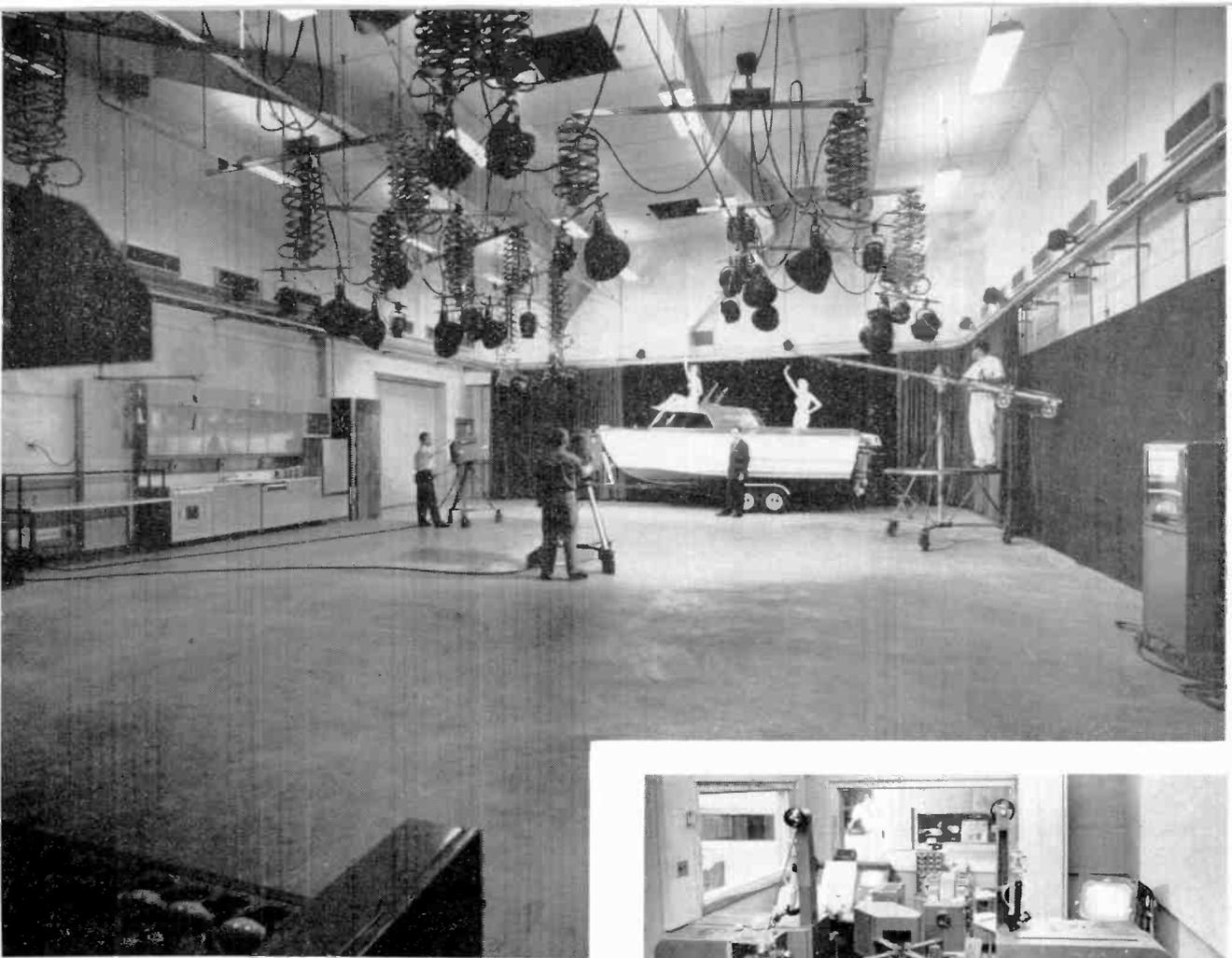
COURTYARD and parking lot of new WAVE Radio-TV building, showing base of relay tower and relay dishes on roof.



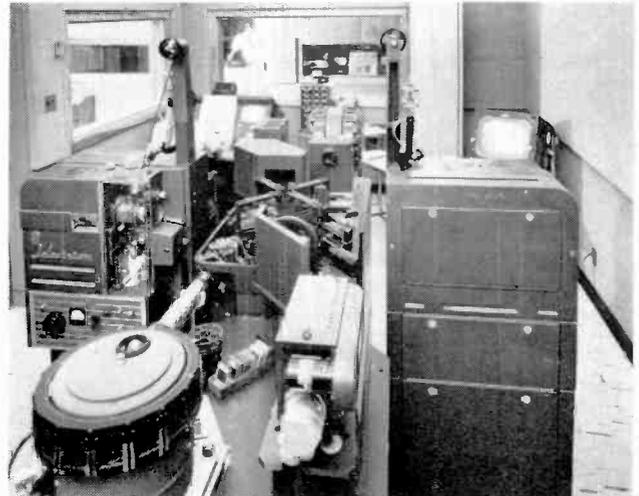
UNIT GE KITCHEN in new building, used for kitchen commercials and home demonstrations. Kitchen was built at GE's Appliance Park, Louisville.



AUDITION ROOM. Clients and prospects can see either televised or film pictures. Walls are covered with special cork-veneer material.



ABOVE: The main TV studio—65 feet by 45 feet. It contains a lighting board with 106 circuits, two 21-inch monitors on rollaround stands, and much more. RIGHT: A view of the projection room. WAVE now uses 2 x 2 slides exclusively.



Jr., points out that the new WAVE Radio & Television Center is the first building in Kentucky ever built exclusively for both radio and television broadcasting. Says he: "After operating for more than 25 years from a hotel suite and from a building which formerly was a woman's missionary seminary, we will welcome new custom-built facilities in which to operate this area's first television station and most complete radio service." "We hope," Mr. Norton added, "after we are moved in and have all the wrinkles smoothed out, to be able later to invite our many friends, listeners and viewers on specially conducted tours of our new building."

The Technical Operations employes of WAVE, Inc. have been represented by Local Union No. 1286, IBEW, since the mid 1940's and the operation of WAVE-TV has been included since its initiation on November 24, 1948. As can be seen by the pictures, the modern WAVE building is a beautiful new home for 1286 members on the staff of WAVE, WAVE-TV.

*Our thanks to Mr. James Caldwell of WAVE, Inc., for providing us with this story and pictures. (Len Caulfield, photographers)*



CONFERENCE ROOM of new building. Decorated by a New York interior decorating firm, the building features modern art throughout the public rooms.

## Union Pay Higher For Similar Jobs, Recent Survey Shows

A union card is worth at least an 8 percent pay bulge to workers in 18 industries surveyed recently by the U. S. Department of Labor. That's the average cash differential found in more than 1,000 comparisons between jobs in union and non-union plants where the occupation, the industry and the geographical area were the same.

Collective Bargaining Reports, monthly publication of the AFL-CIO Department of Research, features a detailed analysis of the survey results which show union wages outstripping non-union pay scales in four out of five cases.

The Research Department points out that the hourly wage differential is only a part of the advantage held by workers in organized plants. Fringe benefits—including vacations, holidays, pensions and health plans—are almost invariably higher where they have been negotiated by a union than where they have been set unilaterally by the employer.

There's a gain to the unorganized worker through union activity, the Research Department points out. Many of the cases where non-union wages are comparable to those in organized plants result from efforts by employers to keep their plants unorganized by matching—and occasionally exceeding—union-won conditions elsewhere.

In every breakdown, the Labor Department surveys showed union wages higher—by industry and by geographical region.

Union wages were 11 to 20 per cent higher in 232 comparisons as against only 38 showing non-union rates ahead by the same margin. In 169 of 197 cases where the differential between comparable jobs was above 21 per cent, the advantage was with the union job.

The surveys covered only industries where there were sizable numbers of both organized and unorganized plants.

## Corporate Profits Soar To Highest Level in 13 Years

Corporate profits rocketed to a 13-year high for April, May and June 1959, increasing by an almost unheard-of 75 per cent over the same three months a year ago.

Not since late 1946 and early 1947 when the excess profits tax and wartime price controls were junked have profits soared as high, the *Wall Street Journal* reports. The paper declared:

"This is the largest gain for any three months, compared with a year earlier, since this newspaper began compiling records for several hundred companies, quarter by quarter. In addition, other statistics indicate it is the largest gain for any quarter since late 1946 and early 1947 . . ."

The largest percentage increases in profits prior to the record-shattering second quarter, the Journal said, took place earlier this year in the first quarter when profits soared 53 per cent above the same period for 1958.

The six-month picture is a year of unprecedented profits with an anticipated sharp increase in dividends. Dividends moved up sharply from the first to the second quarter and another rise is anticipated for the third quarter.

The Journal said the heavy gain in profits reflected recovery from the recession and stepped up buying of steel and other items in anticipation of the steel strike. But the paper took note also of the sharp increase in productivity due to automation and technological change.

A profit factor of "permanent value," it said, was the fact that corporations "had their first opportunity to

fully test most of the new facilities which were installed in the past few years. . . . Such new facilities, of course, are almost invariably more efficient and profitable than older ones."

An analysis of the earnings reports of 428 companies revealed second-quarter profits of \$2,653,863,000, an increase of 75.6 per cent over comparable figures for the second quarter a year ago.

Besides the profits spurt in the first quarter of the year, other large increases, for purposes of comparison, were recorded in the third quarter of 1950 when the increase over 1949 was 53 per cent; and in the third quarter of 1955, when profits jumped 35 per cent over 1954.

Only one of the 25 major industry groups in the Journal's report suffered a decline from the second quarter of 1958 aircraft manufacturers. The Journal explained as follows:

The aircraft makers "are in a transition period from manned aircraft to missiles, and that involves heavy research expenditures and reduced sales—a condition likely to last for many more months."

Textiles, deep in recession in 1958, made an amazing recovery in the second quarter of 1959, with profits increasing 523.2 per cent.

But the two biggest contributors to the overall 75.6 per cent gain, said the Journal, were auto and steel. The steel firms increased their profits over the preceding year by 163.4 per cent. Auto firms showed a 300.1 per cent increase in profits, with all five big producers solidly in the black.



AFL-CIO Convention delegates in San Francisco's Civic Auditorium. Note the set-up for TV coverage at left.

## AFL-CIO MOBILIZES TO M

### 516 Delegates Spend Five Days Hammering Out Policies and Programs



A KRON-TV cameraman picks up newsreel footage on Secretary of Labor James P. Mitchell.

**F**ROM 125 national and international unions, six departments, 200 central bodies and 41 directly-affiliated unions came 916 delegates to the third biennial convention of the AFL-CIO. Meeting in San Francisco on September 15-21, the delegates spent five hard days working on problems affecting some 13,500,000 members of organized labor.

The Convention was preceded by conventions of the Building Trades and Metal Trades Departments, where President Meany set the theme for the convention in speeches pointing out that the current "employer-forced" steel strike is the "testing ground" for an industry-wide and nation-wide attempt to freeze all wages and part of a big-business campaign to stir up hysteria for more anti-labor legislation.

Heaping scorn on business propaganda, that tries to picture any wage increases as being "inflationary," he charged that such a line is a "fraud" in view of record-breaking corporation profits. He went on to say that the new so-called labor reform law was damaging to the labor movement and that it contains restrictions which "have absolutely nothing to do with the issue of labor reform."

Meany warned union leaders that the labor movement cannot survive as an effective instrument to provide workers with a fair share of the wealth if the membership is not involved at all levels in the operation of the union.

## Kennedy Warns of Trouble

**S**ENATOR John Kennedy, in his address to the Building Trades Convention, agreed with President Meany saying that there will be "more attempts to pass additional restrictive legislation in Congress." In a speech frequently interrupted by applause, he assured the delegates that he would "unalterably oppose" all moves in this direction. While he conceded that the new law has provisions which are "unsound" and "unfair to unions," the Senator says it is, nonetheless, a great improvement over the bill originally passed by the House of Representatives.

He lashed out at employer groups for staging a pressure campaign which "completely distorted the reform issue." He praised labor leaders for sincerely working



## MEET THE CHALLENGE



for true reform measures and urged unionists to support and vote for "progressives" who will be sympathetic to the needs and aspirations of working men and women.

## Convention Challenged

RESIDENT Meany delivered the keynote address to the convention saying "We are going to fight back as we have never fought before. . . . Labor is not going to take a backward step! Out of this convention must come a comprehensive plan to meet the challenge to our labor movement."

One of the first resolutions presented was in the field of international relations. Adopted unanimously, the resolution enjoined the United States government to "be unsparing in its efforts to achieve a reduction in armaments, on the road to abolition of all nuclear tests." It also stated that, "We should seek the prohibition of all weapons of mass destruction through an effective system of international inspection, supervision and control" and that, pending the attainment of such objectives, this country "should strengthen its own capacity to deter and, if need be, defeat a military aggression."

PICTURES AT LEFT: Senator John Kennedy received a rousing ovation at the Building and Construction Trades Convention. IBEW President Gordon Freeman, behind him, was an official escort. In the lower picture, AFL-CIO President Meany delivers the keynote address.

September, 1959

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## Labor and the New Law



Part of the broadcasting and recording crew which set up equipment below the speakers' platform.

ON September 9 Mr. Louis Sherman, General Counsel of the IBEW and General Counsel of the Building and Construction Trades Department, addressed the Convention of that Department in San Francisco. While the general tenor of his remarks was, of course, directed to the Department's affairs and to the delegates, some of his remarks (excerpted here) are of interest to all trade unionists.

"My subject today is the situation which, as President Gray stated, confronts us as a result of the current legislative picture in Washington. The great national debate on the question of whether additional Federal legislation should be enacted to regulate labor has raged for more than two years throughout the United States. Heated arguments on this issue have been presented in the legislative halls of Congress, in the national press, and in private meetings of all kinds, and in the very homes, the living rooms and the parlors of the people of our country. That debate is now ended."

"Certainly the first task is to expose the effort of those opposed to labor who have twisted the public mind into a state of confusion between the issues of corruption and the economic rights of labor, and thereby created the legislative situation in which undue restrictions have been placed upon organized labor. As the confusion clears, the entire force of the labor movement must be applied through legitimate channels to secure appropriate legislative relief."

"The fact of the matter is that in this great legislative fight (and it has been one of the greatest battles, as they will tell you, during the course of the last few years) an issue was raised in the House and that issue was not on the rules of the House, and you understand how important they are in our system of government. The issue that was raised in the House was on the anti-labor Griffin-Landrum Bill, and there were all the forces of labor united against it, the AFL-CIO, the Building Trades, the Railway Unions, and notwithstanding that opposition, the situation in the House was that the Griffin-Landrum Bill was passed over the opposition of labor."

"There are a great many provisions in this bill which will unfairly hamper the efforts of the labor movement and of ourselves in the Building Trades. But in the course of dealing with this legislation I think it is fair to expect that the Congress of the United States has now, for the first time after all the years of effort which you gentlemen have put forward, recognized and put down in a legislative mandate that there must be special consideration given to the special facts of the Building and Construction Industry and Unions."

"Here again we are faced with a fact. We are faced with a condition, not a theory. We are always faced with the question of what do we do next, and how do we answer the people who rely upon us when they ask what do we do next? I don't think we are going to get anywhere by refusing to face these problems.

I think the only choice we have is to study the Act and try to develop an adjustment to the prohibitions which have been laid down, so that instead of having the labor movement disappear from the face of the earth, that some way will be found to permit the labor movement under law to carry forward its beneficial activities."

"I know this isn't very pleasant, but I think it is foolish to try to make it pleasant. I think we have to face the situation which is ahead of us. I know this needs no words from me, that fundamentally the attitude of the Building Tradesmen is that of a law abiding citizen, who is very determined—just as the normal businessman is determined—to live under the law, but to know what his rights are so that he may carry forward the matters under his supervision with success for the effort, and without the pain of the application of legal penalties."

International Secretary Joseph Keenan delivers an address.



International President Freeman listens intently to debate.

A comprehensive report of the Federation's Executive Council included a statement well worth noting here. It said, "Labor's efforts must always be dedicated to the broad social objectives which make a better life for all Americans."

IBEW delegates to the Convention were: President Freeman, Secretary Keenan, Vice President Harbak, I. E. C. member Louis Marciante, Bus. Mgr. Frank Riley of L. U. 58, Bus. Mgr. Horace Dove of L. U. 1329, Bus. Mgr. Peter Zicarelli of L. U. 1377, Bus. Mgr. C. J. Sanders of L. U. 543, Rec. Sec. John I. Clucas of L. U. 1200, Bus. Mgr. E. H. Stark of L. U. 254, Bus. Mgr. Mike Morales of L. U. 1710 and Bus. Mgr. M. E. Whitfield of L. U. 602.

# FCC Studies IBEW Remote Proposal

*In recent years management groups have made a strenuous effort to extend and entrench the realm of remote control operations in the broadcasting industry. Often ignoring the defense needs of the nation, these groups sought changes in broadcast rules which left vital units unattended. The IBEW has fought a determined fight to prevent rule makers from overstepping the technological and operational bounds now existing.*

**REPRODUCED** hereinbelow are a Memorandum Opinion and Order and a Notice of Proposed Rule Making released by the Federal Communications Commission on July 31, 1959 on the subject of remote control operation of broadcast stations:

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington 25, D. C.

In the Matter of  
Amendment of Section 3.66  
(Broadcast Service) of the  
Commission's Rules and Regulations

## MEMORANDUM OPINION AND ORDER

By the Commission: Commissioner Craven absent.

1. The Commission has before it for consideration its Order in the above-entitled proceeding, released on April 25, 1958, and a petition for reconsideration thereof filed on May 26, 1958, by the International Brotherhood of Electrical Workers.

2. The April 25th Order amended Section 3.66 (c) (4) of the Rules relating to the remote control operation of Broadcast stations with directional antennae and/or power in excess of 10 kw to permit lower power than that required by the rule on certification by a CONELRAD Field Supervisor that the lower power is satisfactory for CONELRAD service.

3. Petitioner contends that insofar as the Order provided for the lowering of the minimum power requirement, it is substantive in nature, and is therefore defective in that it does not meet the requirements of Section 4 of the Administrative Procedure Act because it neither was preceded by a rule making proceeding, nor included a finding that notice and public procedure thereon were impracticable, unnecessary or contrary to the public interest. Petitioner requests that upon reconsideration the Commission vacate the Order complained of and conduct such further proceedings, in accordance with law, as the Commission deems just and appropriate.

4. A review of this petition and the Order to which it is directed indicates that the amendment to Section 3.66 (4) (4) of the Rules is in fact substantive in nature, and that the requirements of Section 4 of the Administrative Procedure Act *have not been fully met*. We have, accordingly, decided to vacate the Order, and to issue, concurrently with this decision, a Notice of Proposed Rule Making looking toward the same sub-

stantive amendment to this Rule, but affording interested parties an opportunity to comment on this proposed amendment. In view of the fact that petitioner has not attacked the substance of this amendment; and in view of the fact that a number of authorizations for remote control operation have been issued to stations participating in the CONELRAD program which would not meet the minimum power requirements of Section 3.66 (c) (4) but for the amendment; and in view of the importance of the CONELRAD program to the defense of this nation, we are of the opinion that the public interest would be served by our staying the effective date of this vacating Order until the Commission has had an opportunity to evaluate such comments as may be filed in response to the Notice of Proposed Rule Making.

5. In view of the foregoing, **IT IS ORDERED**, That the petition filed on May 26, 1958, by the International Brotherhood of Electrical Workers for reconsideration of the Commission's Memorandum Opinion and Order of April 25, 1958, **IS HEREBY GRANTED** and that Order **IS HEREBY VACATED**; and **IT IS FURTHER ORDERED** That the effective date of the vacating of this Order **IS HEREBY STAYED**, on the Commission's own motion, pending its action on a Notice of Proposed Rule Making issued on July 29, 1959. In the Matter of Amendment of Section 3.66 (Broadcast Service) of the Commission's Rules Relating to Remote Control Authorizations.

FEDERAL COMMUNICATIONS COMMISSION  
MARY JANE MORRIS,  
Secretary.

Adopted: July 29, 1959  
Released: July 31, 1959

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington 25, D. C.

In the Matter of  
Amendment of Section 3.66  
(Broadcast Service) of the  
Commission's Rules Relating to  
Remote Control Authorizations. } Docket No. 13084

## NOTICE OF PROPOSED RULE MAKING

1. Notice is hereby given of proposed rule making in the above-entitled matter.

2. The Commission has before it for consideration its Memorandum Opinion and Order of July 29, 1959, which grants a petition filed on May 26, 1958, by the International Brotherhood of Electrical Workers, requesting the Commission to reconsider and vacate its Order of April 25, 1958, pertaining to the remote control operation of broadcast stations, and conduct such further proceedings, in accordance with law, as the Commission deems just and appropriate.

3. For the procedural reasons set forth in the Memorandum Opinion and Order of July 29, 1959, the Order complained of has been vacated, and the effective date of the vacating Order stayed pending the conclusion of a rule making proceeding proposing the same substantive amendment. It is now therefore

proposed that Section 3.66 (c) of the Rules, which provides that:

"An authorization for remote control will be issued only after satisfactory showing has been made in regard to the following, among others:

- (1) . . .
- (2) . . .
- (3) . . .

(4) The station, if authorized to operate with a directional antennae and/or with a power in excess of 10 kw will be equipped so that it can be satisfactorily operated . . . on a CONELRAD frequency with a power of 5 kw or not less than 50 per cent of the maximum licensed power whichever is the lesser and that the necessary switching from the licensed frequency to the CONELRAD frequency can be accomplished from the remote control position."

be amended by adding to subsection (4) thereof, the following:

"Provided, however, that the power may be less than 50 per cent upon certification by the CONELRAD Field Supervisor that such a power will provide satisfactory service under CONELRAD."

4. The Commission is of the view that rule making should be instituted in order that interested parties may submit views and relevant data.

5. Authority for the adoption of the proposed amendment is contained in Sections 4 (1) and 303 (r) of the Communications Adopted: September 8, 1959.

6. Any interested party who is of the opinion that the proposed amendment should not be adopted, or should not be adopted in the form set forth herein, may file with the Commission on or before September 8, 1959, a written statement or brief setting forth his comments. Comments in support of the proposed amendment may also be filed on or before the same date. Comments or briefs in reply to the original comments may be filed within 10 days from the last day for filing said original comments. No additional comments may be filed unless (1) specifically requested by the Commission or (2) good cause for the filing of such additional comments is established.

7. In accordance with the provisions of Section 1.54 of the Commission's Rules and Regulations, an original and 14 copies of all statements, briefs, or comments shall be furnished the Commission.

FEDERAL COMMUNICATIONS COMMISSION  
MARY JANE MORRIS  
Secretary.

Adopted: July 29, 1959  
Released: July 31, 1959

On September 8, as the result of a telegram from the International Office on September 4, the Commission released the following Order:

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington 25, D. C.

In the Matter of

Amendment of Section 3.66  
(Broadcast Service) of the  
Commission's Rules Relating to  
Remote Control Authorizations.

Docket No. 13084

**ORDER EXTENDING TIME FOR FILING COMMENTS**

1. The Commission has before it for consideration a request filed September 4, 1959, by the International Brotherhood of Electrical Workers, for an extension of time from September 8, 1959, to October 1, 1959, in which to file comments in the above-entitled rule making proceeding.

2. Petitioner urges that it needs the additional time requested to file comments because its counsel is engaged in litigation

which requires participation in meetings on the West Coast and that the extension will not prejudice the position or interests of the Commission or any other party.

3. The Commission is of the view that the public interest, convenience and necessity would be served by affording the additional time requested for filing comments.

4. Accordingly, IT IS ORDERED, This 8th day of September, 1959, that the above-mentioned request of the International Brotherhood of Electrical Workers IS GRANTED; that the time for filing comments in this proceeding IS EXTENDED from September 8, 1959, to October 1, 1959, and that the time for filing reply comments IS EXTENDED from September 18, 1959, to October 12, 1959.

FEDERAL COMMUNICATIONS COMMISSION  
MARY JANE MORRIS  
Secretary.

Adopted: September 8, 1959  
Released: September 8, 1959.

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of

Amendment of Section 3.66  
(Broadcast Service) of the  
Commission's Rules Relating to  
Remote Control Authorizations.

DOCKET NO. 13084

Statement of  
INTERNATIONAL BROTHERHOOD OF ELECTRICAL  
WORKERS, AFL-CIO

The proceedings herein are designed to inform the Commission as to the advisability of continuing in effect an amendment to the Commission's Rules and Regulations which amendment was initially adopted without observance of procedures required by law. (See Memorandum Opinion and Order, July 29, 1959). The amendment in question relates to Sec. 3.66 (c) of the Commission's Rules and Regulations. It would reduce the minimum power required for Conelrad operation of remote control stations and, in effect, eliminate any requirement of an objectively determinable minimum.

Without the amendment the Commission's Rules and Regulations require as a condition of remote control operation by "high-power and directional antenna stations" that they be equipped to operate on a Conelrad frequency with power of 5 kw or not less than 50% of maximum licensed power, whichever is less. With the amendment, Conelrad power may be less than 50% upon certification by the Conelrad Field Supervisor that such lesser power will provide satisfactory service under Conelrad. There is no floor under the minimum power requirement except the Supervisor's individual judgment.

No contention is made that the Conelrad Field Supervisors are anything other than devoted public servants. The question is, however, as to whether the Commission (1) should transfer to such field employees its responsibility for national protection and (2) should, in view of its responsibilities in respect to national defense, reduce to the absolute minimum the power required by the Commission for Conelrad operation.

It is submitted that the Commission which has been charged by the President (E. O. 10312) with the duty of exercising his national emergency powers under Sec. 606 (c) of the Act should not seek to wash its hands of this responsibility by a transfer to subordinates. Whether or not the delegation to field supervisors transgresses the fundamental principle of law prohibiting the re-delegation of delegated power, the Commission, charged with the responsibility for effective Conelrad planning, should not transfer to employees authority to reduce Conelrad power to a minimum, particularly since the authority transferred is in derogation of the Commission-established minimum.

In its Conelrad Regulations, Secs. 3.901 et seq., the Commission has stated that

"The aim of this plan (viz. Conelrad) is to minimize the navigational aid that may be obtained from the continued operation of broadcast stations, while at the same time, providing for the transmission of civil defense information to the public."

It is common knowledge that military science has progressed since the initial adoption of Conelrad along lines which tend to minimize the importance of eliminating navigational aid and to emphasize the importance of transmission of civil defense information to the public. In other words, the development of medium and long-range ballistic missiles makes enemy reliance on radio signals for guidance to targets much less important. On the other hand, the increase in knowledge as to fall-out danger from radioactivated atmosphere makes it imperative that there be a radio warning system of sufficient power to inform the public as to procedures for evacuation of danger areas, and for post-evacuation resettlement.

The public interest in preserving the effectiveness of the Conelrad program has at all times been recognized by the principal parties to the Commission's remote control proceedings. The February, 1956 Petition of NARTB (now NAB) for extension of remote control to high power and directional antennae stations proclaimed the petitioner's "vital interest in the continued success of the Conelrad plan and (in) steps necessary in order to maintain its effectiveness." (Petition filed February 15, 1956, p. 7). The Commission's Notice of Proposed Rule Making in Docket No. 11677 sets forth in paragraph 10 a statement of the Commission's desire for information as to whether all *future* remote control authorizations be conditioned on installation of equipment necessary for satisfactory Conelrad operation. And the I. B. E. W. on July 27, 1956 filed a separate petition for the institution of rule-making proceedings looking to the adoption by the Commission of a requirement that *all* remote control operations, irrespective of power or date of initial authorization, be conditioned on installation of equipment necessary for satisfactory Conelrad operation.

It appears therefore that the parties have been in agreement on one vital point: Conelrad is necessary in the public interest. It is difficult to see where justification could lie for the contemplated weakening of the framework for Conelrad operations.

There are two apparent ways in which Conelrad might be undermined: one, by reducing the *number* of Conelrad stations in operation; two, by reducing the *power* of Conelrad stations in operation. The Commission has heretofore in remote control proceedings indicated its concern with respect to the former because of its concern for the vitality of the Conelrad program; if that concern remains, it should, it is submitted, reject herein measures which would produce the latter.

As mentioned above, the transmission of civil defense information to the public is one of the objectives of the Conelrad program. The effective transmission of such information becomes of paramount importance in view of the fact that evacuation of population centers *will* be an objective in the event of enemy attack. See testimony of Atomic Energy Commissioner Willard F. Libby before Military Operations Sub-committee, House Committee on Government Operations, January 31, 1956, p. 31; testimony of Brig. Gen. Don E. Carleton, *ibid*, at p. 1915. In any evacuation program, information as to wind direction is of tremendous importance. In this regard Dr. Libby testified as follows:

"Well, I would think you ought to stay in the shelter until the radiation level is low enough for you to travel safely. That depends on the way the wind is blowing and the way the fallout actually occurs. Here is where you need your instruments, and your guidance over your radio to tell you what the countryside is like and just as good advice on what you should do." (Hearings, p. 49).

Brig. Gen. Ralph Hospital, President, Civil Defense Directors Assn., State of New York, testified:

"It is recommended that a complete and exhaustive restudy of Conelrad be made by competent authorities as this emergency and highly valuable radio service does not obtain in many of the smaller communities throughout the United States.

". . . Millions of people will become wholly dependent upon their local radio stations for survival in the event of an emergency." (Hearings, p. 1907).

Expert testimony before the Holifield Committee indicated the danger inherent in low power Conelrad operations. Thus Willard Bascom, Technical Director, Advisory Committee on Civil Defense, National Academy of Services, testified:

"When Conelrad does go in the air, its signals are quite likely to be unsatisfactory because of the low power output and the subsequential nature of its operation." (Hearings, p. 173).

Carl Wesser, Chief Engineer, Station WWJ, testified:

". . . in the first place, to cover a certain area, a certain minimum amount of power is necessary to deliver a usable signal to the receiver in that area."

Mr. Eckhart (Committee counsel): "What wattage is that?"

Mr. Wesser: "It would seem offhand . . . that to serve an area like Wayne County, if all transmitters could operate on powers between, let us say, 5 and 10 kilowatts, that might approach the ideal from the standpoint of usable service that could be delivered to the receivers, but there is an economic factor involved in that."

It is submitted that both common sense and expert testimony indicate clearly that the necessities of Civil Defense militate against the adoption of measures which permit the reduction of Conelrad power. The function of the Commission should be to establish a national minimum power and if any variation is permitted from such minimum it should be in the direction of a higher minimum where civil defense interests so require in individual cases.

With respect to authorization for remote control operation issued prior to July 29, 1959 (see para. 4 of July 29, 1959 Memorandum Opinion and Order) the Commission may take cognizance of the special situation of such licensees and in individual cases allow continued operation in accordance with the Conelrad field supervisor's certifications. For the reasons advanced above, however, it is submitted that the Order of April 25, 1958 should be vacated.

Respectfully submitted,

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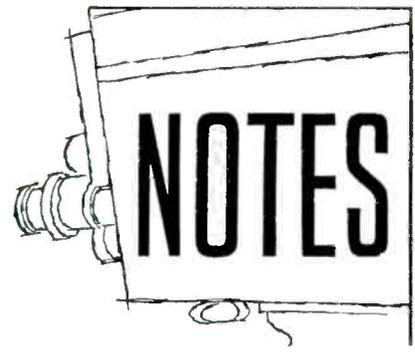
## Labor Law Advisory Committee

WASHINGTON (PAI)—AFL-CIO President George Meany has appointed six labor representatives to serve on an advisory committee to the Labor Department on carrying out the reporting provisions of the new labor-management "reform" law.

The group, with a corresponding group from management, has begun discussions with staff members of the Department.

The labor group includes:

Secretary-Treasurer Tony Gallo of the Cement, Lime and Gypsum Workers; Arthur Goldberg, Special Counsel to the AFL-CIO; Secretary-Treasurer Joseph D. Keenan of the International Brotherhood of Electrical Workers; Secretary-Treasurer William Pachler of the Utility Workers; Secretary-Treasurer Desmond Walker of the United Rubber Workers and J. Albert Woll, AFL-CIO General Counsel.



## New US-to-France Link

Giant metal threads stitch America and Europe ever closer together for communications purposes.

The latest addition to the growing underwater network is the pair of telephone cables recently laid under the Atlantic from North America to the coast of France.

The facility can speed 36 conversations under the sea at one time. One strand carries voices eastward; the other, west. The new link was created because of the success of the first transatlantic telephone cable, placed in service in 1956.

The American Telephone and Telegraph Company owns the cables jointly with the French Ministry of Posts, Telegraphs and Telephones, and the German Federal Ministry for Posts and Communications.

The western ends of the cables surface at Clarenville, Newfoundland. They tie into a cable that crosses Newfoundland and the waters of Sidney Strait to connect with an existing 575-mile radio relay route extending south to Portland, Maine, where it joins the Bell System's national network.

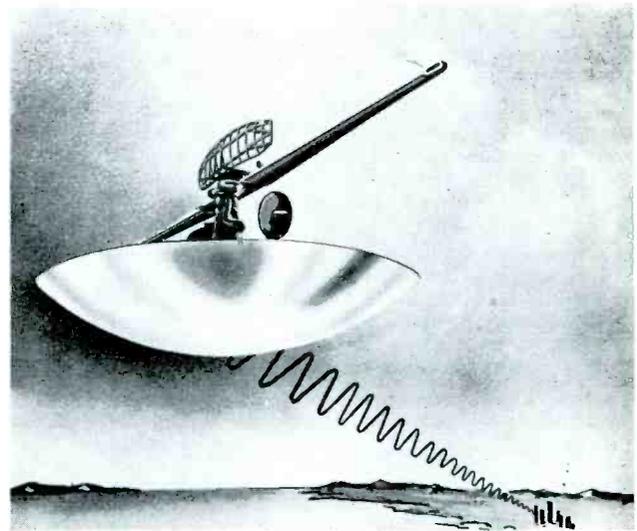
In Europe, the lines end at Penmarch, on the Brittany peninsula of France. Thirteen of the 36 circuits terminate in France and 13 in Germany. Belgium and the Netherlands are allotted one apiece; Italy, Switzerland, and Spain, two each. Two spares can be used in any of the countries in the event of a circuit failure.

Before the operation of the new link, only one cable and nine radio telephone circuits operated between France and the United States, and two cable and 12 radio circuits between Germany and the United States.

The 5,000 miles of cable needed—roughly 2,500 miles for each strand—were manufactured at Newington, N. H.; Erith, England; Calais, France; and Nordenham, Germany. The cable consists of a central copper conductor surrounded by copper tapes, polyethylene waterproofing, more copper tapes, layers of fabric, jute, and cotton-wrapped steel armor wire.

In the deep areas the cable is one and a quarter inches thick and weighs about a pound a foot. That in shallower regions, however, needs protection from tidal action, marine life, fishing rigs, and shipping activities. In these areas, the cable varies from almost two inches

## Future Sky Stations



The Raytheon Co., Waltham, Mass., plans to send stratospheric stations (see drawing) miles above the earth. The company's Government Equipment Div. says that a key factor in the project is development by Raytheon of a high-frequency, high-power microwave tube called the Amplitron. Long-range TV transmission, other communications, missile detection meteorology and other commercial-military operations will be aided by the helicopter-borne stations. Weightless fuel to power them will be from high frequency radio waves in the microwave region. The energy will be beamed in narrow paths from transmitters on earth.

to a little over three inches in diameter. It weighs more than 10 pounds per foot.

Telephone communication by deep-sea cable is made possible by intricate electronic amplifiers, which boost voice currents passing through them by about a million times. (See *Technician-Engineer*, Jan. '54, p. 6; Feb. '54, p. 10; and Aug. '55, p. 8.)

Each amplifier uses three vacuum tubes and some 60 other components packed in flexible copper tubes about eight feet long and only one and three-quarter inches through. They are spliced into the line and laid like ordinary cable with regular cables-ship gear.

The twin cables each use 57 amplifiers, placed 44 miles apart.

—National Geographic Society.

## Satellite Relays

A worldwide, transoceanic satellite communications system—capable of carrying TV programs across the Atlantic and Pacific Oceans—is foreseen in four years.

The prophecy was made by the House of Representatives Committee on Science and Astronautics in a recent report. The report is entitled "Satellites for World Communication."

The report stated that a military worldwide communications system via satellites "appears probable" within four years.

In a discussion of various techniques, the report refers to the passive reflector type satellite balloon which would be used to "bounce" radio signals from one point on the earth's surface to another point several thousand miles away. One proposal, referred to, is to place 24 such balloons in orbit around the earth so that one is "radiovisible" almost always. The cost, the report stated, would run about \$15-\$20 million with each ground station costing "several million dollars."

"This cost," the report said, "however, has less significance when one considers that the system could provide channels of as much as television band-width."

In another section, the 24-hour satellite is discussed. This would provide, it was stated, the equivalent of 1,000 telephone channels or 500 telephone channels plus one television link. Each such satellite would cost about \$4 million, it was estimated, with the total cost of 12 ground stations \$24 million.

## Transatlantic TV

Television is crossing the Atlantic nowadays direct but not "live." This is accomplished by a slow-down-and-weed-out system that sees the slowed-down signal speeded up and the weeded-out portion replaced after it hits the North American continent.

As you know, live TV involves as many as 50,000,000 bits of "information" per second and the transatlantic telephone lines can't handle that much. In order to get the image from England to us, the action is taken on film. The film is given a quick processing and put into an electronic scanner. This scanner takes 8 seconds to scan every other frame. The light-and-dark image from the scanner goes to a modulator, which then shoots the signal onto the transatlantic telephone line in Scotland.

The telephone line ends in Montreal, where the electrical signals are re-converted to light via an electron beam that traces out the picture in a scanning console. Twin lenses are used to record the same picture on adjacent frames at the same time to replace the frame that was skipped in transmission.

The system is quite similar to the system used to send

news photos to newspapers. The resultant image on the home receiver lacks considerable definition.

Not long ago such a picture sequence was made of Queen Elizabeth boarding a Canada-bound jet plane. The action lasted 2½ minutes but it took 2½ hours to transmit the picture over the wire.

This method of intercontinental telecasting, begun this past summer, will probably continue until communications satellites start orbiting around the globe. Some experts believe such a satellite has a chance of flying in a year or so.

## Trees May Shadow UHF

A report submitted to the Association of Maximum Broadcasters recently shows that the screening effect of trees and foliage may be one of the most significant factors in the loss of signal strength in the UHF band.

A field test on 483.26 mc was made last December and January at Salisbury, Md., using Channel 16. WBOC-TV, Salisbury (620 feet antenna height above average terrain). Measurements over the flat terrain of Maryland's Eastern Shore were made using an antenna 30 feet above ground.

## Zenith Plugs 'Drift-Free'

Zenith Radio Corporation has announced three new table-top FM-AM radio receivers equipped with an automatic frequency control circuit that "simplifies tuning of FM and 'locks in' the station tuned, eliminating the problem of FM 'drifting.'" A fourth Zenith newcomer uses a "two gang 'permeability' circuit" for virtually drift-free tuning of FM channels.

STATEMENT REQUIRED BY THE ACT OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233) SHOWING THE OWNERSHIP, MANAGEMENT, AND CIRCULATION OF TECHNICAL-ENGINEER PUBLISHED MONTHLY AT WASHINGTON, D. C., FOR SEPTEMBER, 1959.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, International Brotherhood of Electrical Workers, 1200 15th St., N. W.; editor, Albert O. Hardy, 1200 15th St., N. W.; managing editor, none; business manager, none.

2. The owner is (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 per cent or more of total amount of stock. If not owned by a corporation, the name and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual member, must be given.) International Brotherhood of Electrical Workers (an unincorporated labor organization), 1200 15th St., N. W., Washington 5, D. C.

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5. The average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the 12 months preceding the date shown above was: (This information is required from daily, weekly, semiweekly, and triweekly newspapers only.)

ALBERT O. HARDY,

Editor.

Sworn to and subscribed before me this 8th day of September, 1959.

LAWSON WIMBERLY,

Notary Public.

(SEAL)

(My commission expires September 30, 1962.)

## Overseas TV Growth

United States Information Agency expects more than 900 television stations to be in operation outside of the United States and Canada by June of this year.

Romney Wheeler, director of the USIA TV service, gave this estimate in testimony before a House Appropriations Subcommittee. He said 770 of these stations would be in the free world.

The number of sets overseas is increasing at about the rate of 8 million a year and by July 1 of this year the total will be well over 27 million outside the United States and Canada, Mr. Wheeler said. The number of people who can be reached by TV in the free world is now well in excess of 100 million, he told the subcommittee.

## Tape Conversion Funds

This U. S. Information Agency is seeking \$20,000 to help finance a project to achieve the electronic conversion of taped television shows from American standards to European standards.

In just released testimony before a House Appropriations subcommittee, Romney Wheeler, director of the USIA TV Service, said both Radio Corp. of America and the Ampex Corp. have undertaken preliminary studies without cost to the Government to ascertain if the conversion can be made. It would cost \$100,000 to produce the first piece of hardware, Mr. Wheeler said.

USIA feels the program is of tremendous importance and hopes to encourage its development. The three major networks, whom he expects to participate in the cooperative project would contribute the remaining \$80,000, Mr. Wheeler said.

## Democratic Elections?

We are indebted to the *Radio Officers' News* of the R.O.U. for calling our attention to an election by the stockholders of a large corporation. It seems some of the stockholders were suspicious that the directors had sticky fingers. The former therefore introduced a vote on two resolutions which would restrict the amount of "bonuses" and "pensions" which could be extracted from the company till by the brass. Along with the ensuing ballot came an announcement in big, black bold type that the directors were "Against" the resolutions

and the announcement stated that stockholders who did not cast a vote would be recorded as having voted *against* the resolutions. Can you imagine the screams from Capitol Hill if a labor union put out a ballot like that?

## How to Win Elections

As a disarming, flowery and effective politician who always remembered names the late James Michael Curley, frequently Mayor of Boston, was reputed to stand at the head of the class. He was given to addressing kindly old ladies as "Nellie," much as men call associates, "Mac." One night after a Boston hotel rally one of two cleaning women greeted him.

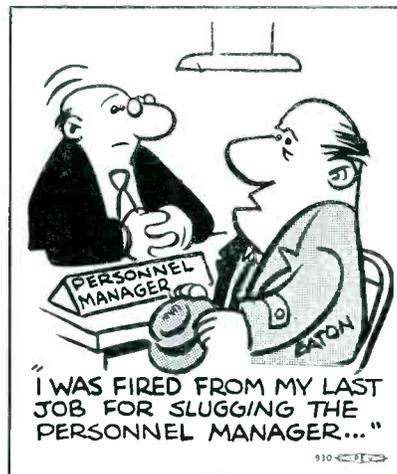
"Hello, Nellie," Curley beamed, and he inquired for her health and family with a gracious smile. As he left he heard the woman shout to her companion: "I told you he knew me."

In the car Curley chuckled and remarked to an aide: "I've been using that gambit for 20 years and this is the first time it really worked."

## KMOX in New Building

KMOX St. Louis, Mo., began operating from its new \$750,000 building Monday, Aug. 31. It's the first construction in 20 years that CBS has put up to house radio-only facilities.

Featuring three separate studios and control rooms. KMOX's two-story home contains the latest in high-fidelity broadcasting equipment.



Technician-Engineer