



The INTERNATIONAL BROTHERHOOD of ELECTRICAL WORKERS

Gordon M. Freeman Joseph D. Keenan Jeremiah P. Sullivan International President International Secretary International Treasurer

ALBERT O. HARDY

Editor, Technician-Engineer

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... the cover

AFL-CIO President George Meany recently became a U. S. delegate to the United Nations, the first American labor leader to be so honored. Before he took up his official duties, Meany toured the UN buildings, meeting the unionists at work there. As seen on our October cover, Michael Poulus of Local 1212 showed him the radio, TV and recording facilities manned by IBEW members. October 24 is United Nations Day, a time when we must all renew our support for the vital world organization. (Our thanks to Richard Strunsky and Labor's Daily for the picture.)

commentary

The average U. S. television station will earn a profit of \$170,000 this year, a survey of 391 television stations by the National Association of Television Broadcasters indicates.

In 1956 an average U. S. TV station earned a profit of \$146,400 before taxes. Total broadcast revenue last year was \$920,700. Operating expenses amounted to \$774,300.

The profit margins are widening. The pretax profit margin is expected to increase from 15.9 per cent in 1956 to 17.7 per cent in 1957. Contrast this get-rich-quick condition of U. S. stations with their 7.2 per cent profit in 1955.

Network and regional advertisers contributed 47 cents of the video station sales dollar last year. Thirty cents came from local advertisers and 23 cents from network sponsors.

Programming took 37 cents of the expense dollar, while 33 cents went for general and administrative costs, 18 cents for technical costs and 12 cents for selling.

We assume that in the survey "labor costs" were part of the "technical costs" and perhaps part of "programming." We know for certain that technician wages did not more than double in two years as station profits have done.

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 the 1956 figures:

August, 1957-121.0; August, 1956-116.8.

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FCC Decision Issued

With Limitations, Commission Permits Further Remote Control Rule Relaxation

T HE FCC decision to liberalize remote control rules has been announced. Following 19 months of suspense, arguments and counter-arguments, the Federal Communications Commission issued a press release on September 20 and copies of its official decision on September 24. A substantial number of pages of the Report and Order are devoted to a summary of contentions by the various interested parties—only a little more than half of the text contains the conclusions reached by the Commission and the real substance of the Order. Accordingly, although anxious to afford our members and readers an opportunity to read the decision, we are reproducing only those parts of the Report and Order which contain the conclusions of the Commission.

The Order of the Commission, which became available shortly before this issue of THE TECHNICIAN-ENGINEER went to press, is presently under study.

In accord with the usual procedure, the Commission would make its Order effective October 25, 1957. The abridged text of the Report and Order will be noted to follow the Commission's usual form; the omission of certain numbered paragraphs should be noted

as missing (designated by the inserted asterisks in the copy printed herein) because the body of such paragraphs contain only the summaries of arguments presented to the Commission by the parties of interest.

Reference

In recent months the *Technician-Engineer* has published background material and official statements on remote control operations and FCC rule making. We refer you to:

• "NARTB Asks FCC for Further Rule Relaxation," March 1956 edition, Page 3.

• "FCC Issues Public Notice," April 1956, Page 5.

• "IBEW Petitions for Delay," May 1956, Page 3.

• "IBEW Files Comments on Proposed Rule Relaxation," July 1956, Page 3.

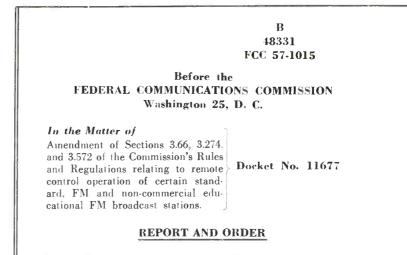
• "How Remote Can You Get?", August 1956, Page 4.

• "The Remote Control Record Is Growing," September 1956, Page 3.

• "NARTB Files 'Reply Comments' . . . Largely New Material," November 1956, Page 8.

• "NARTB Files Final Pleadings," December 1956, Page 10.

• General Counsel Louis Sherman's speech to the Division Meeting, Pages 14 and 15 of the July-August issue, 1957.



By the Commission: Commissioners Mack and Ford abstaining from voting.

1. The Commission has before it for consideration its Notice of Proposed Rule Making released April 12, 1956 (FCC 56-323) and published in the Federal Register on April 18, 1956 (21 FR 2534) in response to a petition filed by the National Association of Radio and Television Broadcasters (NARTB) proposing amendments of the Commission's rules to authorize the remote control operation of all standard and FM broadcast stations.

2. Present regulations permit remote operation, subject to certain conditions, only by standard non-directional and FM broadcast stations operating with powers not in excess of 10 kilowatts. In our Report and Order adopting the present rules we recognized that the most important consideration was whether remote control operation would result in any degradation of the Commission's technical standards and concluded that, in

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light of the status of the equipment needed for remote control operation, the experimental demonstration of the feasibility of such operations, the conditions imposed upon remote control operation, and the salutary purposes to be accomplished by its use in appropriate situations, the authorization of remote control, if limited to standard non-directional and FM stations, operating with power of 10 kw or less, would not result in any degradation of our technical standards.

3. Approximately 500 comments on the proposal were received from various individuals and operators, broadcast stations, regional associations of broadcasters, the national networks, and several national labor unions. All of the comments submitted have been carefully evaluated and considered. However, in view of the large number of comments filed and the duplication of the contentions of the various parties, we shall limit our discussion thereof to the contentions advanced by the principal advocates and opponents of the proposal.

* * * * * *

7. Opponents contend that the issues in this proceeding are not confined to the purely technical question of whether a further relaxing of the Rules would result in degradation of the standards and that unless the petition is dismissed on the basis of comments alone, the Commission must conduct full public hearings to obtain evidence on the operation of station transmitters from all persons concerned with their day-to-day operation, and to have the benefit of experienced judgments of independent engineers who are not partisan and dependent on the industry's good will and, if after full public hearings, it appears that there may be substance to the industries' demand for rules relaxation, then the Commission must conduct investigations into all phases of the status of present equipment, including direct studies and surveys by independent technical professional personnel of the hazards of unattended operation, the experience of all stations presently authorized to operate by remote control, and the number and cause of outages.

8. IBEW argues that Exhibit 1 of the petition purports merely to explain the contents and significance of other exhibits and thus cannot be considered evidence in support of the petition; that Exhibit 2 purports to show reliability of remote control operations with power not exceeding 10 kw. and non directional antennae and has no bearing on the present petition since the reliability of low-power, non directional operation was the subject of the 1952-1953 proceedings.

* * * * * * *

20. IBEW filed a motion to strike the reply comments of the NARTB on the ground that they constitute an amendment to the petition and the submission of new evidence in an attempt to meet the deficiencies of the original presentation. The IBEW also states that inasmuch as the petition, considered with or without the reply comments, fails to make out a case, it must be dismissed and, in view of the fact that the reply comments contain a petition for totally different relief than that in the original petition, it would be improper and a denial of due process of law to proceed further with this case. NARTB filed au opposition to the Motion to Strike filed by IBEW. NARTB states that the reply comments are entirely proper and contain only information that is relevant to the issues in this proceeding and rebuts the objections raised by the IBEW, NABET and ACA, and that the change in the proposal for high power stations is merely a suggestion of a different method by which the objective of this proceeding can be achieved. NARTB contends that the IBEW's interpretation of the scope of reply comments would deprive the Commission of basic information it needs in a rule making proceeding and that the sole limitation on such comments is that they must be relevant to the points raised in With regard to IBEW's contention that the the comments. acceptance of NARTB's reply comments would deprive it (1BEW) of due process of law, NARTB points out that this is a rule making proceeding and not a comparative hearing in which private rights only are concerned. We believe the material contained in the NARTB reply comments was proper rebuttal of the material contained in the original comments and relevant to the issues in this proceeding. Accordingly the Motion to Strike filed by IBEW is denied.

21. The IBEW filed a petition for institution of rule making to amend the remote control rules so that:

"Any station, irrespective of power, heretofore or hereafter authorized to operate by remote control may be so operated only if equipped so that it can be operated on the CONELRAD frequency assigned and the necessary switching from the stations assigned frequency to the CONELRAD frequency can be accomplished."

The NARTB petition proposed that all *juture* remote control authorizations whether or not now participating in the CONELRAD operating system, be conditioned upon the stations being equipped to satisfactorily operate in the system and, by remote switching of the transmitter or by using a separate transmitter, change from its normal frequency to a CONELRAD frequency. Therefore, we are treating the petition of IBEW as a counterproposal in this proceeding.

22. We have carefully considered the many comments filed in this proceeding, and on the basis of these comments and our own knowledge and experience in the field, obtained through reports and records, we have determined that standard and FM broadcast stations with powers in excess of 10 kw and standard broadcast stations utilizing directional antenna should be authorized to operate by remote control under certain conditions. The most important consideration is whether such operation would result in any degradation of the Commission's technical standards and requirements, or more specifically, would increase the possibility of outages and improper transmitter operation. The record indicates that the present remote control operation of broadcast stations with powers up to 10 kw has been satisfactory and no serious degradation of the technical standards has resulted from such operation. With respect to the effect of remote control equipment upon the operation of a directional antenna we find that the addition of such equipment in itself would not introduce any instability in such an array. While the addition of a directional antenna system would modify slightly the functions which are now performed by remote control it would not add any new type of function. The stability of a directional array is the function of the design of a passive network designed to produce a pre-determined pattern of radiation and has no relation to the means employed to monitor its operation. With respect to the effect of remote control upon the operation of transmitters with powers in excess of 10 kw, we find that the remote control equipment acting as it does merely to repeat back certain information, will repeat back this information without regard to the power of the transmitter. On the basis of the record and our experience we have concluded that the addition of remote control equipment itself has no effect upon the stability of a directional antenna or upon the transmitter itself.

23. A question remains as to the reliability of high power transmitters themselves. The record indicates that some high power transmitters in the experimental tests were run by remote control practically without loss of time and with only a few malfunctions. Two other transmitters were found to have insufficient reliability to justify unattended remote control operation in their present condition. However, it appears that these transmitters could be modified or certain other steps could be taken to correct the malfunctions. In this connection, we note that NARTB proposed that remote control operations of stations, operating with power in excess of 10 kw, be granted on a case-to-case basis and upon condition that the station install an auxiliary transmitter, and submit a reasonable showing as the reliability of the main transmitter. We do not believe that the installation of an auxiliary transmitter should be a requirement for remote control authorization. We believe that station management realizes that broadcast time is important and that loss of "on air time" results in loss of revenue and therefore they will seek methods to insure that remote controlled transmitters operate efficiently. However, we are of the opinion that a reasonable showing should be made of the past operation of the transmitter before remote control is authorized for a particular station. In order to demonstrate that a presently authorized transmitter, regardless of its power rating is reliable and capable of being operated by remote control, the following information should be submitted with the application (FCC Form 301A):

(a) An analysis of the transmitter operating logs, maintenance logs and records for the 12-month period immediately prior to the application. This analysis is to include the following items.

(1) The number of outages, their cause and duration together with what corrective measures were taken to remedy the malfunction and to prevent such a recurrence.

(2) The nature and consistency of past maintenance performed and a statement as the maintenance practice and policy to be followed after remote control authorization.

24. We wish to point out that the instant proposal does not contemplate that stations with high power and/or directional antenna be operated by lesser grade operators. Many comments stressed the importance of preventive maintenance, the necessity for observation by an experienced technician, and the reliance on a first-class operator for any significant repair. We believe that it is important that qualified technicians be responsible for the operation of directional antennae and/or high power transmitters even though such stations may operate by remote control. Therefore we are not changing the present rules which require that stations operating with directional antenna and/or power in excess of 10 kw have on duty either at the remote control point or transmitter location an operator holding a valid radiotelephone first-class operator license.

25. In response to the request contained in the Notice of Proposed Rule Making, many parties submitted comments concerning the information to be supplied with the application for remote control of directional antenna stations as well as to what data should be supplied after remote control was authorized. We have carefully reviewed the comments filed and have concluded that applications for remote control will be considered upon a case-by-case basis and granted upon a satisfactory showing that the directional antenna system is stable and is in proper adjustment. On the basis of the comments filed and our experience with the problems of directional antenna systems, we have determined that the basic information necessary to establish the stability and proper adjustment of a directional antenna system, and hence, the information which we will require as part of an application to operate a directional antenna by remote control is as follows:

(a) A statement describing the stability of the system for the proceeding one year period. This statement shall include, but shall not be limited to, such information as the nature and degree of adjustment required, the maintenance procedures followed and the adequacy of the present monitoring system to indicate changes in the operation of the array.

(b) Weekly readings of field intensity at each monitoring point specified in the station license for the preceding one year period. (Monthly readings will be acceptable for those stations which are presently authorized to measure monitoring points field intensities on a monthly basis.)

(c) Readings once each day of antenna base currents (for each pattern) and readings taken at approximately the same time of common point current, phase monitor loop sample currents or remote base currents, and phase indications for the preceding 30 days.

(d) A re-determination of the common point impedance of the directional antenna system.

(e) A partial proof-performance consisting of at least nine or ten measurements taken at a distance of from two to ten miles from the antenna on each radial measured in connection with the last complete adjustment of the directional antenna system, properly analyzed in accordance with Section 3.186.

26. In its petition, NARTB proposed that a station authorized to operate with a directional antenna and/or with a power in excess of 10 kw may operate by remote control only if equipped so that it can be operated on a CONELRAD frequency and the necessary switching from the station frequency to the CONELRAD frequency can be accomplished from the remote control position. We are of the opinion that the adoption of such

* A revised Form 301-A will be provided in the near future.

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a proposal would not necessarily be a departure from the concept that CONELRAD participation is on a voluntary basis. It should be noted that all stations whether or not operating by remote control must be so equipped so as to be able to follow the prescribed CONELRAD alerting procedure set forth in the CONELRAD Manual for Broadcast Stations. Therefore. CONELRAD operation is both mandatory and voluntary, i.e. participation of all broadcasting stations is mandatory to the extent that regular operation of the station must cease after the transmission of the required Radio Alert message, whereas stations may, upon a voluntary basis and after approval of the Commission, operate during a CONELRAD alert to maintain contact with and disseminate information to the public. Such stations participate in the CONELRAD system and operate in accordance with the CONELRAD rules. Stations licensed to operate with higher power and/or directional antenna form the hard core of the CONELRAD system. We realize that in some cases a moderate expenditure might be required to enable these stations to continue in the CONELRAD system with remote control switching. While it is believed that no material number of stations would drop out of the plan because of the necessity of these expenditures, we feel that the public and national interest requires the continued success of the CONELRAD plan and the Emergency Broadcasting System. Therefore, we believe that we are justified in conditioning an authorization for remote control of a station operating with a directional antenna and/or a power in excess of 10 kw upon the installation of equipment that would permit the change over from the licensed operation to CONELRAD operation to be made from the remote control point. Accordingly the request of NARTB is being adopted and therefore the counter proposal submitted by IBEW must be denied.

27. We realize that some existing stations are not required to make field intensity measurements at their monitoring points even though their licenses specify monitoring points at which the field intensity is not to exceed a specified value. Several parties commented that in such instances we should not make these stations take monitoring point readings for a year before authorizing their operation by remote control. We believe that the use of monitoring point readings is one method of determining if an array is stable. Furthermore, we do not see how a licensee could determine whether the field intensity at the monitoring points was exceeded unless measurements were taken at various intervals. We are therefore requiring stations to submit monitoring point readings for the year previous to their application for remote control.

28. Some directional antenna stations authorized prior to 1940 were not required to install phase monitors although some stations have installed phase monitors since that time. The remainder of such stations, if they desire to operate by remote control, must install a phase monitor in order to submit the required 30-day readings.

29. In order to insure that the operation, by remote control, of a station utilizing a directional antenna will not result in deviations from our technical rules or from the station license we have concluded that stations authorized to operate a directional antenna by remote control must; (a) make a proof of performance of the directional antenna system, consisting of from three to four measurements on each radial, once each year as part of the presently required equipment performance measurements and must submit the results of these measurements, plus the monitoring point readings, with each license renewal application, (b) read and log each half hour, at the remote control point, the common point current and the remote indications of base current for each tower of the directional system. (c) Read and log, at the transmitter location, once each day for each pattern (within 2 hours of operation with that pattern) common point current, base currents, phase monitor loop sample currents or remote base currents, and phase indications.

30. With further reference to the questions raised in its Notice of Proposed Rule Making and in consideration of the comments received, we have determined that:

(a) No change is required in Section 3.39(h) with respect to automatic logging devices.

(b) Section 3.39 (d) (8) is being amended to permit the use of semi-conductor devices in addition to vacuum tube rectifiers.

(c) Present rules which require the logging of antenna current and frequency are adequate to insure maintenance of power and frequency within the limits prescribed. It is deemed desirable, however, to amend the rules to provide that stations operating by remote control shall continuously monitor the per cent of modulation or shall be equipped with an automatic device to limit the per cent of modulation to 100.

(d) It is not necessary to require the installation of equipment to turn off the transmitter when it fails to function within the tolerances prescribed but the present remote control rules are being clarified to provide that defective operation of the remote control equipment and associated line circuits resulting in improper control or inaccurate meter readings will require the immediate cessation of operation by remote control.

(e) Remote meters must be calibrated once each week as required by the present rules and the results thereof entered in the operating log. Meters installed at the remote control point to indicate antenna base current and common point current may utilize arbitrary scale divisions provided a calibration curve showing the relationship between the arbitrary scale and the scale of the base and common point meters is maintained at the remote control point.

31. Although we are not requiring that the tower currents as indicated by a phase monitor he read and logged at the remote control point, we do agree with the suggestion that the present rule with respect to the use of a phase monitor at the transmitter to determine the ratio of antenna currents should be revised to reflect current practice and are so amending Section 3.39. We do not agree with the suggestion that a rule should be adopted which would permit the reading and logging of phase monitor sample currents in lieu of base currents provided base currents are read and logged once weekly. Section 3.39(d)(l)(v) provides for the use of a phase monitor in obtaining remote indications of the tower currents but does not state how often the base currents must be read and logged. The station license in most cases specifies that the sample loop currents may be used provided base currents are read once a day. Upon a showing, this condition has been changed, on a case-by-case basis, to using hase currents once a week. No evidence was submitted to convince us that our present practice in this regard should be changed.

32. Both the ACA and NABET urge that the Commission order an evidentiary hearing to determine the facts and also to conduct investigations to determine whether or not the malfunction of equipment has increased or decreased under remote control, whether or not CONELRAD is operating properly and that further consideration be given to doing away with the existing remote control authorizations. The Commission may in its discretion, grant the subject request for further proceedings "if sufficient reason therefore he made to appear" (Section 405). We do not believe, however, that such "sufficient reason" has been demonstrated. All interested parties have been afforded ample opportunity to file written comments and numerous comments have been received. It does not appear that an evidentiary hearing would serve any useful purpose nor would it be of material assistance to us. Accordingly, the requests for an evidentiary hearing are denied.

33. Authority for the adoption of the amendments herein is contained in Sections 4(i), 303(b), (e). (g) and (r) of the Communications Act of 1934, as amended.

34. In view of the foregoing, IT IS ORDERED, that effective October 25, 1957, Part 3 of the Rules and Regulations IS AMENDED as set forth in the attached Appendix.

FEDERAL COMMUNICATIONS COMMISSION

Adopted: September 19, 1957. Released: September 24, 1957.

BEN F. WAPLE, Acting Secretary.



REX FRANSWAY

Rex Fransway Named Chairman of IBEW Council

International President Gordon M. Freeman of the International Brotherhood of Electrical Workers announced the appointment today of a new Chairman of the IBEW International Executive Council, effective September 16, 1957. He is E. J. (Rex) Fransway, business manager of IBEW Local Union 494, Milwaukee, Wis.

A 38-year member of IBEW, Mr. Fransway brings a rich background of electrical experience with him to his new post. The 5,000-member local union which he has served as business manager since 1941, has agreements with almost every branch of the electrical industry — utilities, construction contractors, radio and TV service, motor and sign shops and transport companies. Mr. Fransway's work experience prior to assuming the local union position he now holds, embraced the telephone, utility and construction fields.

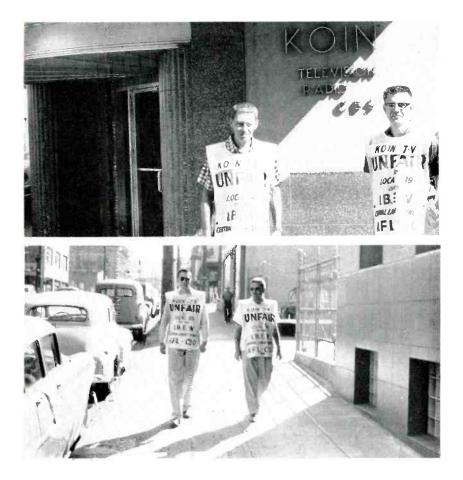
In addition to his position with Local Union 494, Mr. Fransway is also president of the Wisconsin State Conference of Electrical Workers and an active member of a number of civic organizations including the Milwaukee City Park Commission and the Wisconsin State Board of Vocational and Adult Education of which he is vice chairman.

In accepting the position as chairman of the IBEW International Executive Council, Mr. Fransway assumes the post left vacant by the death of Charles M. Paulsen of Chicago.

Portland Picket Lines

Appropriately or not, depending upon the point of view, members of Local Union 49 struck KGW-TV and KOIN-TV at signoff on Labor Day, September 2, 1957. The strikes were a monument to failure of the negotiations which preceded and followed the expiration of the agreements on June thirtieth. Executive personnel filled the jobs vacated by the members of Local 49 and when the two stations were later assisted by similar personnel from KPTV, the latter station was struck on September 5.

At chief issue was the wages to be paid during a proposed two-year agreement. Settlement was finally reached and it was ratified by the employes of the three stations on September 13. The final wage settle-



LOCAL 49 MEMBERS AT THREE STATIONS INVOLVED IN STRIKE FOR NEW AGREEMENTS

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ment was for a \$6 per week increase for 1957-58 and \$5 per week for the 1958-59 term; the 1956-57 basic wage was \$120 per week, for technicians.

TOP: Jack Glover and Gordon Mason at the main entrance of KOIN-TV.

ABOVE: Clifford Yates and Lloyd Dillon at the back entrance of KOIN-TV.

LEFT: Keith Lawless and Larid Wise picket at Broadcast House, KGW-TV.

BOTTOM: Bob Leach and Bob Spencer maintain the line at KPTV.



LOCAL UNIONS Having Broadcast Technician Members

As of October 1, 1957

	Local and City	Officer (Business Manager Unless Noted), Address and Telephone
$\begin{array}{c} 12\\31\\45\end{array}$	Duluth, Minn.	Bernard C. Strand, 1903 Lakeview Ave., Pueblo, Colo. Phone: LI. 2-1417. Clyde J. Giles, 203 Labor Temple, Duluth 2, Minn. Phone: Randolph 2-2671. Andrew J. Draghi, 7265 Santa Monica Blvd., Hollywood 46, Calif. Phone: Holly- wood 3-2317.
49	Portland, Oreg.	Charles D. Hoffman, 1417 S. W. Third Ave., Portland 1, Oreg. Phone: Capitol 8-7683.
$\begin{array}{c} 65\\ 77\end{array}$	Butte, Mont	Albert Coombs, 225 South Dakota St., Butte, Mont. Phone: 8102. Henry M. Conover, 1718 Melrose Ave., Seattle 22, Wash. Phone: Capitol 4505.
108	Tampa, Fla	A. W. Schmidt, P. O. Box 905, Tampa 1, Fla. Phone: 2-1600.
108	Tampa, Fla.	Norman Day, Asst. B. M., 455 N. Lime Ave., Sarasota, Fla. Phone: Ringling 6-2729.
124	Kansas City, Mo.	N. L. Brosch, Asst. B. M., 118 South Gentry, Sedalia, Mo. Phone: Jefferson 7711.
$\frac{135}{202}$	La Crosse, Wis.	O. R. Neisius, 423 King St., La Crosse, Wis. Phone: 2-9337.
202	San Francisco, Calif.	Edward J. Bird, 2450 17th St., San Francisco 10, Calif. Phone: Market 1-7786. Gilbert de la Laing, 258 West Shaw Ave., Fresno, Calif. Phone: 7-3286.
226	Topeka, Kans.	John Erdman, Rm. 8, Labor Temple, 903 Western Ave., Topeka, Kans. Phone: 2-1761.
253	Birmingham, Ala.	Joseph S. Harmon, 1829 Woodland St., S. W., Birmingham, Ala. Phone: 6-2140.
$\frac{271}{292}$	Wienita, Kans.	W. W. Malcolm, 1040 South Broadway, Wichita, Kans. Phone: Amherst 7-8255.
$\frac{292}{347}$	Des Moines Jown	Joseph F. Krech, 243 Foshay Tower, Minneapolis, Minn. Phone: Federal 9-0091. Harold A. Baker, 1129 Sixth Ave., Des Moines 14, Iowa. Phone: Cherry 3-1924.
349	Miami, Fla.	William C. Johnson, 1657 N. W. 17th Ave., Miami 35, Fla. Phone: Newton 5-4546.
417	Coffeyville, Kans,	O. H. Vey, R. R. No. 3, Coffeyville, Kans. Phone: 3982-W-4.
437	Fall River, Mass.	George H. Cottell, 5 Anawan St., Fall River, Mass. Phone: OS. 4-2432.
449	Pocatello, Idaho	R. B. Cragun, P. O. Box 256, Pocatello, Idaho. Phone: 3132.
453	Springfield, Mo.	W. E. Glidewell, 4081/2 W. Walnut St., Springfield, Mo. Phone: 4-7252.
479	Beaumont, Tex.	Dana E. Wolfe, 1965 Park St., Beaumont, Tex. Phone: 4-8252.
$\begin{array}{c} 504 \\ 530 \end{array}$	Meadville, Pa.	Wm. Ferry, 887 ¹ / ₂ Water Street, Meadville, Pa. Phone: 4-0475.
624	Panama City. Fla	George F. Ham, 173 Wellington, Sarnia, Ont., Can. Phone: DI. 4-4154. A. C. Crawford, 105 East Fourth St., Panama City, Fla. Phone: Sunset 5-4761.
662	Chattanooga, Tenn.	John S. Andrews, 803 Underwood Ave., Dalton, Ga. Phone: Dalton 873.
676	Pensacola, Fla.	J. B. Boleware, Labor Temple, 114 East Gregory St., Pensacola, Fla. Phone: Hemlock 2-6978.
715		James A. Wilkerson, Pres., 5006 West Burleigh St., Milwaukee 10, Wis. Phone: Hilltop 5-1664.
768	Kalispell, Mont.	Arthur Baril, Room 9, Ford Bldg., Kalispell, Mont. Phone: 5232.
$\frac{816}{969}$	Chand Innotion Colo	Fred A. Hartle, Asst. B. M., 1025 Kentucky Ave., Paducah, Ky. Phone 2-0012.
$909 \\ 995$	Baton Rouge, La.	Norman R. Dean, 132 So. Fourth, Grand Junction, Colo. Phone: Chapel 2-3432. L. A. Thompson, 405 St. Ferdinand St., Baton Rouge 10, La. Phone: Dickens
1077	Receives I.	3-6350.
$\frac{1077}{1139}$	New Orleans La	Otis Carter, 715 Superior Ave., Bogalusa, La. Phone: RE. 5-5064. Donald M. Simmons, P. O. Box 4034, New Orleans, La.
1141	Oklahoma City, Okla.	Raymond G. Duke, 1141 N. W. 1st St., Oklahoma City 4, Okla. Phone: Regent 6-5449.
1173		.R. W. Caughey, 2303 Kensington St., Harrisburg, Pa. Phone: CE. 3-2812.
1193		George Magdich, 3566 Hollywood Drive, Decatur, Ga. Phone: Melrose 4-5977.
1212		 Charles A. Calame, 11 W. 42nd St., Suite 786, New York 36, N. Y. Phone: PA. 6-8216. Werk M. G. en 1409 West Cleak Charmenium III. Dhenes 6 (2015)
1213	Champaign, III.	Merle N. Sears, 1402 West Clark, Champaign, Ill. Phone: 6-6925. Leo H. Litt, P. O. Box 752, Bismarck, N. Dak.
$\frac{1214}{1215}$	Weshington D C	Frank X. Green, 10513 Bucknell Dr., Silver Spring, Md. Phone: Lockwood 5-1126.
1215	St. Louis, Mo.	. Ralph Barnett, 107 Slavin Building, 8000 Bonhomme Ave., Clayton 5, Mo. Phone: Volunteer 3-2060.
1218 1219 1220	Voungstown Ohio	. Richard L. McNutt, 24754 Winchester Dr., Dearborn, Mich. Phone: LO. 3-4093. Joseph Maxin, 357 Afton Ave., Youngstown 12, Ohio. Phone: ST. 8-7964. Marvin W. Balousek, Pres., 400 N. Michigan Ave., Room 514, Chicago 11, Ill. Phone: Superior 7-5244.
$\begin{array}{c} 1221 \\ 1223 \end{array}$	Portland Me	Murray G. Smith, Pres., Memphis, Nebr. Phone: Ashland 6112. T. V. Sale, Pres., P. O. Box 1643, Portland, Me.
$\begin{array}{c} 1224 \\ 1225 \end{array}$	Cincinnati, Ohio Indianapolis, Ind	J. Frank Atwood, Jr., 3297 Diehl Rd., Cincinnati 11, Ohio. Phone: Humbolt 1-6197. John K. Walters, Pres., 5430 Eastridge Dr., Indianapolis 19, Ind. Phone: Fleet- wood 6-8391.

	Local and City	Officer (Business Manager Unless Noted), Address and Telephone
1228	Boston, Mass	George T. Cairns, 236 Huntington Ave., Room 402, Boston 15, Mass. Phone: Copley 7-5221.
1229	Charlotte, N. C.	Bruce Fleming, P. O. Box 5194, Ardmore Station, Winston-Salem, N. C. Phone: Park 4-0403.
$1234 \\1240 \\1241 \\1257 \\1259 \\1260 \\1264 \\1266 \\1275$	Fargo, N. Dak. Philadelphia, Pa. Dallas, Tex. Kansas City, Mo. Honolulu, T. H. Mobile, Ala. Dayton, Ohio	 Sidney Tankersley, 2208 Weiler Blvd., Fort Worth 12, Tex. Gordon Nelson, Pres., 1409 12th St., Fargo, N. Dak. Phone: 2-7065. Ray Freedman, P. O. Box 97, Bala-Cynwyd, Pa. Phone: Greenwood 7-6931. Hudson Hammond, 1837 Piedmont, Irving, Tex. Phone: 3-6780. Walter L. Reed, 1017 Washington St., Kansas City 5, Mo. Phone: Baltimore 5054. Francis J. Kennedy, 2305 South Beretania, Honolulu 14, T. H. Phone: 9-3445. J. C. Burns, 2104 Hyland Court, Mobile, Ala. Phone: GR. 7-1831. James Carlton, Pres., 1915 Farmside, Dayton 10, Ohio. Phone: OL. 0913. Frank A. McKinna, Bus. Mgr., P. O. Box 5613, Crosstown Branch, Memphis, Tenn. Phone: 33-8520.
1281 1282	Providence, R. I Springfield, Mass	Henry Ferri, 29 Filmore St., Pawtucket, R. I. Phone: PA. 3-7576. Frank Guoin, Pres., Harkness Rd., Pelham RFD, Amherst, Mass. Phone: AL. 3-2459.
1286 1287 1292 1294 1295	Tulsa, Okla. Peoria, Ill. Hartford & Bridgeport, Conn.	Bernard Neher, Pres., 600 Seneca Ave., Louisville 9, Ky. Phone: Emerson 3-5648. Ray H. Bryant, Route 14, Box 369, Tulsa, Okla. Phone: FI. 5-4487. Robert Pratt, 1002 South 8th St., Pekin, Ill. Phone: 6-5722. William Canora, Pres., 21 Elm St., West Hartford, Conn. Phone: AD. 3-1605. Calvin J. Miller, Pres., 2080 Woodcliff Ave., S. E., Grand Rapids, Mich. Phone: Glendale 2-2755.
1299 1300	Montgomery, Ala Columbus, Ohio	J. C. Fischesser, Jr., P. O. Box 1782, Montgomery, Ala. Phone: 4-6762. Ralph D. Flint, 1427 Harrisburg Pike, Columbus 23, Ohio. Phone: Broadway, 4-8845.
1304 1318 1343 1348	Halifax, N. S., Can Trenton, N. J.	 4-8849. Cecil Morrow, 1809 S. Harrison St., Little Rock, Ark. Phone: Mohawk 6-8555. Carl E. Westhaver, Pres., 10 Tobin St., Halifax, N. S. Alonzo S. Fite, 2309 Brunswick Pike, Trenton 8, N. J. Phone: OW. 5-8515. James M. Matson, Pres., 420 West Lullwood, San Antonio 1, Tex. Phone: PE. 5-7808.
1349 1374	Rock Island, Ill Cedar Rapids, Iowa	John Bruggeman, 1520-44th St., Rock Island, Ill. M. A. Powlishta, Pres., 217 10th St., N. W., Cedar Rapids, Iowa. Phone: EM. 3-1307.
1400 1405 1415 1481 1564 1823	Flin Flon, Man., Can. Albany, N. Y. Pittsburgh, Pa. Gadsden, Ala	George A. Kroen, 8402 Charlton Rd., Randallstown, Md. Phone: Oldfield 3-8216. C. Harris, Pres., 2 Boundary Ave., Flin Flon, Man., Can. Phone: 4149. Joseph Sigwarth, 17 Mary Hodge Dr., Schenectady, N. Y. Phone: Union 9-7540. Rocco Catalfamo, 115 Holly Hill Dr., Pittsburgh 9, Pa. Phone: Forest 4-1157. James E. Weatherbee, P. O. Box 2, Gadsden, Ala. Phone: 6-6408. Dennis L. Thuis, 901 E. 17th Ave., Denver 18, Colo. Phone: TA. 5-1311.

INTERNATIONAL REPRESENTATIVES ... Assigned to Radio and Television Broadcasting and Recording Activities

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District 3Russell D. Lighty, R. F. D., Lafayette, N. J. Phone: Newton, N. J., 1521.
District 4W. A. Smith, % Local Union 1377, 3043 Superior Ave., N. E., Cleveland 14, Ohio.
Phone: Superior 1-6469.
District 5O. E. Johnson, 757 Vines Ave., Fairfield, Ala. Phone: State 6-0618.
District 6Freeman L. Hurd, 4424 No. Kimball Ave., Chicago 6, Ill. Phone: Keystone 9-3998.
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BUY UNION LABEL PRODUCTS-YOUR ASSURANCE OF QUALITY

pocket.

Ever wonder where to look for the union label?

Here are some spots:

Neckties-small end.

Gloves-inside upper edge.

Suits-inside right breast pocket.

Overcoats and topcoats-lining of inside pocket.

Trousers-inside right back pocket.

Shirts-bottom of front tail.

Work shirts—bottom of front tail. Work pants—inside right front pocket. Overalls—right hip pocket. Heavy outerwear, rainwear, sportswear—lower pocket. Men's and boys' trousers, pants, slacks, knickers, knee pants, riding breeches—inside right hip

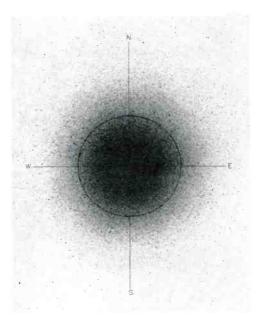


Diagram illustrating how a given minimum grade of service might be distributed around a television transmitter under average conditions. In black areas the field strength exceeds the prescribed level; in white areas it falls short of this value. The circle illustrates how a single contour is used in the current method to represent service. This tends to ignore large areas outside the contour that have the required field strength, and includes areas within the contour that do not. The actual service area would be the sum of all black areas. The method developed by the National Bureau of Standards for measuring service areas is believed to overcome this difficulty; it also provides additional advantages.

NEW method of measuring the service provided by a television broadcast station has been devised at the Boulder Laboratories of the National Bureau of Standards. This method involves an area concept of service rather than the contour concept presently being used. In current practice, television service is defined in terms of the contours for two grades of service, grades A and B. This definition presents two difficulties. First, the contour does not adequately express service because it includes within it many locations that receive less than the specified grade of service and ignores large areas outside the contour that have the specified grade or better. Second, the experimental determination of where the contours lie is very difficult to accomplish adequately.

A more proper definition of service was first

BUREAU OF STANDARDS REPORT

Measurement of Service Area for TV Broadcasting

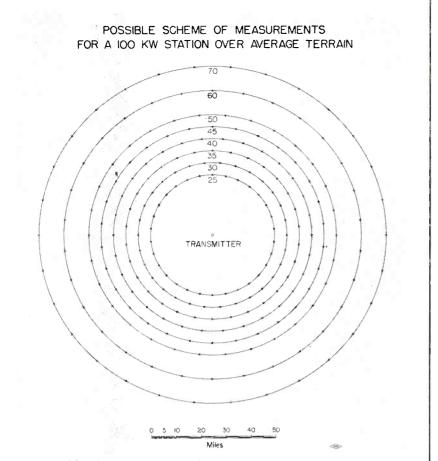
proposed by Norton and Gainen¹ in 1951. This definition expresses the service in terms of the total area which receives service in various grades. The grades of service are related to the signal levels, or more properly to the signal-to-noise ratios. Grade I service would represent the cases where the signal is sufficiently high to override thermal and man-made noise levels; Grade II would represent a lower signal-to-noise ratio where perhaps noise is somewhat noticeable; and Grade III the case where the signal-to-noise level is low and a considerable amount of noise appears at reception.

Because of terrain roughness, including trees, buildings, etc., the distribution of the actual areas is not uniform. It is entirely possible for one dwelling to receive Grade I service while nextdoor neighbors receive Grade II or even Grade III service. Within roughly 50 miles of the transmitter, time variations are relatively unimportant; but as the distance increases, tropospheric effects become more imporant. An expression of the time available must be included in the definition of service.

Current practice in measuring the contours of service involves recorder-tape measurements of field strength. These measurements are made in moving vehicles while driving down roads along eight or more radials from the transmitter. From these measurements the contours where 50 per cent of the locations receive the specified grade of service for 50 per cent of the time are estimated and joined together in the form of a service contour.

Aside from the fact that the contours do not give a very useful representation of service, there

¹ A study of the geographical distribution of population on the coverage obtainable from a national television system, by K. A. Norton and L. Gainen, a working document of the Federal Communications Commission Ad Hoc Committee for the Evaluation of the Radio Propagation Factors Concerning the Television and Frequency Modulation Broadcasting Services in the Frequency Range Between 50 and 250 Mc, October 17, 1950.



One possible plan for sampling the field intensity distribution of a 100 KW television station over average terrain, according to a method worked out by the National Bureau of Standards. In this case, a total of 240 measurements would be made, consisting of 30 discreet observations on each of 8 circles with radii from 25 to 70 miles respectively.

are many difficulties in taking measurements in this manner. First of all, it is impossible to obtain very much of this type of data using the proper height of antenna, namely, thirty feet. Most such measurements are made at ten feet and referred to the thirty-foot reference height by application of a linear height-gain function. Secondly, the routes followed usually do not represent the area very well since (1) roads tend to follow lower levels in rough terrain, (2) they are frequently built up a few feet above surrounding terrain and (3) they are congested with wires and other objects which modify the results. Time and space variations cannot be separated in mobile measurements.

A method of measurement that will lead to an efficient estimate of the areas of service is proposed by the National Bureau of Standards to replace the old method. In this method sample measurements are taken at fixed locations around the transmitter. These locations are established in a systematic manner so that all terrain types are equally likely and the data represent a random sample from the area. In most cases the measurements consist of a single observation of field strength except when time variations are involved. In these instances they represent a short recording of field strength from which the distribution with time can be estimated. A sample set of observations would be taken at a constant radius with sufficient separation to eliminate serial correlation between successive observations. The distribution obtained can be used to estimate the percentage of locations at that distance which receives service in the several grades. By joining together several such estimates made at different distances, an estimate can then be made of the total area around the transmitter for each grade of service.

Some of the advantages of this method over mobile measurements are as follows:

1. Much better estimates of the population perimeters are obtained.

2. Proper account is taken of the statistical nature of the received field, in particular, serial correlation.

3. The measurements can easily be obtained at a height of 30 feet and at locations more typical of potential receiver locations.

4. Time variations can be measured separately from space variations.

5. The analysis is facilitated by the elimination of long recorder tapes. All of the scaling and some of the analysis can be done in the field. In most cases the tabulation consists of writing down a single value read directly from the instrument, and in others it involves at most the determination of the distribution with time from a relatively short observation. The tabulated values then might be, for example, the field strength exceeded 99, 90, and 50 per cent of the time.

6. The measurements are more suitable for technical study and analysis and are repeatable in the sense that repetitive sampling from the same parent population gives estimates where dispersion is expressed by a confidence interval.

7. Additional studies can easily be incorporated into the measurements. Such studies might include cross-polarization effects; direction of arrival measurements, path antenna gain, and many others.

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October, 1957

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READING TIME

Issues and Standards for Judging Disputes

BNA Publishes Two Books On Arbitration

THANKS to the National Academy of Arbitrators a great deal of information on arbitrational procedures, codes of ethics and procedural standards has now been published. "The Profession of Labor Arbitration" is a book comprised of selected papers from the first seven annual meetings of the NAA (1948-1954). This book should lead to better understanding and appreciation of the position of arbitrators, their functions and something of their processes of making determinations.

Although these are papers delivered some time ago-and only now published-there is much substance to them; age has not dimmed their significance. Chapter I is entitled "The Future of Labor Arbitration-A Challenge" and is the text of an address by Professor Edwin E. Witte, chairman of the Department of Economics at the University of Wisconsin. In particular, the history of arbitration which he recounts should be of interest to our readers. It is also interesting that the editor of this volume quotes Professor Witte, in the preface to the book, as saying that the National Academy of Arbitrators "has great potentialities in the sound formulation and general acceptance of professional standards for arbitrators." The editor goes on, to conclude, that "to what extent the Academy has, after a decade, fulfilled this promise must be left to the reader to decide."

In 1954, the Academy heard an address by Professor Archibald Cox of the Harvard Law School, the title of which was "Current Developments in Labor Law and Legislation." Presented as Chapter VII, this address is extremely worthwhile reading.

In the form of appendices to this volume are "Standards of Conduct for Labor Arbitrators," "Codes of Ethics and Procedural Standards," a "Report of the Committee on Ethics" (1953); a "Report of the Committee on Research and Education" (1950) and a further report of the latter committee entitled "Survey of the Arbitration Profession in 1952."

This 182-page volume (excluding the index) is published by the Bureau of National Affairs, Inc., Washington, D. C., and is priced at \$4.50 per copy. Together with "Critical Issues in Labor Arbitration," which sells for \$5.50, the two volumes may be purchased from BNA for \$9.

In a sense, the "companion volume" in this

series is a more practical book—as opposed to the philosophic or academic. Chapter I is "The Arbitration of Discharge Cases: A Case Study." Statistics lace this chapter; at least, they are interesting—whether significant is another matter. In a discussion of the material, which follows it, the statement is made that "there is a fatal seductiveness about statistical compilations—a cozy invitation to indulge in broad generalization—that has proven to be the downfall of many an investigator."

Chapter II of this book consists of a survey and discussion of the subject "What Happens After Reinstatement." Again, this may be a subject of only academic interest—in terms of the statistics presented—but this subject lends emphasis to the statement of the late Herbert Syme: "Labor Arbitration is one of the great examples of American Voluntarism."

The entire 208 pages of this volume should be informative reading—for laymen, union officers —and even arbitrators. The last four pages of the book consist of the Constitution and Bylaws of the National Academy of Arbitrators; appropriately, in the reviewer's opinion, putting the Academy in perspective.

Former FCC Chairman Wayne Coy Dies at 53

Wayne Coy, 53, broadcaster and former chairman of the FCC, died of a cerebral hemorrhage September 24 while attending a reception at the Indianapolis, Ind., Athletic Club.

Since his resignation from the FCC chairmanship in February 1952, Mr. Coy had been connected with Time, Inc. broadcasting enterprises. In May 1952 he bought KOB-AM-TV, Albuquerque, N. Mex., with Time, Inc., becoming president and general manager of the property. He moved to his native Indiana last spring when TLF Broadcasters, Inc. bought the Consolidated-Bitner radio-TV properties in a \$15.7 million transaction. This brought WFBM-AM-TV, Indianapolis, into the Time organization, along with WOOD-AM-TV, Grand Rapids, Mich., and WTCN-AM-TV, Minneapolis. All of these stations are manned by IBEW members.



Call of the Wild

James Ross, California film technician, has developed a communications system called "Canine Command" to cue dogs which appear in films. Using a tiny transistor receiver, built into the dog's collar and a miniature button placed directly behind the canine's ear, Frank Barnes, trainer of Rin Tin Tin, was able to give commands to his animal star from a distance by speaking through a tiny mike and transmitter. Screen Gems outfitted Rin Tin Tin with the gadget during shooting of a TV sequence and now reports that it cuts rehearsal time in half.

The tiny apparatus could have great potentials for mothers who have to scout the neighborhood for youngsters or lion trainers who want to remove their heads from Leo's mouth.

For the Aficionado

Before Manolete met his death in the bull ring, on a recent "Playhouse 90," the Director and his crew passed through one of TV's most complicated patterns of production. There were cues for 110 film inserts, a few more than 1,000 different camera shots involving seven cameras and there were 45 members of the technical crew. An interesting sidelight was that three men operated the mechanical bull. (That's a lot of bull?)

Wide-Tuning Klystron

Varian Associates of Palo Alto, Calif., announces a revolutionary, new wide-tuning-range klystron amplifier tube with internal resonant cavity circuits capable of tuning from 1700 to 2400 megacycles. The VA-800 klystron is one of a line of high-power, high-gain, low-noise CW power tubes delivering 10kW and 1kW of power for tropospheric communication service in the frequency range from 375 Mc to 8500 Mc.

Uniquely, the only rf connections to the Varian VA-800 are an input line with less than one watt of drive power and an output line to carry 10,000 watts of rf power to the antenna. All resonant

circuits are an internal part of the tube and can be tuned readily to any spot in the 1700 to 2400 Mc band. No other physical adjustments are required for the tube to operate at optimum performance at all times. The only electrical requirements are supplies for the cathode, beam voltage, and the beam focusing magnet. Because these are not critical, no warm-up adjustment periods are necessary.

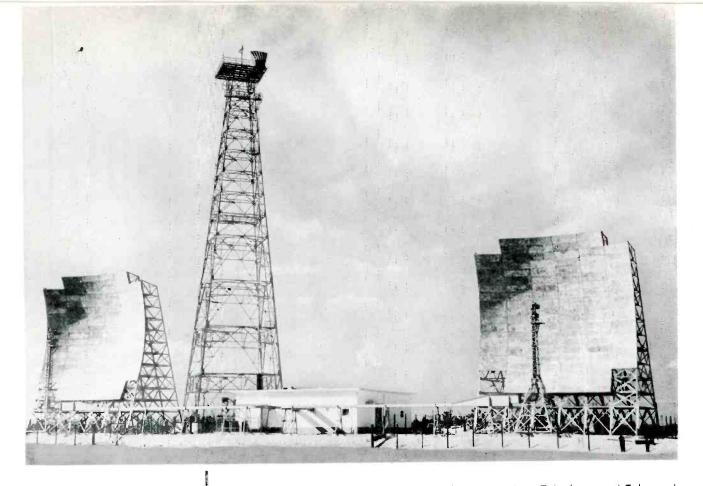
The resulting freedom from physical, electrical, and vital maintenance adjustments removes the possibilities for misadjustment, eases systems maintenance, and helps provide the simplicity required for reliability and low cost operation.

These high power amplifier klystrons provide bandwidths sufficient for hundreds of telephone and teletype channels, or one or two television channels and are used in over-the-horizon forward scatter communication circuits, many of which provide vital communications in remote and inaccessible areas.



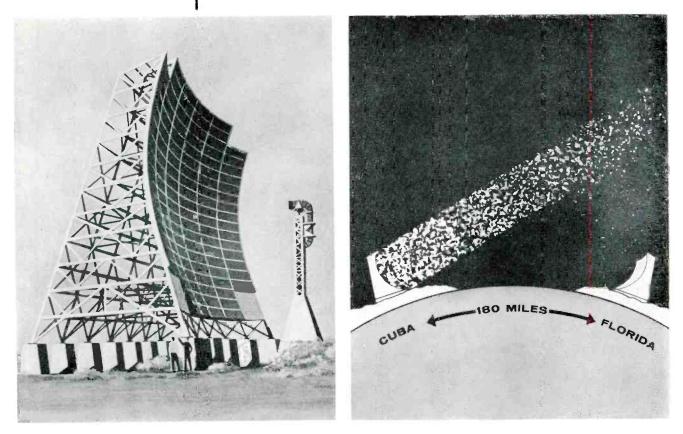
The VA-800 klystron produced by Varian Associates. Its only rf connections are an input line of less than one watt drive power and an output line to carry 10,000 watts of rf power to the antenna.

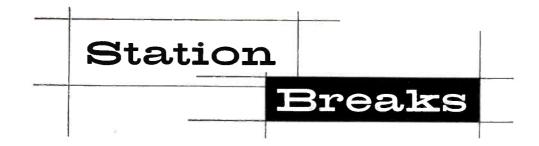
October, 1957



New Link to Cuba

By ricocheting signals off the troposphere, American Telephone and Telegraph and the Radio Corporation of Cuba are now beaming television and telephone conversations over 180 miles of water between Guanabo, Cuba, and Florida City, Fla. Square 60-foot reflectors, shown above and below, transmit and receive the signals in the new \$3-million system. High signal reliability and freedom from interference are attained although only part of the signal is received.





KRON-TV Uninterrupted

KRON-TV, San Francisco, a station which employs Local 202 technicians, installed an emergency generator in January, 1953. The expensive unit has been used only $111/_2$ hours in the past four and a half years of station operation, but technicians at the station agree it's worth its cost in emergencies.

Two power failures blacked out sections of the Golden Gate City last spring, and KRON-TV was the only Bay Area station which could stay on the air. On May 4, when an airplane tore into electric power lines in Niles Canyon and blacked out sections of the city about 25 minutes, and on June 18, when an insulator failure cut off power about 20 minutes, station technicians were able to switch quickly to the emergency generator.

Agreeing that the cost of its generator per kilowatt hour is a little high (\$4.82 per kw hour), the station management feels the public service it ensures is worth the extra cost.

KSD, **KSD-TV** Interrupted

KSD and KSD-TV employes, respecting a picket line set up by Local Union No. 1 at the *St. Louis Post-Dispatch* Building, were indirectly involved in the strike of maintenance electricians for a new agreement. The strike took place on Saturday morning, September 7, and ended when agreement was reached early the following day.

KSD-TV returned to the air shortly before 7:00 p. m. on Sunday, after being silent since Saturday morning. KSD, however, resumed operation from its transmitter and lost only three and onehalf hours of air time. Although a second newspaper was involved in the electricians' strike, no problem was encountered there similar to that at the *Post-Dispatch*; the *St. Louis Globe-Democrat* has only a minority ownership interest in KWK and KWK-TV.

The dispute primarily involved wages—an overall increase as well as differentials for second and third shifts. Agreement was finally reached on a new basic scale of \$137.20 for day shift work, \$141.20 for the first night shift and \$143.20 for the second night shift, during the first year of the two-year agreement. During the second year, all the scales will be increased by \$4.80 per week. These scales are based upon a 40-hour workweek.

The mechanical, news and business department employes also observed the picket lines at the newspapers. The *Post-Dispatch* distributed those parts of its Sunday editions which had been printed prior to the commencement of the dispute, as did the *Globe-Democrat*. In an effort to fill the gap, the *Southeast Missourian* of Cape Girardeau published a Sunday edition for the first time in its 53-year history. The *East St. Louis* (Illinois) *Journal* published extra copies of its regular Sunday edition.



KCBS General Manager Untermeyer, Jane Todd, S & C Motors Executive Schlesinger, and Local 202 Member Williams.

KCBS Remote Truck

A preview of many remote broadcasts to come from KCBS's F-100 Ford panel remote truck was enacted in San Francisco recently when winsome Jane Todd, KCBS woman's commentator, interviewed KCBS General Manager Henry Untermeyer, (left) and S & C Motors Executive Albert Schlesinger, while KCBS Engineer Mel Williams handled the broadcast.

October, **1957**

The 1957 Ford will be a mobile radio station for news and program use for KCBS. Plans call for 2-way ultra-hi frequency telephone equipment for communication and program transmission, full tape and recording equipment, and remote program pickup equipment in the truck.

A Leece-Nevell alternator generator will deliver a 60-amp. charge to a 12-volt battery enabling KCBS engineers to broadcast from the truck with the motor idling.

Every suitable accessory is installed on the F-100, including air cleaner, arm rests, chrome bumper, directional turn signals, heater and defroster, rear-view mirror, oil filter, padded imstrument panel and sun visors, custom panel, radiator grille guard, heavy-duty radiator, white sidewall tires, radio, safety seat belts, spotlights, dual taillight, tinted glass and Fordomatic.

There's a Ford in KCBS's future!

—Bill Cullenward, KCBS.

Truman Library Pickup

The full ABC-TV net carried a pool-origination broadcast of the dedication ceremonies for the Truman Library at Independence, Mo., July 6. KCMO-TV of Kansas City, a station employing members of Local 1259, handled the local coverage, using five cameras, 12 technicians, a five-man production crew, and three stagehands. It was the longest feed to date for the enterprising Mid-West station.

Providence Change

A radio station in Providence, Rhode Island, which has an agreement with Local 1281, changed hands recently. WHIM was sold by Frank W. Miller, Jr., to Richard D. Buckley and John B. Jaeger, the chief executive officers of WNEW, New York, for \$830,000. Miller bought the 1 kw daytimer two years ago for \$469,000.

Mexican Visitors

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ANGELES

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A group of five union leaders of the Mexican Musicians Union were in this country recently for a three-months' study of trade union organization and labor-management relations. They came here under the auspices of the International Cooperation Administration.

As part of the schedule, the group spent one day conferring and visiting with officers of Local 1212 in New York City.

Are you receiving your TECHNICIAN-ENGINEER regularly and at the right address? Following the distribution of each issue of the Division magazine, the General Headquarters in Washington receives dozens of returned copies marked "Moved, No Forwarding Address," "Incorrect Address," etc. The office staff is now reviewing the complete mailing list in an effort to bring it completely up to date. If you have a new address, or if you are not already receiving the TECHNICIAN-ENGINEER, out out the coupon below and mail it to us THIS WEEK.

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