

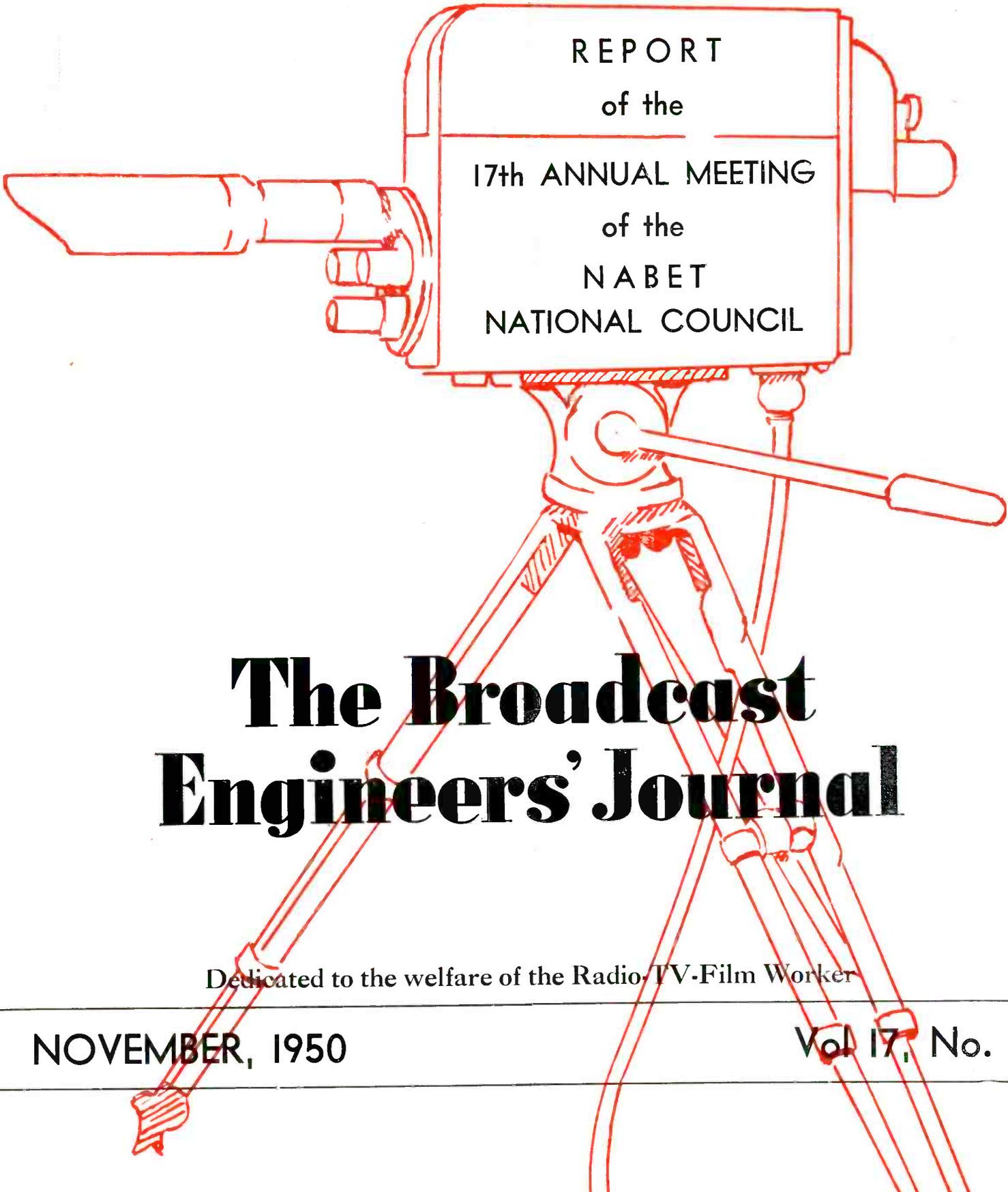
CAST ENGINEERS' JOURNAL  
Stolzenberger, Editor  
Richmond Hill 18, N. Y.

If undelivered for any reason,  
stating reason, on form 3547,  
for which is guaranteed.

F A GENRES WGBF-WEOA  
2232 E POWELL  
EVANSVILLE 14 IND  
8151

New York  
Permit No.

OFFICIAL PUBLICATION OF THE NATIONAL ASSOCIATION OF BROADCAST ENGINEERS AND TECHNICIANS



REPORT  
of the  
17th ANNUAL MEETING  
of the  
NABET  
NATIONAL COUNCIL

# The Broadcast Engineers' Journal

Dedicated to the welfare of the Radio-TV-Film Worker

NOVEMBER, 1950

Vol 17, No. 11

# ADVANCE

to better recordings with

# ADVANCE

## RECORDING BLANKS



**Advance**  
Recording Products Company  
35-12 34th STREET • Stillwell 4-7837 • LONG ISLAND CITY, N. Y.

**All you want . . .**

**Available for immediate delivery**

# THE BROADCAST ENGINEERS' JOURNAL

ED. STOLZENBERGER, EDITOR AND BUSINESS MGR.

Editorial, Advertising and Circulation Offices:  
116-03 91st Avenue, Richmond Hill 18, N. Y.  
Telephone: Virginia 9-5553

Volume 17, No. 11  135 November, 1950

Contents copyright, 1950, by NABET Publications

## TABLE OF CONTENTS

	PAGE
NABET President McDonnell's Message	2
Executive Secretary George Maher's Statement	2
The 17th Annual Meeting of the NABET National Council	3
Report of the Ass'n of Documentary and Television Film Cameramen to the NABET National Council	8
Introducing Mr. Timothy J. O'Sullivan, NABET National Representative	10
St. Lawrence News	10
Metro-New York Progress	11
Chicago News	13
G. E. Electronic Color Television Progress	14
"Horizons Unlimited for TV"	15
Industry News: Radio-TV-Film-Recording	16
Labor-Management News	18

## THE BROADCAST ENGINEERS' JOURNAL

OFFICIAL PUBLICATION OF THE N. A. B. E. T.

Trustees: Chairman of the Board, H. L. Byers; NABET Pres. J. R. McDonnell, DeWitt C. Shultis, R. W. Bauer, A. Poppele.

Secretary-Treasurer ..... GEORGE MAHER

### ASSOCIATE EDITORS

Chicago	CHARLES RILEY and DICK DAVIS
Cleveland	EARL HOLL
Detroit	WALT BAKER
Dixie	SAM SAMBATARO
Hollywood	JOHN T. BAXTER
Mohawk	JOHN F. McMAHON
Metropolitan New York	TED KRUSE
Omaha	LLOYD LATTA
Philadelphia	R. J. WILKE
Pittsburgh	FRANK E. HENRY
Rochester, N. Y.	B. HOLLY
Rocky Mountain	GEORGE SOLLENBERGER
San Francisco	M. A. DWYER
St. Lawrence, N. Y.	ALEEN A. CORBIN
Syracuse, N. Y.	R. W. ARDNER
Washington	A. T. POWLEY

The Broadcast Engineers' Journal is a privately printed monthly publication issued by NABET Publications. Address all communications to Publication office: E. Stolzenberger, 116-03 91st Avenue, Richmond Hill 18, L. I., N. Y. Telephone Virginia 9-5553.

Advertising rates and information supplied on request. Subscription, \$2.50 per year; \$4.00 for two years. Single copies, except Christmas Yearbook, 35c; Christmas Yearbook, \$1.00. All remittances in advance. Foreign: add postage. Back copies 50c, back Yearbooks, \$2.00.

Nothing appearing in The Broadcast Engineers' Journal shall be construed to be an expression of The Broadcast Engineers' Journal or the National Association of Broadcast Engineers and Technicians, but must be construed as an individual expression of the author or authors.

**NABET NATIONAL OFFICE**  
Room 543, 80 E. Jackson Blvd., Chicago 4, Ill. Tel. Wabash 2-2462  
George Maher, Executive Secretary

## National Association of Broadcast Engineers and Technicians

DEDICATED  
to the  
WELFARE-SECURITY  
PRESTIGE  
of the  
RADIO-TV-FILM  
WORKER

Contact any of the following officers for further information:

**J. R. McDonnell, Pres.**  
375 O'Farrell St., Room 101  
San Francisco 2, Calif.  
Ordway 3-8484

**Geo. Maher, Executive Secy.**  
80 E. Jackson Blvd., Rm. 543  
Chicago 4, Illinois  
Wabash 2-2462

**C. L. Gorsuch, Nat'l Rep.**  
48 West 48 St., Rm. 407  
New York 19, N. Y.  
Plaza 7-3065 - 3066

**ADTEC Section**  
Patricia F. Lewis, Bus. Agent  
48 West 48 St., Rm. 407  
New York 19, N. Y.  
JUdson 2-5171

**James H. Brown, Nat'l Rep.**  
6223 Selma Ave., Rm. 109  
Hollywood 28, Calif.  
Hillside 9311

### Chapter Chairmen

**Chicago:**  
George W. Smith  
6434 S. Francisco Ave.  
Chicago 29, Ill.

**Cleveland:**  
Harold V. Brandt  
R. D. No. 2  
Brunswick, Ohio

**Detroit:**  
David B. Stewart  
1160 Seward St.  
Detroit 2, Mich.

**Dixie:**  
J. Willard Dean  
22 Shepherd St.  
Raleigh, N. Car.

**Hollywood:**  
Ben M. Doty  
3330 Charleston Way  
Hollywood 28, Calif.

**Metropolitan New York:**  
Ed. Stolzenberger  
116-03 - 91 Avenue  
Richmond Hill 18, N. Y.

P. H. Boucheron, Jr.  
67 Hillturn Lane  
Roslyn Heights, N. Y.

R. W. Bauer  
1436 Lexington Ave.,  
New York 28, N. Y.

**Mohawk:**  
D. C. Wilson—Apt. 43  
Schopman Drive  
Schenectady 3, N. Y.

**Omaha:**  
D. Roy Glanton  
5500 Kansas Ave. Rt. 2  
Omaha 12, Nebraska

**Philadelphia:**  
H. S. Bates  
3346 Decatur St.  
Philadelphia 36, Pa.

**Pittsburgh:**  
W. C. Stuchell  
247 Cornell Ave.  
Pittsburgh 29, Pa.

**Rochester:**  
Edward Lynch, Vice-Pres.  
109 Wolcott Ave.  
Rochester 11, N. Y.

**Rocky Mountain:**  
Aubrey F. Blake  
2901 Eaton Street  
Denver 14, Colorado

**San Francisco:**  
S. A. Melnico  
1751 38 Avenue  
San Francisco 22, Calif.

**St. Lawrence:**  
David H. Lane  
119 Maple St.  
Black River, N. Y.

**Syracuse:**  
R. W. Ardner  
1224 Bellvue Ave.  
Syracuse, N. Y.

**Washington:**  
Paul J. Malik  
1545 Key Blvd.  
Arlington, Va.

### Section Chairmen

**Atlanta:**  
H. C. Hanson  
2836 Tupelo St. S.E.  
Atlanta, Ga.

**Blghampton:**  
V. Homer  
32 Camden St.  
Johnson City, N. Y.

**Connecticut Valley:**  
A. T. Sagan  
52 Orchard St.  
Chicopee, Mass.

**Elmira:**  
L. C. Hartman  
422 Fulton St.  
Elmira, N. Y.

**Fairmount:**  
D. W. Gruitt  
Box 32,  
Monongah, W. Va.

**Kingston:**  
J. G. McNelis  
304 Greenkill Ave.  
Kingston, N. Y.

**Louisville:**  
K. B. Smith  
409 E. Oak St.  
Louisville 3, Ky.

**Mid-Hudson:**  
Robert Masterson  
6 Bush Avenue  
Newburgh, N. Y.

**Richmond:**  
Elmore Taggart  
2010 Seddon Rd.,  
Richmond 22, Va.

**San Diego:**  
J. A. Kemp  
1576 Acheson  
San Diego 11, Calif.



## A Message to the Members of NABET

from

JOHN R. McDONNELL  
President, NABET

At this writing the Annual Nabet National Council has adjourned after one of the most successful meetings in the history of the organization. The Councilmen approached the sessions with an attitude of cooperation, with the sincere intent of arriving at a full understanding of the Union's problems and determining a course for the ensuing year. It was agreed unanimously by the Council that NABET is in a stronger, sounder position than it has been for some time.

An innovation in basic NABET structure was the adoption of a divisional, or regional, plan along the lines recommended jointly by NABET Affiliation Committee and the IBEW Radio Advisory Committee. The transition to the Regional setup will be gradual and with a minimum of disturbance to the normal operations of the Union. One immediate benefit was the determination of the Council to authorize additional National Representatives to the end that each Region shall have a Full-time Officer to implement NABET's organizational aims. One of the new National Representatives has already been appointed and has been ratified by the Council and as further additional appointments fill out the roster, offices will be set up in the newly established Regions. We are building a stronger Union.

The work of the Affiliation Committee was unanimously praised, and it was decided to continue the Committee as a valuable asset in evaluating this important subject.

The Full-time Officers were congratulated by the Council on their performance this past year. Their unstinting efforts are responsible in large part for the economic gains we have achieved, and the upsurge in NABET membership.

The Council revised the By-Laws so as to make possible National billing and collection of dues (at Chapter option). This should relieve the local Treasurers of a considerable burden of detail work. Additionally, a simplified table was adopted which will minimize the effort of computing dues, and incidentally provide a small amount of added revenue to the National Treasury.

Not the least of the benefits derived from the meeting was the opportunity for the National Councilmen to get acquainted with each other and gain inspiration from the awareness of common problems and common goals.

Finally, it was personally gratifying to receive the warm assurance and the outspoken appreciation of the elected representatives of NABET. In acknowledging the responsibility implied by accepting re-election to another three-year term as President I would like to urge each member of the Union



George Maher

NABET

Executive

Secretary

Of special interest to the NABET membership are the numerous accomplishments of the 17th Annual Meeting of the National Council which has just been concluded in Chicago. A more detailed commentary on these accomplishments appears elsewhere in this issue of the *Broadcast Engineers' Journal*.

Without reservation, the membership can be assured that the National Council has met and dealt with their problems in a business-like and most realistic manner. Steps have been taken to insure a more efficient operation of the Union and at the same time, provide for a program of expanded service to the membership.

The most vexatious problem facing NABET has been that concerned with organization, negotiation, and service to the membership. We have been handicapped by a lack of adequate personnel required for a proper performance in this direction. Therefore, I am most pleased that the National Council has authorized the hiring of additional personnel whose efforts will be devoted to the solution of this particular problem.

It is a pleasure to announce that Mr. Tim O'Sullivan has been engaged as a National Representative and is presently breaking into the operation in the Chicago office. Under the new regional plan referred to in President McDonnell's column, it is expected that two more National Representatives will be appointed shortly after January 1st, and at that time, NABET will be infinitely better equipped to effectively deal with any problem with which we may be faced.

I am very happy to report that by January 1st, 1951, NABET will have 2,500 members, and we of the National Office have set a goal of 3,000 members by the end of 1951.

With pardonable pride we feel that NABET is in the soundest position, both financially and administratively, than at any time since its inception, and we again pledge our every effort to the end that we shall continue to be an effective instrument in behalf of all radio and television workers.

GEORGE MAHER,  
*Executive Secretary.*

to join me in the determination that we shall pursue with renewed vigor the aims and goals of our Union to the end that NABET shall be unquestionably the outstanding Union in the Broadcasting and Television Industry.

JOHN R. McDONNELL, *President, NABET.*

# The 17th Annual Meeting of The N. A. B. E. T. National Council

EDGEWATER BEACH HOTEL — CHICAGO—OCTOBER 11, 12, 13, 1950

The Seventeenth meeting of the NABET National Council concluded at 8 p.m., Friday, October 13, 1950, at the Edgewater Beach Hotel, Chicago.

The NABET National Executive Board met for a three-day session and functioned in effect as an overall steering com-

mittee. Major item developed for presentation to the National Council, was the regional or divisional administrative setup, the basic concept of which was developed originally by the joint NABET-IBEW Radio Advisory Committee, which met in Washington in November, 1949. The NABET Constitu-



The National Council in session. Note the map of the United States. NABET has embarked upon a regional or divisional administrative and organizational setup. First and immediate result after enactment of Constitutional Amendments, will assure equitable representation on the National Executive Board from all sections of the country. Standing to left of map is President McDonnell. Standing to right of map, Executive Secretary George Maher. Seated around table, from left to right, Chairman Blake of Rocky Mountain, Lane of St. Lawrence, Melnico of San Francisco, Ardner of Syracuse, Malik of Washington, West Coast National Representative Jim Brown, court stenographer Miss Smith, Vice President Ed Lynch of Rochester, ADTFC Business Agent Miss Patricia F. Lewis, Ehrhardt of Buffalo, Geo. Smith of Chicago, Brandt of Cleveland, Dave Stewart of Detroit, Dean of Dixie. Standing, left to right around table, Chairmen: Wilson of Mohawk, National Representative Cliff Gorsuch, Glanton of Omaha, Stuchell of Pittsburgh, Bates of Philadelphia, President McDonnell, Executive Secretary George Maher, Ed Stolzenberger of Metro-New York, Rudy Bauer of Metro-New York, Ben Doty of Hollywood, Boucheron of Metro-New York.



NABET's National Executive Board. Seated, Dave B. Stewart of Detroit, and President John R. McDonnell. Standing, Ed. Stolzenberger of New York, Ed Lynch of Rochester, and George Smith of Chicago.

  
**NABET**  
**NATIONAL**  
**EXECUTIVE**  
**BOARD**

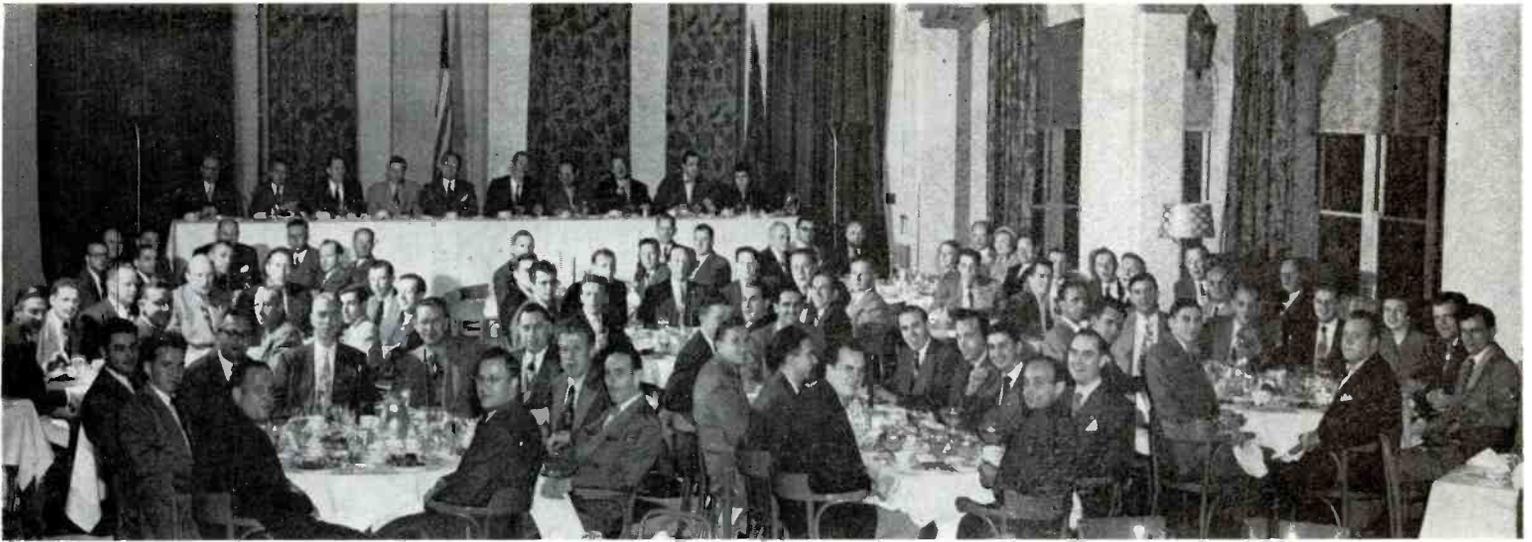


  
**NABET**  
**FULL-TIME**  
**STAFF**



NABET's present full-time staff. Standing, Executive Secretary George Maher, and National Representatives Cliff Gorsuch and Jim Brown. Seated, Miss Patricia F. Lewis, Business Agent for the ADTFC section. See separate item introducing NABET's latest addition to its full-time staff, National Representative Tim O'Sullivan.





The official dinner tendered to the National Council by the Chicago Chapter was held at the Edgewater Beach Hotel, Chicago. The speeches were kept to a minimum, and many old friendships were renewed.

amalgamation, NABET thus becomes an important factor in the overall industry.

The National Council had high praise for NABET's *Broadcast Engineers' Journal*, and commended the work of the Editor and the Board of Trustees. The National Executive Board appointed the following new Board of Trustees: President J. R. McDonnell, Harry Byers, R. W. Bauer, D. C. Shultis, and Arthur Poppele. The President stated that all Chapters would do an outstanding job for NABET's Yearbook, and that the Journal will play an increasingly important part in propagating NABET in the industry.

The National Council made revisions in the National dues formula, which will become effective with the 1st quarter 1951

dues. Essentially, two of every three steps on the approximately 50-step dues escalator were eliminated. Whereas for example, IBEW 1212 in New York has two steps (\$15 and \$22.50 per quarter) NABET has now reduced its dues escalator from approximately 50 to 17 steps; along with the reduction of the escalator and incidental to it, dues are very slightly higher, depending upon the individual step selected for comparison.

More importantly in connection with National dues collection, was the adoption of a mail-order "from warehouse-to-customer" approach to the problem. Effective January 1, 1951, each member will receive directly from the Chicago National Office, a bill for dues due. The notice will state the amount due, to whom to make your check payable, and where to mail it. Likewise, the member's dues card receipt will come directly from the Chicago office, to the local office for withholding if the individual is otherwise in arrears in local dues, fines, assessments, etc., and for notation on the member's office file card, the fact that the National Office acknowledges receipt of payment. The pre-stamped and addressed dues card is then dropped in the mail to the member. The National Council affirmed NABET's policy of attempting to secure dues check-off in all contracts, and as this is negotiated, the dues collection procedure will be further simplified. In the field of Initiation fees, the total fee has been increased to \$75, \$50 of which is due the National Office, the remaining \$25 is due the local Chapter. As previously, the Chapter may waive its portion of the local initiation fee, and the President may waive the National portion where already organized groups or units elect to join NABET. Henceforth, dues increase will be effective with salary increase, replacing the former practice of delaying the dues escalator until the first of the next year.

The National Council directed the National Executive Board to draft "NABET Policy." When completed, the National Council will consider; if adopted by the National Council, the policies will become a provision of the National Constitution and By-Laws.



"Your Negotiating Committee reports an understanding reception by management . . . so far, we have learned that the Gross is up, but the Net is down . . .!"

## Support the NABET Yearbook

# When television won its wings

How multiple uses for airborne cameras and equipment were revealed by experiment

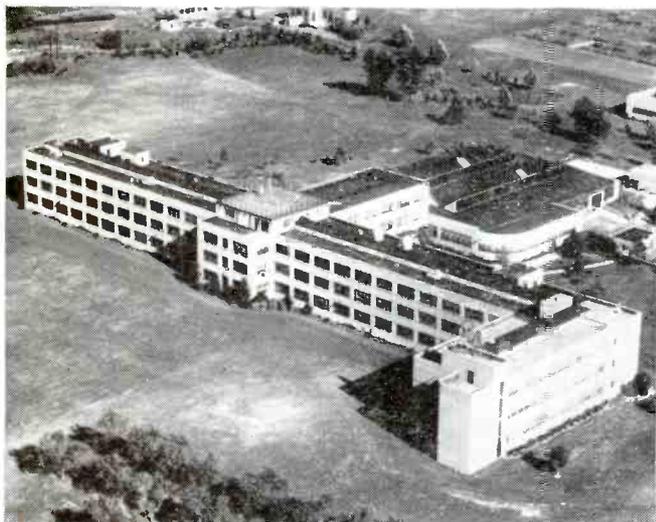
No. 10 in a series outlining high points in television history

*Photos from the historical collection of RCA*

● Put a television camera in the nose of an observation plane, and generals—many miles away—can watch and direct the course of a battle. Such, in World War II, was one of the suggested uses of airborne television as an “optic nerve.”

Feasible? Absolutely—yet this is only one of the many ways in which television can serve in fields outside those of news and entertainment. The entire subject of the use of television cameras and receivers in the air has been carefully investigated by RCA.

Not too long ago, at the time when plans for our inter-city television networks were in discussion, the



RCA Laboratories in Princeton, N. J., as seen from the air. New uses for television—including, for example, its adaptation to aviation—are one part of this progressive institution's research program.



Mounted in the nose of an airplane, special RCA airborne television equipment will give ground observers a sharp, clear, bird's-eye view of land and sea.

idea of making telecasts from planes high in the air was proposed.

From New York, a plane equipped with a television receiver, set off on a flight to Washington—200 miles away. When above Washington, at an altitude of 18,000 feet, passengers in the plane clearly saw Brig. General David Sarnoff, of RCA, talking to them from Radio City! Later, RCA placed a camera and transmitting equipment in an airliner, and a bird's-eye view of New York was successfully telecast to observers below!

It has also been proposed by authorities, that a television camera might be used as the “eye” of a guided missile. Placed in a rocket's nose it would let a distant operator see where the missile was headed. If need be he could steer it in any direction to hit a moving target.

But less on the destructive side, and more important to us now, are the possible uses of television in “blind flying” conditions, when airports would normally be closed in from bad weather. With a television receiver in the cockpit, and a transmitter sending information from the landing field ahead, the pilot could clearly see conditions on runways and approaches—come in with far greater security than when guided by radio alone!



**Radio Corporation of America**

WORLD LEADER IN RADIO—FIRST IN TELEVISION

# Report of the Association of Documentary and Television Film Cameramen (ADTFC) To The NABET National Council

By PATRICIA FINN LEWIS, ADTFC Business Agent

I want to say for ADTFC and for myself, how very glad we are to be here. We are confident that our affiliation with NABET will strengthen both our unions. For these reasons: because of the increase in our total membership (although from NABET's point of view this increase is not half so impressive as from ours); because of the national scope of NABET which will enable us to organize motion picture technicians on a nation-wide scale and will strengthen our organizing activities in the New York area; and finally because of wider union coverage in the radio-television-film industry. I purposely add the word film to radio and TV because the recent trend in TV has been toward an ever-increasing amount of film production specifically for television. This factor is important in our affiliation because of the obvious advantage of an industrial type trade union.

Since the actual working conditions in the film industry are relatively new to you, I want to talk about the type of work we do, our past history, the steps we've taken to better our working conditions, and the future possibilities for strengthening the workers' position in our respective fields through NABET-ADTFC cooperation.

Since its beginning in 1945, ADTFC has organized technical personnel responsible for production work on non-theatrical films. Today ADTFC includes among more than 250 members (and we've been growing at the rate of 20 members a month), Cameramen, Assistant Cameramen, Sound technicians (this includes mixers, boom operators and recordists), Electricians and Assistant Electricians, Unit Managers (whose function resembles that of Assistant Director) and Apprentices in all categories. Our members enjoy a goodly amount of personal and collective prestige. Among outstanding films produced by members of our union are: *Louisiana Story* which took the Academy Award; another award winner *The Quiet One*; and *Dreams That Money Can Buy* and *Maine Fishing* won first prizes for Cinematography, with 40 nations competing, at the Venice Film Festival,

1949. We're particularly proud to have a man like Robert Flaherty, who is known all over the world as one of the greatest living documentary film-makers, as our honorary president.

Most of the privately produced films for the State Department, Army, Air Corps, Navy and other governmental agencies, such as the Commerce and Agriculture Departments, are made by members of ADTFC. In TV our members are now employed on many of the all-film TV shows—such as *Candid Camera*—many sports events, and practically all of the TV film spot commercials. And finally our field embraces all industrial, historical, documentary and scientific films.

ADTFC members are working in every phase of film production in the East—and I might add, all over the world. At the last count we have a member in Turkey, one in Switzerland, one in Norway, and one in South America. As a matter of fact the only work over which we don't claim jurisdiction are theatricals—the commercial type Hollywood entertainment film.

The nature of our employment is very different from current employment practices in the radio and TV industry. Not many of our members are employed on a yearly basis. Work varies largely with the season, since most outdoor filming is done during the summer months. Therefore the majority of our members are employed on a freelance basis. Short term jobs, for example a TV commercial, are usually filmed in a New York studio and take anywhere from a day to several weeks. Longer jobs, for example historical films or an Army recruiting film are generally shot on location and take anywhere from a week to 15 weeks, depending upon the size of the production. The majority of these productions are filmed on tight schedules and almost invariably entail concentrated periods of work and many overtime hours. I would estimate that most members are employed considerably less than 52 weeks a year. Therefore this kind of freelance employment necessarily demands high

minimum scales and enforcement of strict union regulations.

Before I go on I want to try to create for you a mental picture of a motion picture set.

On this typical set producing a TV commercial, you'll generally find one production camera attended by a cameraman and his assistant. This requires, say 30,000 watts of light so there will be one Chief Electrician and probably one assistant and one apprentice handling the lights. On the set there is a magnetic tape recorder attended by a mixer and a boom operator in charge of the microphone. Besides these technicians there is the unit manager who is an ADTFC man and the director and possibly the producer, sponsor or agency representative—who are non-union.

The story of how ADTFC came to be organized is part of the story of prevailing conditions in the film industry before and during the war. I'm going to try to block them out for you as briefly as possible. From the beginnings of the motion picture industry until before the last war, the situation was such that IATSE was the only motion picture union and naturally claimed jurisdiction over all union-made films. The majority of non-theatrical and low budget films, however, were made by unorganized technicians working at whatever wage they could get. And this because most of them found it extremely difficult to join the IA.

With the war, film production in the non-theatrical field shot up: the major studios in Hollywood and independents all over the country were turning out films for the Armed Forces. Many new independent companies were formed at this time. Because of the shortage of cameramen, in Hollywood the IA started giving cards to non-theatrical cameramen for both theatrical and non-theatrical work. In New York a great many cameramen were issued temporary IA cards.

After the war production decreased and concurrently there was an influx of pre-war cameramen and technicians and new cameramen—men who had been trained in the Armed Forces. Needless to say,

they were all looking for work. As this situation developed, the IA stopped organizing cameramen in Hollywood and in New York they rescinded many temporary cards and refused admission to cameramen who wanted, of all unreasonable things, to work at union scale. That's how ADTFC was formed. In 1945, 30-odd men got together, of necessity, to set wage scales and working conditions. One of their basic aims was to seek affiliation with already existing trade unions in the industry.

Since that time the number of full members has grown to over 170 and because of the non-cooperation of other IA technicians' locals, the categories of membership broadened to include most of the technical personnel involved in film production.

As for every other union, the first years were the hardest. Organizing for us is not a matter of organizing the majority of the workers in one shop—but of organizing in a freelance field where workers are frequently unemployed. Thus with every increase in membership our power to make producers abide by our working rules and to force them to hire union help increases—and as this increases, our potential membership increases. That's why, in the last year, ADTFC has made tremendous gains from every point of view.

As I stated earlier, since our members are not regularly employed, our wage scales must be considerably higher than yours. By constant organizing campaigns and by increasing the trade union consciousness of our members, we have been able to maintain, for the most part, union scales prevalent in the industry. The minimum for cameramen is \$175 a week, but some cameramen earn as high as \$350; Assistant Cameramen \$120 a week; Chief Electrician \$110 a week; Ass't Electricians \$93.75 and Soundmen \$127.70. Our Working Rules enforce strict regulations for meal periods, travel time, vacations and other conditions of employment.

We require also the employment of minimum crews and by introducing heavy overtime penalties we have put pressure on employers to hire larger crews and consequently to decrease the total number of hours worked by individual members.

Because there are still quite a few unorganized film workers we have sometimes had difficulty enforcing minimum scales and working rules. Offenders have been penalized—but the fact still remains that we are not yet in a position to force producers to hire complete union crews. Thus our members often work with non-union personnel.

In recognition of this weakness we have been conducting an extensive organizing campaign in New York. We have also created a category of apprentices. This category prevents new workers in the industry from undercutting union scales—and in effect eliminates a source of cheap labor for producers. The creation of this category has also been a boon to apprentices because they now get their experience at a living wage.

There is another problem we are just beginning to deal with: the full-time staff employee who works at a salary below the union minimum. One solution to this problem is to organize the majority of staff members in a shop and then fight for union recognition. This is admittedly difficult, for some staff members are afraid of jeopardizing their jobs—but we are working this out with staff members already in ADTFC.

Basically the problem with staff and freelance employees is the same. We can force employers to use complete union crews only when we have organized the majority of people in the industry who belong to no union. Along with our organizing campaign, another step we are taking in the fight for recognition of uniform scales and standards, is to pressure employers to sign contracts. These contracts cover employees already hired on a job and commit the employer to abide by the union's working rules for the duration of the job. If we continue in this direction, and this has already begun to happen, producers will find less and less advantage in hiring non-union personnel. For these reasons: 1) because the most experienced workers are already in ADTFC, and 2) since our working rules limit the number of non-union technicians that can be employed, a producer, when he signs a contract, agrees to pay scale to the majority of the crews. Thus when he finds he must pay scale to most of his crew and that he can get more experienced personnel from the union than among the unorganized, it will be easier for ADTFC to push for complete union crews. This situation in turn will increase the incentive for the unorganized to join the union.

We have neither a hiring hall nor a seniority system. Members names and addresses together with information on their background and experience are circulated to the producers in book form. From the book, producers choose individuals for hiring—the union's function is to keep track of members who are available.

We've managed to keep a fair amount of ADTFC news in print through pub-

licity releases to newspapers and trade magazines and articles on ADTFC made films of specific interest to the trade journals. We also have a union newspaper which will be incorporated into NABET's *Broadcast Engineers' Journal*.

At this point I'd like to mention some of the future possibilities for expansion and strengthening of our unions. First among these, the possibility of organizing ADTFC on a national basis. In this respect, I'm sure NABET can give us a great deal of valuable advice and help.

We estimate that there are upwards of 1000 independent producers operating throughout the United States: 300 in New York; 250 in Hollywood; 55 in Chicago; and from 10-20 each in Pittsburgh, Philadelphia, Cleveland, Washington, Detroit, San Francisco, St. Paul, Des Moines, St. Louis, Portland, Ore., Boston, Texas, and Western Canada; and from 5-10 each in Louisville, Denver, Phoenix—and points west. Thus the possibility of organizing in Metropolitan areas like Chicago, San Francisco, and Cleveland should be good.

Another important point I think we should bear in mind for the future: As I've already noted, the trend in TV today is definitely towards the production of films for this medium. For this reason it is important for ADTFC members to get this work wherever possible in companies organized by NABET. For in such a case, NABET-ADTFC would have control of the process from actual filming until it goes out over the air—quite a big sized stick to hold over a boss' head.

We know that we will continue to grow and organize with your help and support—particularly because of the added strength the flexibility of an industrial type organization will give us. It gives us prestige and security to know that we have the strength of your organization behind us—plus the backlog of experience you have had organizing your own union. We'd like you to know also, that the names of your members who are qualified and desire work in the motion picture industry, will go on our lists as soon as they make known their wishes. Also we'd like you to keep us informed about job possibilities for our qualified members within TV stations themselves. This would be for orthicon cameramen, boom operators, sound technicians and apprentices. We feel job exchanges are a means of strengthening our relationship and understanding of each other's problems.

Let me repeat once more how glad we are to be here. Right now we have a NABET-ADTFC affiliation written on paper. We can put that unity into ac-

To Page 10

Introducing —

## TIM O'SULLIVAN NABET NATIONAL REPRESENTATIVE

NABET's newest addition to its outstanding corps of full-time field representatives, is Mr. Timothy J. O'Sullivan.

Tim O'Sullivan comes to NABET with the highest of recommendations, and was unanimously ratified by the 1950 National Council. He is 29 years old, is married, and has one son, Michael, age 2½.

Tim's pertinent experience dates back ten years, to September, 1939, when he



TIMOTHY J. O'SULLIVAN

started as a combination man, control operator and announcer—at station WLBC, Muncie, Indiana. In November 1941, he joined the announcing staff of Westinghouse stations WOWO-WGL, Ft. Wayne, Indiana.

World War II required Tim's services as a navigator in heavy bombardment, and he completed 32 missions over Germany. He was awarded the Distinguished Flying Cross, and the Air Medal with three oak leaf clusters.

He returned to WGL as news editor, in October of 1945. He was instrumental in organizing the Fort Wayne AFRA Local in 1946, serving as chairman during the early stages, and later as executive secretary. He was of unquestioned assistance to NABET in its strike against WKJG at Ft. Wayne, giving full radio coverage of the strike which was completely ignored by both local papers (one of which owned the struck station).

In 1949, Tim O'Sullivan was elected to



## ST. LAWRENCE

By ALEEN A. CORBIN

The news from our Chapter this month concerns our relations with management. Of late things have been progressing downhill at a rapid pace.

Our Chapter, as you may know, is still a small one consisting of WWNY and WMSA. The number of Union members at WWNY is eleven, while WMSA in Massena, a smaller station, employs only five. While we must constantly listen to their gripes over every little detail here in town, still it is very seldom that they try to railroad anything through on us that is a contract violation. This is probably due in part to the fact that David Lane, our Chapter Chairman is here, and they know that he won't stand for anything that isn't up to the letter of the contract. Probably it is partly due to the fact that there are more engineers to buck in Watertown if they try anything unpleasant. In Massena, however, it is a different story. The local office here is constantly beleaguered with complaints from the representatives up there about violations. A short time ago Dave listed the violations and presented them to the management. The violations turned out to be so obviously illegal that it seemed

---

the AFRA National Executive Board as member-at-large for the Mid-Western region. In June of 1949, he was awarded the Ruskin Scholarship to Oxford University, England, the award being made by the British Trade Union Congress through the Institute of International Education of New York City.

Mr. O'Sullivan is presently going through a brief indoctrination under the guidance of NABET Executive Secretary George Maher, and the full impact of this outstanding addition to the staff will soon become apparent to the membership and the industry.

*Ed. Stolzenberger.*

difficult to believe that any management would have tried to pull them off. They were as follows:

1. One man had worked six days to get in his forty hours instead of the five day week called for by contract.
2. A remote that should have been given to a man on his day off was worked into the schedule in such a way that the man was working a split shift.
3. The time of the engineers is supposed to start when they report to the business office downtown, but the Company was not paying them until they arrived at the transmitter outside of town.
4. It was found that the announcers were using the regular control board for audition purposes.

Dave Lane came back after investigating this mess and told them what he expected them to do to right things immediately. When he pointed out that he was only demanding things that were in the contract, they set about to right things in some fashion.

But while these particular problems are more or less solved for the time being, still the attitude of the management seems to be to quarrel and wrangle with the Union at every possible opportunity both in Massena and in Watertown. The Brockway Company, like so many others, is forever harping to us about our responsibilities under the contract. They seem to forget, however, that responsibility is a two way street.

It is probably not surprising, under the above conditions, that one of our engineers, John Wicks, feels that there may be greater opportunity for him elsewhere. John (who came to work with us in June, 1949, is leaving at the end of the vacation period to take a position with Bell Aircraft in Buffalo. Needless to say, despite the fact that we hate to see John go, we wish him lots of luck and the very best of everything.

---

### ADTFC REPORT—From Page 9

tion—we can grow and strengthen each other through mutual aid and support. I can say for ADTFC that we pledge to do just that.

---

## Support The NABET YEARBOOK



## Metro-New York Progress

We have read NABET's brief in the IATSE vs. ABC case, wherein IATSE claims a local rather than a national unit, and further claims a craft unit for projectionists. While naturally we regret this attack of one union upon another at a time when there are so many common-front problems, the IA attack does have a unique value to the industry workers today.

It is no secret that the non-IA world has fearfully carried and not necessarily concealed its secret fear that the day would come when the basic IATSE philosophy would be laid bare for all to see: from here, that philosophy, stated in any other words, is still this:

"Assign the radio-TV-film industry to the IATSE; if you don't come voluntarily, we will have you in small pieces."

In each step, the song remains the same, "this particular job function is *all* we want—we can work side-by-side and be happy."

In the IATSE vs. ABC projectionists case, NABET's position was that of intervenor; the briefs are in on both sides; we will announce the result when the NLRB makes its determination in the case.

On Nov. 13th, 1950, an identical case will start, this time IATSE vs. NBC, with NABET the intervenor. NABET, again, will be the sole union protecting technicians from the IATSE attack.

On the Metro-New York home front, we have successfully completed re-negotiations for the RCA-Victor Engineers and the Matrix plant contracts. We next take on the MUZAK Corp.

Our Chairman and additional National Councilmen of Metro, went to the Chicago convention un-instructed by the General Meeting of Sept. 13th. From the Chairman's statement to the National Council, we urged more full-time men in the field and the administrative structure that will permit maximum efficiency. Four full-time representatives have been added, and the constitutional amendments for the Divisional setup are now being drafted. The report recommended the nailing down of NABET policy, and a new Section of the NABET National By-laws is presently being drafted by the National Executive Board, titled, "NABET Policy." We recommended efficiency in the mechanics of national dues collections along the philosophy of the warehouse-to-the-customer mail-order routine, and such a procedure has been adopted effective Jan. 1st, 1951. We urged the permanent combination of the function of National Secretary-Treasurer as a subordinate function of the Executive Secretary, and this was accomplished, attaching a salary of One Dollar (\$1.00) per year to the Secretary-Treasurership. We urged the revision of the geographical jurisdiction of present NABET Charters;—mission accomplished. The responsibility of press and public relations was

Climaxing 15 years experience in training **PRACTICAL ENGINEERS** . . . we announce completely **NEW** and **MODERN AM - FM - TV STUDIO, TRANSMITTERS, and IMAGE ORTHICON CAMERA CHAIN** . . . specially designed and planned to give the student the practical experience needed to be a real asset to an engineering staff.

Request our descriptive catalog describing at length the specialized training and equipment offered here.

Our Placement Department will furnish data on graduates upon request.

Phone or Wire Collect

Telephone TEmple 3-4620

## RADIO ELECTRONIC TELEVISION SCHOOLS

3730 Woodward Avenue, Detroit 1, Michigan

## CAPPS\*

SAPPHIRE is, and has always been, the only material for making cutting styli for high class recordings.

CAPPS\* Patented Sapphire Styli (2187512) are the original and accepted standard for high class professional acetate recordings.

*Imitated but not equalled*

**FRANK L. CAPPS & CO., Inc.**

244 W. 49th STREET NEW YORK CITY  
Telephone CIRCLE 6-5285

\*Reg. U. S. Pat. Off.

placed in the Executive Secretary's office; it had been dubious or non-existent in the past. The National Council was enthusiastic about the affiliation of the ADTFC film group with the Metro-New York Chapter NABET; the Chairman in turn is providing the Executive Secretary with the complete file and correspondence including the Section Certificate under which the ADTFC operates, so that other NABET Chapters need do little more than fill in the signature spaces. This increased membership increases the Union's revenue. The NABET dues escalator was decreased from 50 to 17 steps, simplifying the chore and slightly increasing the dues revenue. National portion of the initiation fee was increased from \$25 to \$50, the local portion of \$25 remaining the same—further implementing the national revenue without cost to the present membership. Metro-New York will soon be electing its 4th National Councilman, and by the first of the year, the Chapter membership will have passed 1,000—when we will be electing our 5th National Councilman. This growth-wave is spreading across the country, and as soon as the additional full-time representatives get into daily action, the NABET membership can be expected to leap forward. Administratively, in organization, mechanics, and personnel, NABET is ready, willing, and able to best represent the Radio-TV-Film workers!

FOR INFORMATION  
ABOUT  
**NABET**  
CONTACT  
ANY OFFICER

★ SEE PAGE 1 ★



Cliff Gorsuch was in Buffalo Monday through Wednesday, Oct. 16-18, for the NLRB elections. It is NABET's pleasure to welcome the radio and television workers at WKBW, 50 kw, WGR, 5 kw, and WBEN AM-FM-TV, 5 kw. Election results at other Buffalo stations will be announced here as soon as known.

The CWA-CIO "Div. 10 Voice" paper dated October 1950, carries a front page item, "Referendum Carries, Divisions Will End":

"With the banging of the gavel calling the 1951 convention of CWA-CIO to order, Division 10, together with all other CWA divisions, will pass from existence. This is the meaning of the overwhelming vote in favor of "two-level" throughout the union in the nationwide referendum.

Replacing Division 10 will be its constituent locals, chartered directly by the international. Unless changed by further amendment, these locals will retain their present structures and jurisdictions. Coordinating the locals, there will be a national director for the bargaining unit.

The new structure will approximate the normal trade union structure prevalent in America. There will be direct lines of communication between the international and the locals, sole policy making bodies of the union. Service to the locals will be provided by the international through its districts.

Delegates to the international convention will be elected directly by the grass-roots, the members in the locals. These delegates will be directly accountable to the locals for their

actions. They will make union policy and will elect all top international officers. . . ."

#### METRO PERSONALS

In a vote to Neil Youngster, Harry Hiller says, "Have just received my license, call is K2CT, power 25 watts on 1877.4 KC, 3754.8 KC, later on 3950 KC phone; now Class B, now on CW "A-1." . . . Also have the BC 474 A with VFO so can work anywhere in the 80 meter band. Will be glad to talk with the fellows. "Nemo Lodge" is now on the air!"



The photo shows Metro-New York members Bob Ward, Alex Horwath, and NABET Honorary Member Harry E. Hiller, at the latter's camp at Raquette Lake, N. Y. Raquette Lake is in Hamilton County, in the North Central portion of the state. The camp itself is about five miles from the town by lane, and seven miles by boat. Harry is reported to have his own fibre glass boat which seats six persons. The boat is equipped with a 10 hp outboard motor, and makes the trip across the lake in about 50 minutes. Hiller's property consists of 136 acres of woods, with a main house, ice house, two lean-to's, two cabins, two boat houses, pump house, etc., all very beautifully nestled and hidden from the beach (50 yards away) by trees. Hunting and fishing are reported excellent.

#### ADTFC VIEWFINDER

"Larchmont Race Week" was recently filmed for Trio Productions by Abel Abrahamsen, directed by Julius Tannenbaum, who also has to his credit the camera work for a film entitled "Wild Pony Roundup" (Livingston Productions), Abrahamsen assisting. The pony roundup, which attracts crowds of people from all over the East, is organized yearly at Chincoteague by the Volunteer Fire Department to help pay their expenses. . . . Knickerbocker Productions has finished work on a State Department Film called "Junior Chamber of Commerce" at Morristown, N. J. The film deals with the civic improvement implemented by the younger edition of the Chamber of Com-

**NEW YORK NABET-ADTFC**  
Room 407  
48 W. 48 St., New York 19, N. Y.  
Phones:  
NABET—PLaza 7-3065—3066  
ADTFC—Judson 2-5171

merce. It was directed by Peter Glushanok; Cameraman Mike Nebbia; Assistant Mike Zingale; Electrician Warren Shannon; Apprentice Arthur Ross, and Unit Manager Jim Hanney. . . . Work on TV commercials is in progress at Transfilm with full union crews (up to 12 members) including Apprentices Joe Christiano, Amram Scheyer, Robert Burke and Bernie Hirschenson and Assistant Electrician Jay Zimmet. . . . For Frank Donovan a commercial on Canasta with Wesley Adams Cameraman; Robert Galbraith Assistant; Karl Sterling Electrician;



### NABET-ADTFC JOIN HANDS

**Affiliation of ADTFC with Metro-New York NABET was consummated Sept. 28, 1950, with the signing of the ADTFC Section Certificate by the Presidents and Business Agents of both groups. Seated, left, Ed Stolzenberger—NABET, and right, Arthur Florman, President of ADTFC. Standing, METRO Business Agent Cliff Gorsuch, and right, ADTFC Business Agent Patricia F. Lewis.**

John Fletcher Assistant and Robert Burke Apprentice. . . . Bert Spielvogel Cameraman and Robert Longwell Assistant, working on a 60 minute film entitled "Water" for none other than New York City . . . a film for the Visual Education Department of the Girl Scouts recently completed was directed by William Resnik; Cameraman Mike Nebbia; Assistant Mike Zingale. . . . Mike Nebbia just finished some work at Yale University for MPO Productions along with Scott Reynolds Electrician. . . . Stanley Bleicher and Max Kurz, Electricians have finished a stint for Films for Industry. . . . Warren Shannon Electrician and Walter Helmuth Assistant recently completed a job with Paul Faulkenberg (A. F. Films) on racial discrimination. . . . Producer-Cameraman Victor Solow has completed work on an army film about the New York Association for the Blind—the Lighthouse—with Assistant Jesse Paley; Electrician Mike Zingale and Apprentice Arthur Ross. . . . Gail Barsch has produced a film on the UN agriculture reform program in Haiti with Jean Oser, directing; Peter Glushanok

Cameraman; Sol Negrin Assistant and Max Glenn Unit Manager. The film was financed privately in memory of a soldier who lost his life during World War II. . . . After a record 68 weeks, Candid Camera (Allen Funt) is off the air and the ADTFC crew on the show in limbo—Arthur Florman Cameraman, Bill Horgan Assistant, John Babb Unit Manager, and Russ Harknett Soundmen. Russ was called back into the Army. The Armed Forces incidentally are making inroads on ADTFC membership—Manny Alpert and Dennis Maitland were called back to the Army. Sheldon Nemeyer to the Navy.

Welcome to new members: Cameramen Sam Isser, Victor Lukens, Wesley Adams, Herman Kroll, Omar Marcus; Electricians Karl Sterling, Sol Becker and Jay Zimmet; Soundmen Willard Goodman and Leroy Stone; Unit Managers Jack Berk, John Babb, Francis Cornelis, Don Haldane, Gene Searchinger and Gilbert Williams; Apprentices Harry Kapzansky, Clarence Roberts, Benjamin Adler, Moe Singer, Judah Singer, Bernard Hirschenson, Howard Holmes, Morgan Smith, Mark Salvani, John Wing, Hugh Campbell, George Friedlander, Lee Gorden, Martin Harman, Milton Hoffman, Charles Klain, Arthur Mulock, John Parker, Philip Rein, and Harold Zegart.



### ABC CHICAGO —By DICK DAVIS

Looks as if 'ole man winter is coming to Chicago early this year. Ordinarily this is the mild hazy and sort of lazy Indian Summer, but we've already had some chilly nights of 40 degrees. Seems as if summer no more than arrived and then up and left us.

This won't be too much of an effort this month. My ever lovin' wife saw fit to consign to the garbage can what few notes I had assembled. So, I'll probably be leaving out a lot of the pertinent things that I was supposed to be sure and include this time.

Anyway, Walt Steben was aroused out of a comfortable sleep about 4 a.m. on the night of September 22nd. His wife, Lil, gave birth to a 7½ pound baby girl. So NABET extends the customary congratulations and a fin to help defray.

Mr. Serena of the WENR-WLS transmitter was recently recalled to active duty with the United States Navy, bless their sea-going souls.

Cliff Braun, the barefooted cameraman, has quite a fan club among the Bill Farrell show audience. He gets a rousing cheer from a group of teen-age girls every time he mans the No. 3 camera. In fact, I think he gets more applause than Farrell from that particular group. The barefoot gag came from part he played in a production number of the Don McNeill TV Club.

To Page 19

# G. E. Co. Color TV

First details of the new General Electric color television system called "frequency interlace," announced last week, were revealed here today by Dr. W. R. G. Baker, G-E vice president and general manager of the Electronics Department.

Dr. Baker said the greatest advantage of the new system is that it permits all of the high precision equipment to be localized at the transmitter, and therefore probably would not cause any great increase in the cost of home TV sets equipped to receive the color telecasts.

The system makes possible the simultaneous transmission of three different color (green, red and blue) signals in heretofore unused portions of present-day TV channels, he said. It could be used with either the three-tube or single picture tube systems previously proposed.

Dr. Baker discussed frankly both the advantages and disadvantages of the new system, which has not yet undergone field tests. No demonstration of the G-E color system will be possible until after October 1.

Interpreting the system for the general public, Dr. Baker explained that a present television channel might be compared to a three-lane, one-way highway, with the separating strips of land representing those portions of a TV channel presently unused. He said that the new color system amounts to increasing the amount of traffic this highway can carry without increasing its width. One way to do this would be to open the dividing strips for traffic. This is essentially the theory of the new G-E system. By using the previously unused sections of each channel it is possible to transmit more information within its present width.

According to Robert B. Dome, consultant for the Receiver Division of the G-E Electronics Department, who conceived the new color system, most of the black and white picture information is transmitted at or near the "harmonics of the line scanning frequency" in each channel.

The G-E color system makes use of the spaces between these harmonics to transmit the information associated with the two remaining colors. The information for the second color, which would be red, would be transmitted at a "subcarrier frequency" carefully selected to lie halfway between the green signal harmonics in the unused parts of each channel.

The third color, blue, would be transmitted at a second sub-carrier frequency, according to Dome. Since the second

and third color information need not be transmitted over the entire bandwidth, they could be segregated from each other.

When this information reaches the color television receiver, for example a three-picture tube set, much of it is separated by conventional filter circuits. However, all three of the tubes are affected to some extent by the green, red and blue information. But instead of an expensive and complicated wave filter to exclude the undesired frequencies, Dome said, the human eye itself will do the rest of the filtering.

"Physiological filtering" is the name given by Dome to the persistence of vision which allows the viewer to "see" only the green information on the face of the green tube, only the red information on the red tube, and only the blue information on the blue tube. When these colors are combined in the three-tube receiver, or when they are combined on the face of the single color picture, a "high fidelity" picture would result since these colors can be mixed to produce all remaining colors and hues, he said.

The persistence of vision of the human eye, Dome said, is the same factor that enables a person to see the rapidly changing "frames" of a motion picture as continuous movement instead of individual "still" pictures. In the case of the G-E color system, the human eye would ignore the split-second changes resulting from the three color information being transmitted on the same channel.

Dr. Baker said that present conventional television receivers would not only receive the color broadcasts in black and white, but might even receive a better picture because of the addition of certain detail in the lights and shadows.

In a color set incorporating the G-E system, conventional black and white broadcasts, could be received. On low-priced receivers, the set owner would have to "try" the color switch to see whether the broadcast was in color or in black and white. On more expensive receivers the switching could be done automatically.

Comparing the advantages and disadvantages of the new system, Dr. Baker pointed out that while complete field tests have not yet been made, preliminary laboratory tests to date verify some of the basic principles.

In addition to the important advantage that the precision equipment is located at the transmitter, permitting relatively low-cost receivers, comparatively simple in construction, Dr. Baker said, is the in-

dications that the system would be free of "field sequential color fringing."

Color fringing, it was explained, is an effect similar to off-register color printing caused by the time difference in reception of color information. It appears on the screen in a field-sequential system when a rapidly moving object is shown. Since, in the G-E color system, all of the color information is transmitted simultaneously, color fringing from this cause would be absent.

Tests will be made, the G-E vice president said, to determine whether color fringing can result due to a time delay in reception of the color information caused by atmospheric conditions. This difficulty is not expected, he said, but tests should be made to rule out any possibility.

Listed as another disadvantage of the system is the possible necessity of an effective automatic gain control for each color in order to simplify tuning.

Improvement in some relaying facilities would be made necessary by the G-E color system. If, Dr. Baker said, transmission was not accurately controlled and less than a four megacycle channel was transmitted, color information would be lost.

Over-ruling most of the possible disadvantages, Dr. Baker said, is the fact that the system is inherently compatible with present black and white television, and overcomes all objections to any system which would not permit black and white broadcasts to be received on color sets, or color broadcasts to be received in black and white on present day receivers.

---

## Aerovox Issues New Distributor Catalog

In 40 pages packed with new types, extended listings, code designations, applications and other data, the latest Aerovox General Catalog provides a most practical addition to the reference library of the radio-electronic worker. Capacitors of many different types, many of them new, are cataloged. An entire section is given over to television capacitors for TV servicing. Wire-wound and carbon resistors are listed, as well as Aerovox vibrators and test instruments. A copy of this latest Aerovox catalog may be obtained from your local Aerovox distributor.

---

## SUPPORT NABETS YEAR BOOK

# "Horizons Unlimited" For TV, Says RMA Head; Cosgrove Explains position on Color

Already a billion dollar industry, radio-television manufacturers are entering a new era of industrial advancement "with horizons unlimited," President R. C. Cosgrove told members of the Radio Manufacturers Association at their annual membership luncheon at the Stevens Hotel.

Predicting that close to 9,500,000 television receivers will be in use in the United States by the end of 1950, Mr. Cosgrove said the past 12 months have been "a banner year" for the industry and "the future looks extremely bright for all of us."

While deploring the "political pressure which has been put on the industry to bring out color television before it was developed," President Cosgrove expressed confidence that "common sense will prevail and that we will have a set of standards for color television that will permit the industry to make an increasing contribution to the public interest and enjoyment."

Calling attention to the constant improvement in black and white television receivers, coincident with the reduction of manufacturing costs and retail prices, Mr. Cosgrove said:

"While this aggressive black and white development was being accomplished and the price of sets to the public cut in half during the last year, the color promotion was most untimely. The industry was accused falsely of holding back color. All sorts of stupid and ridiculous assertions were made in Washington about the 'selfishness' of the industry and alleged designs of the industry and individual manufacturers to act contrary to the public interest.

"If these folks making the ungrounded statements had any business experience or any elementary knowledge of this industry, they would have known that all of us have built our business on enlightened self-interest in the public interest; that we stay in business and prosper only when we serve the public interest. They should also know that this is one industry that has been extremely competitive and in spite of the fact that during the past shortage of television receivers prices have been cut in half.

"This industry has a great record of never deliberately obsoleting a product or giving the public unreliable, untested or

unworkable products. We are now trying our best to maintain, for enlightened self-interest, this position of public service in our approach to color television."

The continual work of the RMA Television committee, under Chairman Max F. Balcom, throughout the color television hearings before the Federal Communications Commission, and the more recent activities of the National Television System Committee, under Dr. W. R. G. Baker, Director of the RMA Engineering Department, were cited by Mr. Cosgrove as examples of RMA's efforts to assist the government and the industry in the solution of color television problems.

The NTSC is proceeding with the development of technical data and recommendations, despite the refusal of the FCC to sponsor the project, Mr. Cosgrove said. "We expect the NTSC in its recommendations to be entirely free of political or commercial considerations and that its findings will be of sound and lasting value."

Reviewing the activities and services of RMA, President Cosgrove pointed out that the Association has three times as many members as it had ten years ago and is now on the threshold of further expansion.

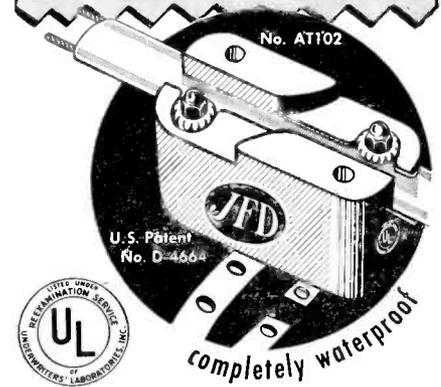
"RMA has contributed to a prosperous and fine industry which has created great benefits for the public and has provided employment for a large number of workers," he said. "The industry can be extremely proud of its record. No industry has provided as great a physical value in its products and at the same time brought such great education and entertainment to so many people."

## No Parts Shortage for TV Servicing, Reports President Sprague

There is no immediate threat of a serious shortage of replacement parts for servicing television and radio receivers, President Robert C. Sprague of the Radio-Television Manufacturers Association said following a spot check in New York City where complaints of such a shortage have been reported recently.

Distributors contacted by RTMA in

### TWIN LEAD, TELEVISION LIGHTNING ARRESTER



APPROVED for OUTDOOR-INDOOR Use \$2.25  
Protects Television Sets  
Against Lightning and Static  
Charges

Twin Lead  
**JFD SAFE TV GUARD**

Simple to install everywhere and anywhere  
...no stripping, cutting or spreading of  
wires. More than 300,000 in use today!

SEE YOUR JOBBER OR WRITE TO

**JFD MANUFACTURING CO., Inc.**  
6127 16th Avenue, Brooklyn 4, N. Y.  
First in Television Antennas & Accessories

New York reported that they are generally well stocked with replacement parts for TV requirements although they have had to allocate certain components because of unusual demands from dealers since the Korean outbreak, Mr. Sprague said.

Allocations were brought on by a small minority of dealers and servicemen who were trying to hoard some of the components in short supply, he explained. Receiving tubes, resistors, antennas, television tubes, and condensers are being allocated by parts distributors at present in the New York area.

"The distributors seem to be handling a difficult situation very well and are trying to be fair in their allocation of components most in demand from dealers and servicemen," Mr. Sprague said.

"Despite heavy demands from set manufacturers who are at a peak production pace and regardless of large anticipated military requirements for electronic components, the industry by reason of its expanded capacity can keep its distribution outlets adequately supplied for any normal requirements of set servicing, both

To page 17

# Industry News: Radio - TV - Film - Recording

## Fall Meeting Discussions Feature Latest Radio, TV Developments

Latest technical developments of radio and television equipment and components will be discussed by the country's leading electronic engineers at a three-day gathering during the annual Radio Fall Meeting, October 30-Nov. 1. The annual meeting of radio engineers is sponsored jointly by the Institute of Radio Engineers and the Radio-Television Manufacturers Association's Engineering Department. This year's meeting will be held at the Hotel Syracuse, Syracuse, N. Y.

Featuring technical sessions in both mornings and afternoons, the meeting will be climaxed by a dinner on Tuesday evening, Oct. 31. RTMA resident Robert C. Sprague will deliver the feature address and Dr. W. R. G. Baker, Director of the RTMA Engineering Department will serve as toastmaster.

Following is the tentative program of the Radio Fall Meeting:

### MONDAY, OCTOBER 30

9:30 A.M.—

General Session (Ralph R. Batcher, Presiding.)

Welcome by Chairman of Syracuse IRE Section.

A Broad Range Oscillator for Television Testing: H. A. Finke and J. Ebert, Polytechnic Research and Development Corporation.

Wideband Impedance Matching Between A Resonant Antenna and A Line: Harold A. Wheeler, Wheeler Laboratories, Inc.

High Frequency Crystal Calibrator Design: Jerry B. Minter, Measurements Corporation.

The Determination of Amplifier Sensitivity With The Aid of The Noise Diode: W. K. Squires, Sylvania Electric Products Inc.

2:00 P.M.—

Quality Control Session (J. R. Steen, Presiding).

(Sponsored by IRE Professional Group on Quality Control.)

Application of Statistical Quality Control in Manufacture of Electronic Products: Ellis R. Ott, Rutgers University, and George Scheel, Sonotone Corporation.

The Quality Control Indicator: C. J. Falk, General Electric Company.

The Control of Averages in Radio Tube

Manufacture: A. K. Wright, Tung-Sol Lamp Works, Inc.

The Human Aspect of Engineering Quality Into the Product: Carl Gartner, Allen B. DuMont Labs., Inc.

8:00 P.M.—

Joint Session with Technology Club of Syracuse.

### TUESDAY, OCTOBER 31

9:00 A.M.—

Television Session (R. A. Hackbusch, Presiding.)

(Sponsored by the IRE Professional Group on Broadcast and Television Receivers.)

A Study of Permanent Magnet Focusing Devices For Television Picture Tubes: Kenneth James and R. T. Cappodanno, Emerson Radio & Phonograph Corporation.

The Application of a New Low-Noise Double Triode as an RF and IF Amplifier in Television Receivers: Robert M. Cohen, Radio Corporation of America.

Consideration of Optimum Use of Picture Tubes: W. B. Whalley, Sylvania Electric Products, Inc.

Evaluation of Performance Characteristics of Cathode-Ray Tubes for use in Television Receivers: Kenneth A. Hoagland, Allen B. DuMont Labs., Inc.

2:00 P.M.—

Television Session (D. D. Israel, Presiding.)

(Sponsored by IRE Professional Group on Broadcast and Television Receivers.)

The Technical Aspects of Phonevision: E. M. Roschke, Zenith Radio Corporation.

An Analysis of Color Television: Arthur V. Loughren, Hazeltine Electronics Corporation.

6:45 P.M.—

Radio Fall Meeting Dinner: Toastmaster, W. R. G. Baker; speaker, Robert C. Sprague President of RTMA.

### WEDNESDAY, NOVEMBER 1

9:00 A.M.—

Audio Session (O. L. Angevine, Jr., Presiding.)

(Sponsored by the IRE Professional Group on Audio.)

The Mechanics of the Phonograph Pickup: T. E. Lynch, Brush Development Company.

Lightweight Pickup and Tone Arm: C. R. Johnson and L. J. Anderson, Radio Corporation of America.

Sound Pickup in High Ambient Noise: Wayne Beaverson, Electro-Voice Incorporated.

## Tubes Sold For New Sets Exceeded 1949 In Seven Months

Sales of radio receiving tubes to manufacturers for new sets in the first seven months of this year exceeded those sold for the same purpose in the entire year of 1949, the Radio-Television Manufacturers Association reported. Sales in the January-July period this year totalled 149,276,662 as against 147,298,436 sold for new sets in 1949.

Overall radio receiving tube sales through July of this year at 191,503,938 units were only 7.2 million under the 198,753,295 tubes sold in 1949.

Tube shipments in July totalled 21,128,017 of which 14,600,533 were sold to manufacturers for new sets. Replacement tube sales in July amounted to 6,015,511; exports 417,586; and sales to government agencies 94,387.

## TV Monitor

A new General Electric television visual demodulator (Type TV-21), which allows the transmitter operator to measure accurately the transmitted signal, is now available for commercial use according to Paul L. Chamberlain, Manager of Sales for the Commercial Equipment Division.

The new unit feeds both picture and

### NABET-ADTFC

Dedicated to the

WELFARE-SECURITY-PRESTIGE

of the

RADIO - TELEVISION - FILM

WORKER

waveform monitors simultaneously and is easily installed in a standard equipment rack. It is crystal controlled, eliminating the need for tuning, and is practically impervious to stray r-f fields.

In addition to its primary use as a transmitter monitor, the new demodulator can be used as a double sideband detector or a transient demodulator. By operating the "crystal" switch," the overall transmitter attenuation characteristic required for Proof of Performance tests can be measured. By switching out the sound rejection traps the unit can be used in connection with the study of transient response of a television system.

## Audio Devices Announces New 2500- Foot Audiotape

Audio Devices, Inc., 444 Madison Ave., New York 22, has announced the availability of plastic-base Audiotape (magnetic recording tape) in 2500-foot rolls, on standard NAB aluminum hubs or on complete 10 1/2" aluminum reels.

Mr. Bryce Haynes, vice president of Audio Devices, has stated that the new, professional-size Audiotape offers the following important advantages:

1. Exceptionally Low Cost: Audiotape Type 2551H (on hub only) has a list price of \$10. Audiotape Type 2551R (on completed reel) has a list price of \$12.85. Prices are subject to Audio's usual discounts to dealers, radio stations recording studios, schools and industrial firms.

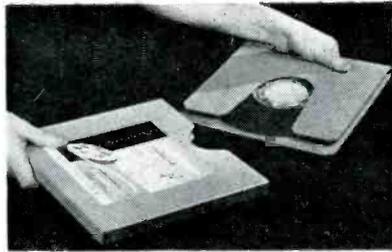
2. The full measure of 2500 feet gives 4% more tape per reel than the usual 2400-foot roll.

3. There are no splices in the entire 2500-foot roll. It is guaranteed to be all one piece.

4. Audio Devices guarantees that volume deviation within a 2500-foot roll, at 1000 cps, is not more than 1/4 db—and not more than 1/2 db from reel to reel.

5. A unique, specially designed package (Pat. Pending) makes handling and storage of tape easier and safer.

The new package consists of an inner and outer container, as illustrated. One side of the inner container is provided with a fixed wooden hub-core which holds the tape hub firmly in place while in the package. The other side has a wide, rounded slot which can fit over the hub on the turntable of a recorder. By holding the inner container with the slotted side down, the tape can be set on the recorder turntable hub without removing it from the container, after which the con-



tainer is simply slid out from under the tape. In this way, the tape is firmly supported at all times and there is no danger of its slipping from the hub or becoming unwound. The tape can be returned to the container by sliding the slotted side under the roll of tape while it is still on the turntable.

The standard hub can also be converted to a completed reel without removing it from the container, and without danger of spilling the tape or dropping the sleeve screws. With the slotted side down, the first reel flange can be placed on the hub and held in position by the sleeve screws. Then the hub-core side of the container is folded down, holding the sleeve screws in place so that the roll can be turned over and the other reel flange screwed in place.

When tape is stored on the hub in this container, it hangs from the fixed hub-core, so that the tape does not rest on itself. There is no danger of flattening the bottom of the roll or damaging the edges of the tape.

The new Type 2551 Audiotape is packed five boxes to a carton, and is available through Audiotape and Audiodisc suppliers all over the country.

## NO PARTS SHORTAGE From Page 15

in New York City and elsewhere.

"I am confident that most dealers and servicemen are along with the distributors, trying to treat the public favorably and avoid hoarding. However, a few unscrupulous dealers, if permitted to do so, could create shortages of components whose full production is required to meet normal requirements of manufacturers and distributors."

## Large TV Picture Tubes Constitute 89 per Cent RTMA Sales

Large type television picture tubes—14 inches and over—now constitute more than 89 per cent of cathode ray tube sales

to TV receiver manufacturers, the Radio-Television Manufacturers Association reported today. Manufacturers' purchases of picture tubes in this category amounted to only 15 per cent at the end of last year. The popular 12 through 13.9 inch tube of last year amounted to only 10 per cent of sales to manufacturers in June, RTMA said.

June sales of cathode ray tubes to set manufacturers as reported to RTMA showed a total of 566,942 tubes valued at \$15,054,810 compared with 599,667 units valued at \$14,260,114 in May.

Total sales of cathode ray tubes of all types, including oscillographs, camera pick-up etc., aggregated 604,832 units valued at \$16,075,359 during June.

## Electronics Mobilization Committee Established Jointly by RTMA-NSIA

A National Electronics Mobilization Committee, which will coordinate all industry mobilization activities and offer its services in an advisory capacity to top government policy making officials, has been established jointly by the Radio-Television Manufacturers Association and the National Security Industrial Association.

Comprising 22 industry leaders, the committee was appointed jointly by Robert C. Sprague, President and Chairman of the Board of Directors of RTMA, and Frank M. Folsom, Chairman of the Board of Directors of NSIA, following a special meeting of the RTMA Board of Directors yesterday in New York City.

Fred R. Lack, Vice President of Western Electric Company, was elected chairman of the committee which will set up a Washington office to maintain constant liaison with national defense officials and all agencies having to do with industrial mobilization and military procurement of radio and electronics products.

The radio-television industry is gearing itself to step up military production to from \$1 billion to \$1.5 billion during the next 15 months. Industry leaders have already advised defense officials of the industry's desire to give top priority to government orders and expedite production of essential radio and electronics equipment and components.

The National Electronics Mobilization Committee will not replace the Electronics Industry Advisory Committee, which was appointed in 1948 jointly by the Munitions Board and the National Security Resources Board.

# LABOR-MANAGEMENT NEWS

## The Secretary of Labor Says:

No group in the United States has shown more clearly its profoundly felt endorsement of steps taken to protect free peoples and to bolster world peace than American organized labor. The statement issued after a recent "unity" meeting of AFL and CIO representatives in Washington has an impressive word on that subject. I quote: "We recognized the serious threat to world peace and to our country as a result of Communist aggression. We vowed our complete determination to give full and united support to our Government in this time of crisis. Labor in America is completely united against Communist aggression and infiltration. . . . We will continue to work together in the field of international relations through the International Confederation of Free Trade Unions, as a means of strengthening democracy throughout the world."

The work done by American trade unions in the international field deserves the appreciation of all Americans. One of our strongest weapons in the fight to keep foreign unionists from succumbing to Communist propaganda and chicanery is the American labor movement.

That doctrine is reenforced by the facts of American life. Our workers, far from being the slave labor of Communist fabrication, are free men with an ever-increasing influence in the functioning of American democracy. Our workers are enjoying the benefits of social and economic, as well as political, democracy. Labor has won its own place in the scheme of American affairs.

---

## THE WAR EFFORT

By CHESTER M. WRIGHT

The whole pattern of things to come indicates that before too long we shall have controls that will go far toward governing our economy. That means our living and our lives.

It isn't a pleasant prospect.

Of course not much will be done about establishing controls until after the November elections, but, barring the miracle of peace, we shall greet 1951 in a fairly tightly controlled economy.

Three things come under controls—wages, prices and materials.

It isn't so very long ago that we had controls.

We may resent them, but in a full scale war, with the whole national effort bent upon survival, it is necessary that we surrender temporary individual authority in favor of united, national authority.

We may resent them, but in a full scale war, with the whole national effort bent upon survival, it is necessary that we surrender temporary individual authority in favor of united national authority.

I remember a great plant that made a certain type of big gun shells in World War 2.

A few pounds of a certain metal were needed to keep that plant running so that it could keep the shell supply rolling. Some little clerk in Washington had forgotten the priority papers and only a determined hurry-up hunt saved the day. That was one of the little slips of controls.

Another plant made magnesium bombs—the first to fall

on Japan. Without controls that plant could not have been assured of continuous operation.

War is a furiously demanding operation. Nothing can get in the way, without risk to the nation.

No individual is important enough to get in the way. We have to stand aside for the greater good.

Abuses there have been and abuses there will be. There will be a lot of petty crooks and a few big ones. But the main result will be good—because it has to be good.

The chance of war getting smaller is slim; the chance of its getting bigger is frightening—awesome—commanding.

Now I want to point out one very important fact about controls in this country.

They are not used by any dictator. No one man authorizes them.

Controls, for us, are voted by our Congress, which we elect and they can be abolished by our Congress.

As long as we elect the members of Congress, the final authority rests in the hands of the people.

Hostile propagandists will shout, as they have done before, that controls means autocracy. That is rubbish, as long as we retain the right to effective suffrage. Of course, if ever we lose that, we lose everything.

But that is something we are not going to lose.

Since that is the case, controls become a part of and a result of the working of democratic processes.

Don't ever forget that fact and don't ever let anyone else forget it.

On the other side of the fence, there is Russia. Controls there are permanent and the people have nothing to say about them. They dare not even argue against them.

The Communist dictatorship tells the Russian people what to do. Resistance means slaughter.

Over there they call it a purge, or they call it liquidation. Whatever it is called, its other name is Death!

Now, in the face of all that seems to lie ahead, our job is to make our democracy work as well as possible. We need in government the best men available.

We need an end of jealousy and bickering in Washington. We cannot tolerate stupidity.

All of which points to the coming elections and the overwhelming need for doing everything possible to elect men and women who have the capacity to meet successfully the great needs of the hour.

If all of us must go to war, then let politics also go to war.—CMW.

if you are commercially or professionally interested in TV, read

### TELEVISION ENGINEERING

for news of all that's NEW in the lab, plant and station involving design, manufacture operation and maintenance of TV equipment for research, production, testing, receiving and transmitting.

Special Rate: 3 yrs. (36 issues) \$5

Bryan Davis Publishing Co. Inc.  
(Publishers of SERVICE)

52 Vanderbilt Ave., New York 17, N. Y.

# LABOR LAW INTERPRETATIONS

Prepared by the Legal Unit of the New York State Department of Labor under the supervision of Deputy Industrial Commissioner and Counsel Abraham H. Goodman.

Under date of July 18, 1950, the Department of Labor received the following opinions from the Attorney General of the State of New York concerning the subjects of overtime and of incentive pay in relation to the purview of Section 196, subdivision 2 of the Labor Law.

"This will acknowledge receipt of your letter of June 30th requesting my opinion whether or not overtime earnings, as described in the letter you attached, come within the purview of Section 196, subdivision 2, of the Labor Law.

"The employer proposes to pay its employees every second Friday at their straight time rate for eighty hours which will cover the normal work performed during two week period ending on such pay day. A similar arrangement has been held by my predecessor to be a substantial compliance with Section 196 (1932 Atty. Gen. (Inf.) 246).

"However, the employer intends to postpone payment of wages for work performed in excess of its normal work day of eight hours and its normal work week of forty hours until the next succeeding pay day, which will be in every instance at least fourteen and as much as twenty-eight days later than when earned.

"Clearly such an arrangement offends the provision of Section 196, subdivision 2, which reads as follows:

"2. Every person carrying on a business by lease or otherwise, shall pay weekly the wages earned to a day not more than six days prior to the date of such payment."

"While presumably compensation for overtime work is at premium rates, nevertheless it constitutes wages earned by an employee. With certain exceptions, Section 160 of the Labor Law permits an agreement for overwork in excess of the prescribed hours at an increased compensation. Section 160 derived from L. 1870, c. 385. Section 196 has its source in L. 1890, c. 388. Therefore, the legislature was fully cognizant that wages earned by an employee might include overtime compensation when it first prescribed the time for payment thereof, yet it did not then and has not since made any distinction or exception between compensation for overtime and compensation for straight time in this respect. The apparent purpose of Section 196 is to secure the prompt payment to an employee of the full fruits of his labor.

"Doubtless much clerical work and bookkeeping might be eliminated and the convenience of the employer might be better served by the adoption of the proposed payroll plan. It was evidently for those reasons that the bi-weekly payroll plan was held by my predecessor to be a substantial compliance with the statute, and I am in accord with such holding. However, Section 196 provides for the weekly payment of wages earned to a day not more than six days prior to the date of such payment. The grace period of six days was obviously provided by the legislature for the purpose of giving the employer sufficient time within which to complete and make ready his payroll. By taking advantage of the liberal construction already given Section 196 by this office, the employer here seeks to extend such time beyond the grace period provided by the legislature. The language of the section should not be further strained.

"My conclusion is that all wages earned by an employee, including overtime compensation, must be paid by an employer within the time fixed by Section 196, and that insofar as the proposed payroll plan provides for payment of wages, representing overtime compensation thereafter it is in violation of this section and cannot be sanctioned.

"The above is consonant with the holding of the federal courts in cases arising out of the Fair Labor Standards Act. See *Atlantic Co. v. Broughton*, 146 F. 2d 480, 482; *Mid-Continent Petroleum Corp. v. Keen*, 157 F. 2d 310; *Reid v. Solar Corp.*, 69 F. Supp. 626.

"Consideration has been given to the cases of *Tanner v. Imperial Recreation Parlors*, 263 App. Div. 371, aff'd 290 N.Y. 801, and *Livingston v. Todd Shipyard Corp.*, 187 Misc. 672, aff'd 271 App. Div. 864, appeal dismissed 296 N. Y. 854, cited by counsel but in my opinion neither has application to this matter."

---

## HOSPITAL COSTS

Daily cost in 1949 for each patient for hospital care is set at \$14.33, an increase of \$1.24 over 1948, by the American Hospital Association. The average deficit for each patient was \$2.59 a day. The average stay per patient is 8.3 days, almost half a day less than in 1948. Approximately 18,000,000 were hospital patients during the year—about one in eight.

---

## CHICAGO NEWS—From Page 13

Studio N has settled down to full scale operation now and has taken quite a load from Studio A and the Penthouse. I did a tour over there the other day and it is quite a nice operation. Lots and lots of room. Bob Popke and I were on cameras that day. The first show was scheduled to be a two-camera production, but mine got contrary just before we went on the air and consequently, Bob did a marvelous job doing the whole half hour on his camera. Assisted of course by yours truly keeping the cables out of his way. Russ Hunt is the TD there. Leo Mulatz handles the audio problems, and Walt Kramer takes care of the camera controls.

Chicago NABET officers have their hands full these days making ready for the National Council Meeting, which, of course, will be over and done with by the time this reaches print.

I, along with three or four other guys, have been making our presence known to Chicago talent this last month soliciting advertising for the Yearbook.

Steve Gabocy is out of circulation again now that his wife has returned from her visit to Pittsburgh. He's not too unhappy though. After two years with ABC, he has finally got a Saturday and Sunday off.

It's not hard to tell that Owen Rogers is a newly married man. Formerly he used to mosey around the studio after we went off the air wondering what to do with himself. Not any more though! He takes off like a scared rabbit, lunch pail and all as soon as the last show is over.

I said this would be a short one this time and that about wraps it up for Chicago.

---

DEADLINE is 2nd of EVERY MONTH. EXAMPLE: COPY RECEIVED MARCH 2nd APPEARS IN THE APRIL ISSUE, IN THE MAIL APRIL 1st.

---

## ACA Booted

Meeting in Washington in June, the CIO executive board continued its job of cleaning house of pro-Communist elements who have hurt CIO's good name and organizational efforts in recent years. Expelled were the American Communications Association and the Fur and Leather Workers.

Executive board action came after a hearing committee, which had heard charges against ACA some time ago, presented its evidence. This evidence showed that ACA had followed the Communist Party line to the detriment of workers in the telegraph industry and of CIO. Board action was by a 32-2 majority vote.

ACA has failed miserably as an organizing force. Its last major stronghold is in metropolitan New York Western Union. It is doubtful that ACA's national membership exceeds 8,000.

## C.W.A. FINANCIAL FORECAST NEED FOR \$1.50 PER CAPITA TAX

Financial needs of the union under "two-level" operation were the subject of a financial forecast presented on Wednesday to the delegates by a sub-committee of the special constitution committee. This forecast was based upon a \$1.50 per month per capita tax to the international. As was anticipated, it was the subject of much discussion among the delegates.

Provided for in the forecast was an international staff of full time persons larger than that of all the full time division personnel now employed. This staff, while considered adequate, would not be as large as those in other unions of the same size.

While the forecast could not of necessity be considered more than a considered judgment, it indicated the widely expanded services of the international under the proposed changes. These would include much more than merely taking over the functions of the divisions and would include real service from the international to the local units.

Discussion of the matter brought out the fact that there is wide realization that the union cannot continue to operate on its present 50 cents per capita regardless of structure. Choice before the membership, it was made clear, is a higher per capita with broad service under the streamlined structure or an increased per capita with limited service under the present structure.

## New BLS Tables Measure Working Life of U. S. Men

The Department of Labor's Bureau of Labor Statistics recently announced a major statistical achievement: the development of actuarial tables showing how many more years an average American man can expect to work.

According to the new Tables of Working Life, which measure the growing gap between the span of total life and the working life for men in the United States, the total life expectancy of an average 20-year-old white male worker increased 5½ years between 1900 and 1940, but his work-life expectancy rose only 2½ years. The number of years which he could expect in retirement doubled in this period—from 2.8 to 5.7 years. If this trend continues, BLS points out, the gap be-

tween total life expectancy and work-life expectancy will have tripled between 1900 and 1975.

Motivated by the fact that older people make up an increasing proportion of the population, the Bureau began work on the tables in 1945, and is now developing work-life tables for women.

## Food Prices Doubled

Chicago, Aug. 15 (UP)—Prices on many foods are almost as high as when World War II price controls took effect and the cost of some items has tripled, a survey indicated today.

A check of retail prices in 19 cities showed coffee has taken the giddiest whirl. Pork chops and round steak were close behind and milk, butter, sugar and potatoes all were up sharply.

The survey showed these comparative average prices of seven basic items on the housewife's market basket since April 12, 1941, when the OPA was set up:

Food	Then	Now
Coffee (1 lb.)	25.1	81.7
Pork Chops (1 lb.)	27.1	80.1
Round Steak (1 lb.)	31.0	91.7
Potatoes (5 lbs.)	12.6	22.7
Milk ((1 qt.)	12.9	19.6
Butter (1 lb.)	42.4	67.7
Sugar (1 lb.)	6.3	10.3

Government statisticians said the consumer's dollar today has only 60% of the purchasing power which a dollar had in April, 1941.

## Tax Status of Disability Plans

The Bureau of Internal Revenue in I. T. 4010 and I. T. 4011 has held that contributions by employers under New York's and New Jersey's compulsory disability law are ordinary and necessary business expenses. If the employer assumes and pays the contributions required by employees, such payments are includible in the gross income of the employees and are subject to withholding of income tax at the source on wages. Such amounts constitute ordinary and necessary business expenses to the employer. In I. T. 4011, the Bureau has held that contributions made by employers under private state plans established under the New Jersey compulsory disability act are ordinary and necessary business expenses.

In I. T. 4015 the Bureau ruled that benefits received by employees under the California disability plan are excludible from gross income.

**P. T. Barnum Is Alleged to Have Made This Wise Observation:**

## *If You Don't Advertise Your Business, the Sheriff Will*

We Are Confident of the Future, Are You?

FOR ADVERTISING RATES AND DATA

Write: THE BROADCAST ENGINEERS' JOURNAL

116-03 91st Avenue

Richmond Hill 18, N. Y.

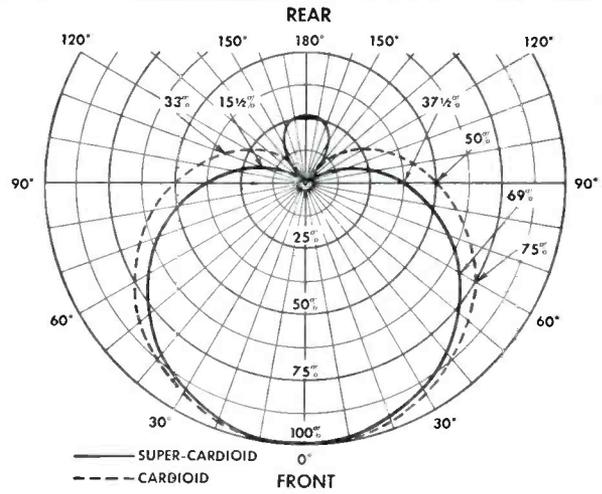
# Broadcast Radio Engineers

who want

this →

specify

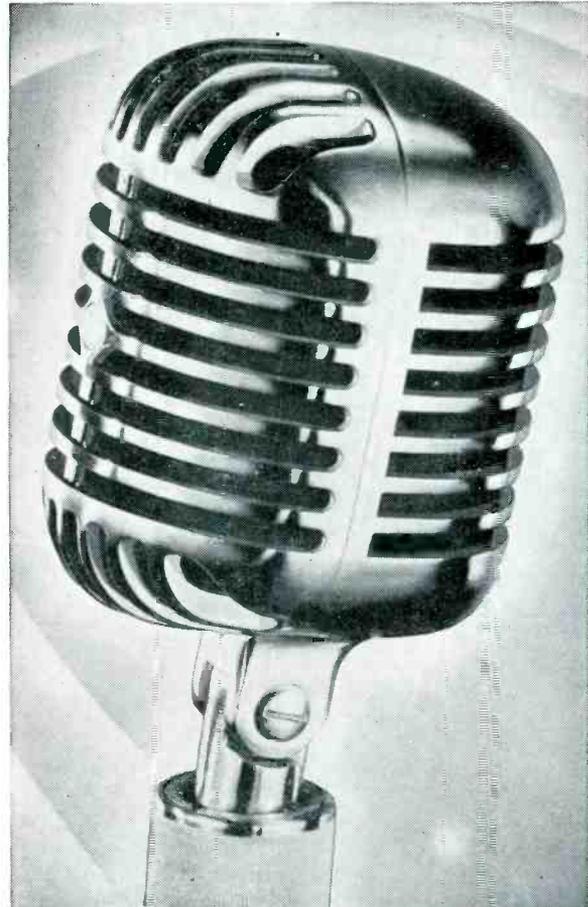
this →



**because** the Shure Super-Cardioid Broadcast Dynamic Microphone has a super-cardioid pickup pattern which reduces the pickup of unwanted random noise energy by 73%. It is twice as unidirectional as the cardioid. In the super-cardioid pattern, the ratio of front-to-rear pickup is 14 to 1—in the cardioid, 7 to 1. There is a wide, useful pickup angle at the front of the microphone while the rear response is down of the order of 15 db over a broad range of frequencies. Reverberation energy pickup is decreased over two-thirds. The microphone can be placed close to the reflecting surfaces without objectionable effects if the rear side of the microphone is toward the reflecting surface.

The Shure "556" Dynamic Microphone has an Acousto-Mechanical circuit containing a single moving-coil element, which operates in conjunction with a high flux magnet and provides high efficiency and smooth peak-free response from 40 to 10,000 cycles. The super-cardioid pattern is achieved in a single unit, due to the "Uniphase" principle—a patented Shure development. The moving-coil unit is provided with a double wind-screen to permit quiet outdoor operation. As a precaution against mechanical vibration pickup, the unit is spring-suspended inside the microphone case, which in turn is floated in live rubber in the special Vibration Absorbing Unit, which eliminates reproduction of vibration transmitted through the stand. The microphone also has a standard 5/8"-27 thread which permits mounting on any Shure desk or floor stand. Adapters to other stands are obtainable when needed. Case dimensions: 4¼" high, 3¼" wide, 3½" deep. Shipping weight, 4½ lbs.

Patented by Shure Brothers, Inc.



## SHURE SUPER-CARDIOID DYNAMIC MICROPHONE

MODEL "556"

Code: RUMUB • List price \$95.00

MULTI-IMPEDANCE SWITCH ON MODEL "556"

IMPEDANCE TABLE	OUTPUT LEVEL
L—35-50 ohms	56.1 db below 1 Milliwatt per 10 microbar signal
M—150-250 ohms	56.8 db below 1 Milliwatt for 10 microbar signal
H—High Impedance	57.5 db below 1 volt per microbar

# SHURE BROTHERS, Inc.

MICROPHONES AND ACOUSTIC DEVICES

225 W. Huron Street

Chicago 10, Illinois

CABLE ADDRESS: SHUREMICRO

**POWER AND  
IMPEDANCE  
MEASUREMENTS**

# DAVEN

## OUTPUT POWER METERS

*of unexcelled accuracy and reliability*  
have many applications

TYPE OP-182



Impedance Range: 2.5 ohms to 20,000 ohms. Remains essentially resistive over frequency range of 30 to 10,000 cps. Accuracy  $\pm 5\%$ .

Power Range: 0.1 mw. to 5 watts in steps of 0.1 mw.

Indicating Meter: Calibrated from 0 to 50 milliwatts and from 0 to 17 db. —Zero level: 1mw.

Meter Multiplier: Will change reading of indicating meter by ratios of 0.1:1, 1:1, 10:1, 100:1, or decibel reading by -10, 0, +10, +20.

The DAVEN Output Power Meters are designed to measure the actual power delivered by an audio signal system to a given load. However, because of the characteristics of the circuit, they are admirably suited to other applications, namely:

1. Determination of Characteristic Impedance of an A.C. Source.
2. Effects of Load Variation on a Signal System.
3. Transmission Line Equalization Measurements.
4. Measurement of Insertion Loss in Multi-channel Mixer and other complex circuits.
5. Filter and Transformer Measurements.
6. Radio Receiver Measurements.

The equipment shown on this page is built to DAVEN'S well-known standards of precision. Please write for more detailed data. Let our engineering department help you on specific problems.

TYPE OP-962



Characteristics similar to OP-961, except that it can measure up to 100 watts.

Impedance Range: 40 selected impedances between 2.5 and 20,000 ohms. Accuracy  $\pm 2\%$  over frequency range 30 to 10,000 cycles.

Power Range: 0.1 mw to 100 watts in 0.1 mw steps. Range may be extended below 0.1 mw by use of external amplifier.

Indicating Meter: Calibrated from .01 watt to 1 watt and from -10 to +10 db. Zero level: 1mw.

Meter Multiplier: Extends range of meter from 0.01 to 100 times scale reading.

TYPE OP-961



Impedance Range: 2.5 ohms to 20,000 ohms. Remains essentially resistive over frequency range of 30 to 10,000 cps. Accuracy  $\pm 2\%$ .

Power Range: 0.1 milliwatts to 50 watts in steps of 0.1 milliwatts.

Indicating Meter: Calibrated from 1 to 50 milliwatts and 0 to 17 decibels. Zero level: 1mw.

Meter Multiplier: Extends the power reading of the indicating meter from 0.1x to 1,000x scale value, or the db. reading from -10 to +30 db. in steps of 2 db.

THE **DAVEN** CO.  
181 CENTRAL AVENUE • NEWARK 4, NEW JERSEY