

THE BROADCAST ENGINEERS' JOURNAL
ED. STOLZENBERGER, EDITOR
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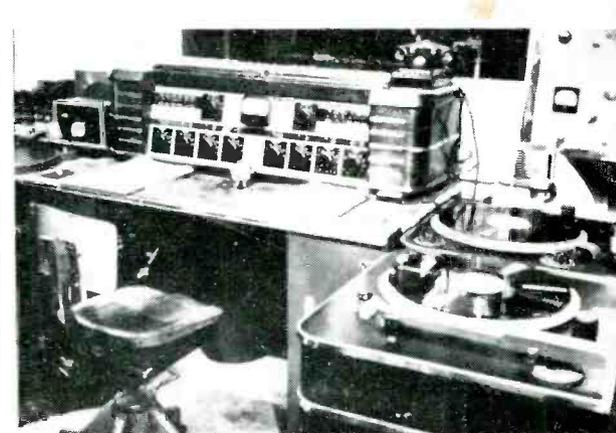
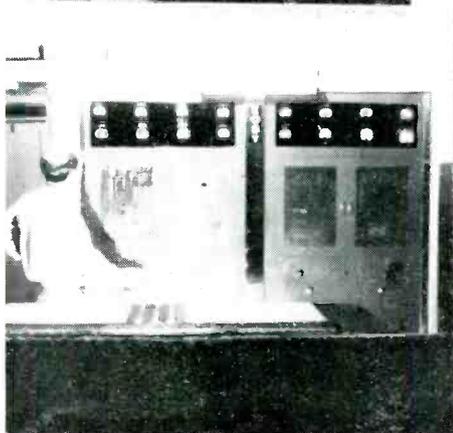
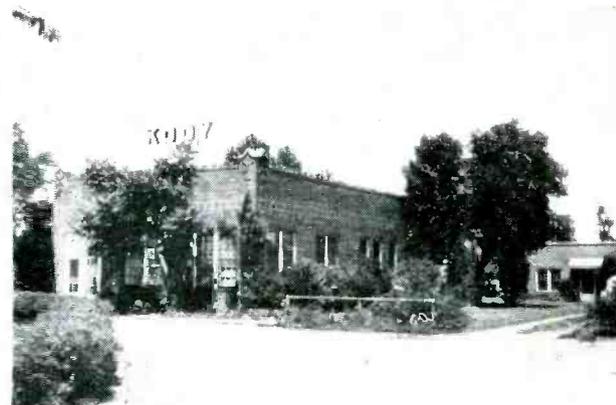
Official Publication of the National Association of Broadcast Engineers and Technicians

The Broadcast Engineers' Journal

Since 1934... Of, By, and For the Broadcast Engineer

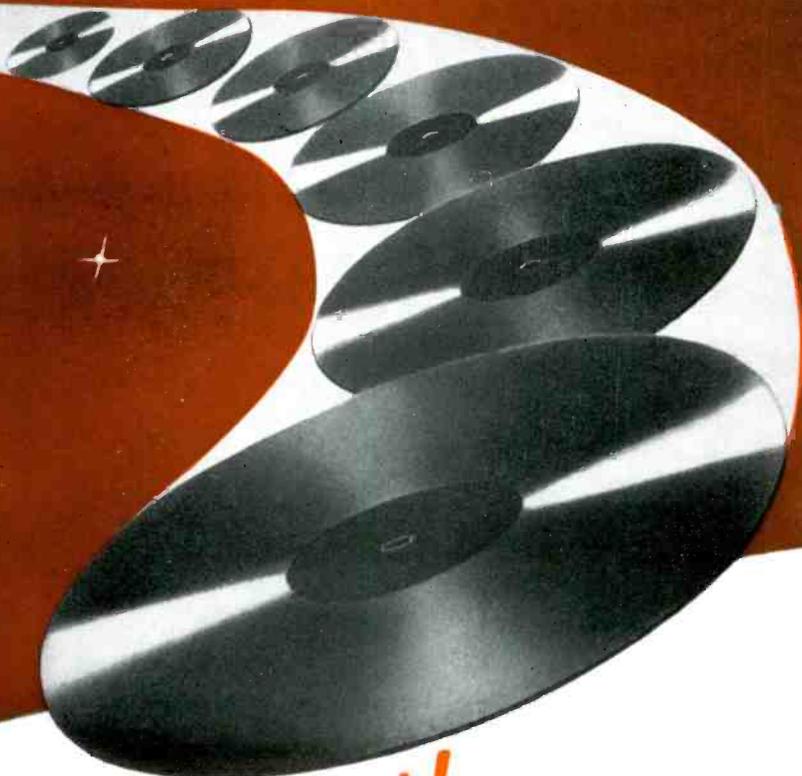
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No. 2**



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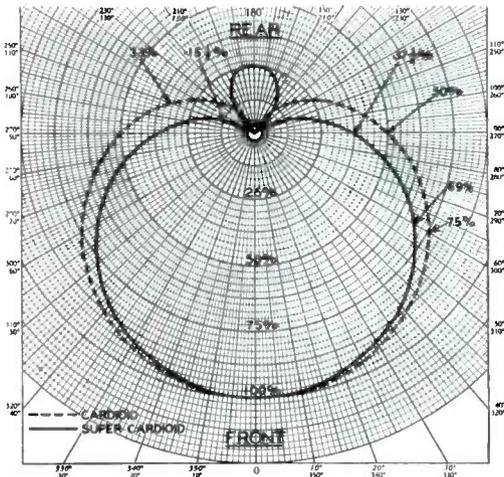
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THE BROADCAST ENGINEERS' JOURNAL

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Volume 13, No. 2

February, 1946

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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 free to subscribers. All remittances in advance. Foreign: Add postage. Back copies 50c, back Yearbooks, \$2.00.

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NATIONAL N.A.B.E.T. OFFICE
 Room 501, 66 Court Street, Brooklyn 2, N. Y.
 A. T. Powley, President

NABET ACTIVITY

To the Editor:

IN a recent issue of the "Broadcast Councillor" I note that IBEW is taking credit for the network wage increases. By what stretch of the imagination this conclusion is reached is beyond comprehension. It has been readily admitted by radio engineers throughout the industry, IBEW members as well, that NABET led the way to better wage scales and working conditions. For many years IBEW has been crying about low wage scales for engineers,



A. T. Powley, President, NABET

but nothing was ever done about it. In many cities throughout the Country, NABET'S scales are above IBEW'S scales. A good example is Detroit, Michigan, where the highest IBEW scales are \$20.00 per week below that of NABET.

According to Section 1.01 of the IBEW-CBS contract, a provision was made whereby the contract could have been opened in September of 1944 for the readjustment of wages. However, no action was taken by IBEW at that time. It was not until IBEW

learned that NABET was negotiating for a new contract in September of 1945 that the decision was made to reopen the CBS contract and at a date following the conclusion of NABET'S negotiations. In New York we heard many statements to the effect that IBEW was holding out for \$130.00 per week, which figure it was claimed they intended to strike for. However, it seems that the intestinal fortitude was lacking, because after five days' deliberation the contract was signed, granting an increase which was 39¢ per week above our top scale. It now appears they are bragging about this 39¢, after NABET was instrumental in increasing the prevailing \$85.00 per week scale to \$110.00 per week.

In the face of NABET'S accomplishments, IBEW still pleads with our members to join forces so that they might help and protect us. Let us be frank about this so-called "help" which is offered. It is not that IBEW wishes to help us, but it is a fact that they need us to help them. The past years have shown that NABET can take care of itself, and shall continue to do so in the future.

(Continued on Page Four)

National Association of Broadcast Engineers and Technicians

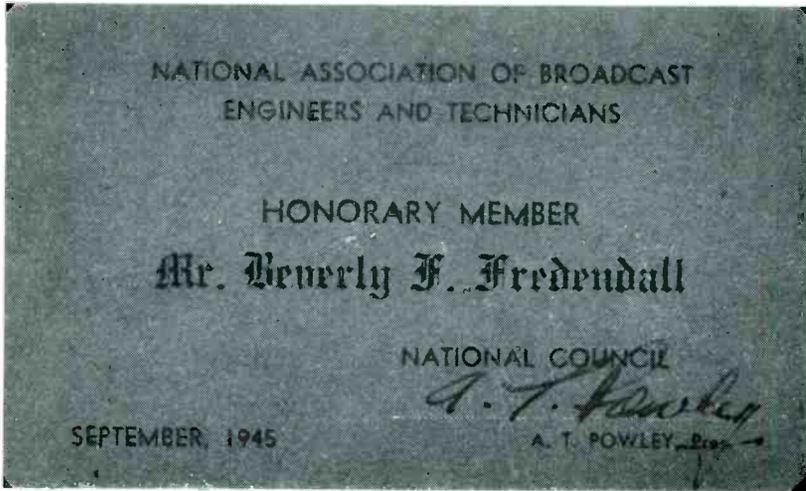
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the
BROADCAST
ENGINEER

Attention Broadcast Engineers!

- NABET is a dignified union *worthy* of your support.
- NABET is an *effective* union, Of, By, and For the Broadcast Engineer *exclusively*, operated upon and dedicated to the principle that every member has a *right* to know what is going on in the union's "front office."
- NABET is controlled by its *members*; they have the right to vote on all matters of union policy. As a NABET member, you would have the *right* to Okay any actions which your President might take.

Contact any of the following officers for further information

- | | |
|--|--|
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Exact-size reproduction of NABET's first Honorary Membership card. The printing is black against a gold background.

NABET gets things done! On January 2nd, President Powley left for Schenectady, N. Y., to complete final negotiations with WGY. On January 7th Powley telephoned the good news that the WGY contract was signed, providing substantial increases and retroactive pay. NABET GETS RESULTS!

Mr. Powley also advises that Harry Hiller had gone to Syracuse, N. Y., to negotiate the WAGE contract; negotiations completed and contract signed. NABET GETS RESULTS!

The NABET strike at WSAY, Rochester, N. Y., continues, with employer Brown ridiculous to the point where the Government, through the 8th Division NLRB, has itself placed an unfair labor charge against Mr. Brown and WSAY. NABET expects to get results in this case too.

The Muzak contract was signed during the latter part of December, 1945.

Mr. Powley was liberal in his praise of our recent Yearbook issue; it is our pleasure to pass on his commendation and appreciation to every member of the Journal's national staff; congratulations for a job well done!

For information about NABET, write to any of the National Officers listed on page three.

Dep't of Justice video-monopoly charges against Scophony, Paramount, General Precision Co., DuMont, 20th Century-Fox, et al, closer to settlement; DJ opposition seems to be toward Scophony's exclusive licensing of other defendants to total exclusion of others in video field.

Saludos: Non-discriminating bonus of 7½% to 15% depending on length of service, etc., paid by RKO to its Managers and Ass't Managers whether or not unionized (MPTOM&AMG).

WIND—Chicago, seems to have what might be a practical solution to the old howl, "the peepul own the airwaves, but have difficulty getting air-time." WIND proposes to set aside one hour a week, no charge, no advance presentation of script for "approval"; takers only required to post \$100,000 bond to protect WIND against possible libel suits. Seems fair, sounds logical, and will take one of the gripes away from the various anti-radio factions.

Look for NAB to make most of Petrillo's latest foolishness, and try for generalized anti-labor legislation. Look for organized labor to challenge broadcast license renewals wherever there is evidence of anti-union discrimination, on the basis that labor and the public interest are synonymous.

Our recent thought-provoking article by Jordan McQuay titled, *Television: Production and Programming* should have been pre-faced by an editorial foreword to the effect that the statements and opinions expressed were primarily those of important agency people, expressed extemporaneously at an impromptu gathering. The New York trade-paper *Variety* of Jan. 2, 1946, carries an interesting item expressing various agencies' views on television. This item related plans of top agencies, indicating: *much expanded activity, preponderance of commercial time has been on film, few think television not yet ready, several agencies "watching and ready to jump," one large agency all-out for 100% film, and ready to spend money in that direction.* We are satisfied that Mr. McQuay did an accurate job of reporting. We do not recommend discounting too glibly the opinions of the advertising agencies because of any imagined lack of experience; most of the agencies are well staffed with radio, theatrical, and movie production experience. Television is an advertising medium; as in other media, the advertiser gets what he wants and what he is willing to pay for; the maximum influence will come from his advertising agency, based on their experience and other data. The necessary "television experience" can and will be bought by the agencies (and the new-comers to television broadcasting) when they are ready to use it, in exactly the same way that Hollywood bought its "sound experience" with the advent of the talkies.

ALWAYS BONUS CHRISTMAS! We are pleased to quote from the ABCO News Release of Dec. 18, 1945: "Today, Dec. 19, (1945-Ed) the American Broadcasting Company, Inc., is presenting Christmas bonus checks to all employees who have been with the company one year or more. Checks will be presented simultaneously in New York, Chicago, Hollywood and San Francisco." It is good to note that ABCO AGAIN DID NOT discriminate against its unionized employees. Congratulations ABCO!

Being a normal good citizen and having worked for almost twenty years, we naturally have a bankbook and a couple of shares of stock. In the mail, we received a bunch of literature from General Motors relative to its labor troubles. As a stockholder, we have some natural sympathy for the other side of the story; but this literature should have been printed on transparent paper! It was too easy to see through. The GM claim is that their profits and their financial well-being are none of the workers' business, and cannot be considered in arriving at wages. Well! This is a very strange about-face! We have no trouble remembering the ruthless paycuts, and cuts on top of paycuts, during the early thirties—ALL BASED ON REDUCTION OF INCOME AND EARNINGS. Employers themselves have created the policy of relating salaries to company earnings and income. All that labor appears to be trying to do is to catch up.

F. R. "Fritz" Rojas took on a new title effective with our Yearbook: Consultant on Business Policy. The new title more clearly defines the function, and was effected at that time to avoid confusion with Yearbook Sales Coordinators. Rojas' wide experience and proven business judgment continue to serve Nabet and the Journal well. We are proud of his continued active association with the Journal.

Tom Gootee, recently returned from technical and literary travails with the Army, has re-joined the Journal Staff as Art and Editorial Consultant. He has formerly been Chicago Associate Editor, and is probably best-known for his "Dr. Killfidget" stories. A nationally recognized writer, he is uniquely qualified for this new post.

Former Circulation Manager for this Journal, Ted Kruse, back again among the ranks of civilians. He is still reluctant about undertaking the duties of Circulation Manager again because Nabet's ranks have since doubled, and circulation problems increase roughly as the square of the membership increase. We have been doing his Circulation Manager's job since he's been gone, and know what we're talking about! We hope that he can be talked back into the job.

The 1946 Winter I. R. E. Meeting

Largest Radio Engineering Show Ever Held — 87 Technical Papers —
Over 4,500 Engineers Attend Four-Day Technical Meeting

By Ed Stolzenberger

PRESENTING a panoramic view of the new world of electronics, the Institute of Radio Engineer's mammoth Radio Engineering Show, which was held in connection with its annual Winter Technical Meeting, Wednesday, January 23, to Saturday, January 26, on two floors of the Hotel Astor, New York, represented the largest exhibit of its type ever shown. More than 4,500 radio and electronic engineers attended the four-day gathering.

As a preview of an electronic "world of tomorrow," the 170 exhibits of new devices by 135 companies included everything from the latest developments in radio receivers to the latest Frequency Modulation and Television transmitters, from a preproduction model of a camera for the photographic recording of patterns which may appear on a cathode ray oscilloscope screen to "packaged" antennas, easy-to-erect 30-foot antenna towers and 150-foot masts.

Radars and radar devices for peacetime use, AM and FM radio, television, sound recording, communications, photography, vacuum tubes, magnetic recording, remote control devices, testing devices, time and heat control devices, rectifiers and converters, electronic navigation and direction finding instruments, and X-ray equipment were a few of the many categories of electronic equipment featured in the exhibit.

Summaries of Technical Papers are presented alphabetically by authors' names

No papers are available in preprint or reprint form nor is there any assurance that any of them will be published in the Proceedings of the I.R.E. and Waves and Electrons, although it is hoped that many of them will appear in their pages.

29. Consideration of Frequency, Power, and Modulation for a Long-Range Radio Navigation System.

P. R. Adams

(Federal Telecommunication Laboratories, Inc.,
New York, N. Y.)

The general suitability of various types of radio transmission are examined with respect to the requirements of a long-range aerial navigation system. By long-range navigation is meant, primarily, transoceanic navigation over distances of the order of 1500 miles.

The characteristics of short waves and long waves are separately and thoroughly analyzed with the help of considerable data which have been tabulated for this purpose. Data on other important factors are also considered, such as on signal field strength, in particular, for transmission below 300 kilocycles, also on atmospheric noise intensities, and on antenna radiating efficiency. A certain number of conclusions are obtained from these discussions. Modulation and other problems such as corona effect are also considered.

7. Phase and Frequency Modulation—A New Method.

Robert Adler

(Zenith Radio Corporation, Chicago, Ill.)
and

F. M. Bailey and H. P. Thomas

(General Electric Company, Syracuse, N. Y.)

The design of frequency-modulation transmitters has been simplified and their performance improved by the development of a new phase modulator tube. In a concentric structure of conventional dimensions, a radial electron stream is shaped into a wave-like pattern which progresses continuously around the cathode. The development of the tube is reviewed. A description is also given of a commercial frequency-modulation broadcast transmitter making use of this tube together with a discussion of the design features involved.

8. Antenna for Frequency-Modulation Station WGHF.

Andrew Alford

(Consulting Engineer, New York, N. Y.,
formerly Radio Research Laboratory, Harvard
University, Cambridge, Mass.)

An antenna of a new type is described. The radiation is horizontally polarized and essentially omni-directional. One radiating element gives considerable gain over a dipole in the vertical plane. Design data and test results are discussed.

45. Broad-Band Antennas and Direction-Finding Systems for Very High Frequencies.

Andrew Alford, J. D. Kraus, A. Dorne,
and J. Christensen

(Radio Research Laboratory,

Harvard University, Cambridge, Mass.)

Methods have been developed to obtain broad-band antenna operation with low standing-wave ratio for frequency ranges employed in radar. The description of these methods includes directional antennas, an-

tennas with circular polarization, slot antennas, nondirectional antennas, and also direction finders giving instantaneous visual presentation of direction for the same frequencies. These direction finders are usable over wide frequency ranges without any antenna adjustments and have a pickup sensitivity comparable to or exceeding that of a half-wave dipole. Examples of homing devices for use on airplanes are given.

34. Design of a Small-Size High-Voltage Rectifier, Type 1Z2.

George Baker

(National Union Radio Corporation,
Newark, N. J.)

The new factors in the design of a small size, low-current rectifier tube for operation at several kilovolts are considered. The filament must withstand large mechanical forces produced by the electric field. The anode is shaped and processed to minimize cold field emission that, if uncontrolled, would result in large reverse current and high-velocity electrons striking the glass. The dielectric losses and leakage currents in the glass must be kept within limits.

84. Magnetic Recorder as an Adjunct to the Home Receiver.

S. J. Begun

(Brush Development Company,
Cleveland, Ohio)

4. Basic Principles of Underwater Sound-Equipment Design.

Captain R. Bennett

(U. S. Navy, Bureau of Ships,
Navy Department, Washington, D. C.)

The general subject of sound navigation and ranging is discussed in outline with some emphasis on the historical side of this little-known field.

The use of sonic and supersonic echo ranging and detection equipment for location of submarines is discussed briefly with special emphasis on the general principles of systems. Some of the special problems in this field of general interest are presented for information and possible study.

50. Electronics in Naval Warfare.

Captain R. Bennett

(U. S. Navy, Bureau of Ships,
Navy Department, Washington, D. C.)

A general survey of the use of electronic equipment in naval warfare is given with special emphasis on the progress made during the war. An attempt is made to show the interrelation of military uses of equipment

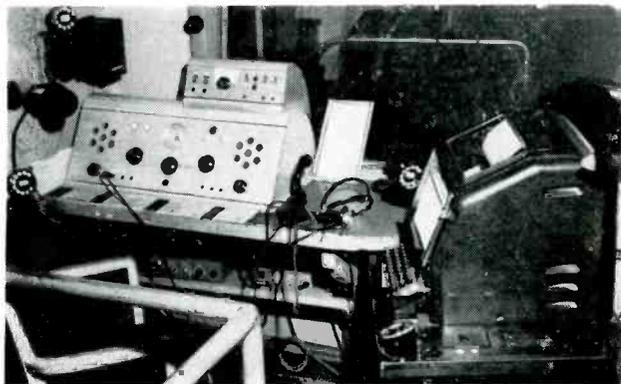
“ to NBC in the Pacific” By E. L. Parkhurst

NBC Master Control, San Francisco

IN THE summer of 1944, it became evident that the increased war activity in the Pacific area would lead to more and more “newsworthy” broadcasts from that area. In order to permit the efficient coordination of these broadcasts, two of the smaller studio control rooms in San Francisco’s Radio City were set aside for the more or less exclusive use of the respective ABCI/NBC news and special events departments, and the required technical modifications were made by the San Francisco Maintenance group. The facilities were duplicated in both studios, differing only in minor items as dictated by the methods of operation of the individual networks.

As originally installed, these control rooms and their associated mixers, were equipt to switch on a selective basis, a maximum of 4 incoming Nemo lines, two of which were permanently assigned to NBC and ABCI network program. The first modification, then, was to increase the nemo facilities to 10, thus allowing the selection of any of 8 special incoming programs. Of these 8 circuits, the last 6 were normalled to incoming circuits from the Pacific area, with the necessary attenuators, equalizers, etc., included as part of the normalled circuits.

The next requirement of the program departments was adequate and extensive monitoring and “talk-back” facilities to all expected pick-up points. To meet this demand, special control panels and consoles, or “school-desks,” were constructed by the local cabinet maker, and installed at one end of the producers’ table. These control panels mounted two 6 in. loudspeakers, their volume controls, two 12 position monitor selector switches, a 6 position talk-back circuit selector switch, carrier, local and network talley lamps, a Telecron clock, operated from the studio precision clock system, and a bank of jacks for headset monitoring. The dual monitor speakers allows the special events coordinator to follow two circuits at the same time, and the talk-back system allows the coordinator to talk to any predetermined point where such facilities are available. At the time these activities were started, all outgoing and incoming communications and conversations were subject to censor, so, in addition to the two circuits to each remote point, a third circuit, known as “censor monitor,” was installed, and appeared on one of the monitor selector positions. The coordinator, while in communication with an over-seas pick-up point, would monitor this censor loop—as long as he heard his own voice, or his own program, if that was the case, he knew he was passing censor



OK—if the circuit was “dead,” the censor had the outgoing circuit intercepted.

The monitor amplifiers are standard RCA Type MI 12209 6-watt amplifiers, mounted on a shelf beneath the “desks”.

The “talk-back” amplifiers are NBC type ND 300 AAGC amplifiers. One amplifier suffices for each studio—the talk-back selector switch is arranged to connect the output of the AAGC unit to the desired outgoing circuit, while the input remains connected microphone to AAGC unit at all times. One point on the talk-back selector switch is arranged to connect ALL outbound circuits together, so that the coordinator can talk to ALL points simultaneously, as is occasionally necessary. Operation of the talk-back button on either the microphone stand or the “school-desk,” picks up the relays associated with the selected circuit, and also operates muting relays in all nearby loudspeaker circuits.

The use of facilities from several of the Pacific area is on a “joint” basis, as far as NBC/ABCI are concerned. These “joint” circuits terminate in the equipment room in the low side of a 1:4 coil and equalizer. The high side of each coil feeds a “delta” pad, which provides the “split” facilities, as well as isolation between legs. Each leg feeds, via a variable attenuator, the proper Nemo job. The various associated monitor circuits—those on the school-desks, Announcers’ ACBs, news room monitors, as well as loops to the Recording room, also are fed, thru isolation resistors, from the high side of the 1:4 coils.

One set of joint facilities were routed to and from San Francisco from the commercial company’s plant in the Hollywood area. This I point out, only to emphasize the fact that SOMEONE knew that San Francisco could and would do a better job of coordinating than anyone else on the Pacific coast, Hollywood contemporaries notwithstanding.

Most of the over-seas pick-ups require rather heavy filtering, to eliminate the usual high frequency back-ground and circuit noises. An NBC Type NA21 variable frequency filter is installed in the circuits, between “Nemo job relays out” and “Nemo program relay in”. These filters are adjusted for best broadcast quality under the existing circumstances.

On occasions, it is necessary to present these overseas programs by delayed transcription, depending on conditions at the time of origin. Therefor, dual transcription turntables were installed in each control room.

A control room-studio interfone, the usual battery of private line telephones, and a leased-wire teletypewriter machine complete the similar installations in each control room.

The NBC decided that on certain occasions, it would be necessary to have control of the network and/or the local station, KPO, in the hands of the special events coordinator. A “pent-house” was added to the NBC school desk, upon which were mounted controls whereby the regular outbound network channel, a special outbound channel, and the local station channel, in any combination, could be fed Nemo program, overseas program, or local “flash” announcements, under direct control of the coordinator.

CHICAGO CORN FROM A COB REPORTER *By* K. A. SLOBB

HERE we go again. Will start off by explaining about the list of names you see in a prominent place on this page. I've tried to compile a list of "hams" in the Chicago Engineering Staff of NBC-ABC. I've listed the calls alphabetically, so I hope you guys in other chapters will cut the list out . . . paste it in your Callbook or have it handy near your operating position so you can look for these calls. Since ten meters is the only band open at the present, I've also designated the fellows who are presently on 10 phone. You fellows out on the West Coast shouldn't have any trouble contacting us here in Chicago, but we will have to wait to talk to the East Coast until the other bands are released by the FCC. Incidentally, don't be surprised when some of the calls sign Wilmette or Glenview or Elmhurst instead of Chicago . . . they are Chi suburbs. I see in the 1946 Yearbook that Thor LaCroix, W6LN, will attempt to coordinate our amateur activities, so write to him.

There is much activity here about amateur radio. As you can see by consulting the list

of Chi hams, several fellows are on ten now, and many more are designing their post-war rigs . . . buying parts and receivers, and generally making ready for 20 and 40 meters to come back on. Three of the boys have picked up RCA AR-88D communication receivers, and they are very happy with their buys. These were bought on a "deal," which only the three guys concerned can fully explain.

Ed Golec and I have put in our orders for HQ-129 Hammarlund receivers, and several others are interested in this job, I understand. Marvin Eichorst is putting an R9 signal into the West Coast and Hawaii. I happen to know about this, as I talked to an old friend of mine, K6OQM, over Ike's rig. Bill Cole and Jim Platz are buying parts, Roger Parker is troubled with parasites, and Hugh White, Dick Wehrheim and Ralph Brooks have been heard QSOing on ten. Jim Lato is worrying along with his old receiver, but will get a new one as soon as they come out. Bill Schooley is dealing in surplus radio equipment in a small way. Incidentally, many of us had high hopes

for surplus equipment, but so far haven't found any big bargains except tubes and small stuff like that.

While on this parts subject, and without trying to plug any one distributor, I think it is in order to sincerely thank Sam Poncher of Newark Electric Company on behalf of the Chicago guys for his generosity on Christmas.

Quite a few changes in the past couple of months. Paul Moore has returned from the Army and resumed his job as Transmission Engineer. Two of the studio engineers have come back from the Army also . . . Fred Shidel and Lester Washburn. I'll try to have something more about these three in next month's issue.

In the process of getting these three ex-servicemen back to work, three military replacements had to leave. Al Johnson and Art Cunningham have already gone, and Tom McEwan is scheduled to leave for the Army in the middle of January.

Speaking of men coming back from the service, there is a considerable influx here in Chicago aside from Engineering.

The NBC Announcing Staff is complete now, with the exception of Dick Noble who is in Shanghai, China. ABC Announcing Staff has a couple back also, including Tom Casey, who brought back a trick of making little paper birds with wings that flap when you pull its tail. This little gadget drove us nuts, until we got the hang of folding the paper. One night four engineers were all sitting around in the lounge trying to fold these little birds when the telephone rang. Someone answered it this way . . . "Primary Department."

The stork made a couple of landings during the month of December. Larry Balsley announced the arrival of a son, Lawrence Edward Balsley, born December 10, 1945, and weighing in at seven pounds. Ralph Knowles is the proud father of a seven pound, eleven ounce baby boy born December 19, 1945, and named Michael Hugh Knowles. Congratulations to both!

Glenn Webster, ex-Master Control engineer, and now with Collins Radio, paid us a visit during the month. Glenn is getting along fine, likes Cedar Rapids very much, and had many interesting tales to tell of what Collins is planning for the Post-War market.

Studio D here in the Mart is in the process of being revamped. The Austin Company, who seems to be the contractors, are making extensive changes, and while the place is still in quite a mess they seem to be giving the walls the parabolic treatment.

Do you know what Santa Claus says to his reindeer when he wants them to go faster? "Get the lead out of your prance!"

How would it be for all NABET men who are hams, or say all NBC or ABC engineers who are hams, to have some distinctive sign or emblem on their QSL cards? I don't know what the answer is . . . I haven't been able

W4IDK/W9	Bill Beeson	NBC Maintenance
W5GDW/W9	Don Fitch	NBC Studio
W6ULQ/W9	Harry Eckland	ABC Studio
W9AFA	Ralph Brooks	NBC Maintenance*
W9AL	Thur Bombaugh	WENR-WLS Transmitter
W9AT	Ed MacCornack	ABC Studio-Field
W9BGI	Vern Mills	NBC Master Control
W9BRX	Emerson Squires	WMAQ Transmitter
W9BU	Bill Cole	NBC Master Control
W9CIU	Fred Shidel	NBC Studio Control
W9CP	Ralston Miller	NBC Studio Control
W9CTN	Charley Corliss	ABC Studio-Field
W9DBT	Bob Whitnah	WENR-WLS Transmitter
W9DVV	Bill Anderson	ABC Studio-Field
W9FQ	Bill Cummings	ABC Studio
W9FVV	Jim Lato	NBC Maintenance*
W9GG	Dick Wehrheim	NBC Recording
W9GN	Ralph Davis	NBC Master Control
W9GY	Jim Platz	WMAQ Transmitter
W9HGY	Aryl Aldred	NBC Maintenance
W9IT	Ed Holm	ABC Studio*
W9KDI	Roger Parker	NBC Recording
W9KQS	Minor Wilson	NBC Maintenance*
W9LEP	Hugh White	NBC Trans. Eng.
W9MV	Paul Moore	NBC Master Control*
W9RUK	Marvin Eichorst	NBC Op. Supervisor
W9SBC	Ted Schreyer	WENR-WLS Transmitter
W9SSS	Jim Mehren	NBC Studio
W9VGA	Ed Golec	NBC Master Control
W9WS	Russ Sturgis	NBC Maintenance
W9WXY	Howard Newbouer	ABC Studio
W9YMZ	Kermit Slobb	WENR-WLS Transmitter
W9ZWU	Harvey Kohnitz	

* 10 Phone.

to think of anything . . . although NBC might use the NBC mike with the sparks emanating from same. Don't know what the ABC engineers would use, since we don't want to always buy Chesterfield. Think I will write to LaCroix about this matter. If you have any ideas for designs, why not write to LaCroix yourself. His address is in every BEJ.

Here is some dope from RCA Recording. Jack Penninger has transferred to Chicago from New York. We also welcome a new RCA Recording engineer, Richard M. Bayne. Dick comes to us from recording work in San Francisco, I believe. Sorry I can't report more about him this time. Maybe next month.

The Chicago boys have voted to give Frank Schnepfer, our Chairman, a \$500 Victory Bond, in appreciation of his efforts on our behalf during contract negotiation, etc.

This leads me abruptly into the meat of this column. It is rumored, and the sources are fairly reliable, that the Chicago NBC Production Men who engaged in strike-breaking activities during the recent NABET strike were presented with \$125 wrist watches . . . suitably engraved and presented with the compliments of NBC.

Bonus time came around this year and left many happy and many unhappy. ABC employees, all of them, were extremely pleased with their bonus, which was bigger and better than before, and given on an im-



First awards in the NBC Central Division suggestion contest have been presented to six employees, with the top honors going to James H. Platz (right), master control supervisor. Platz's winning suggestion concerned the conversion of the NBC chimes buttons on all studio banks at the master control desk from black to red, thus preventing accidental ringing of the chimes. He was presented with a \$25 Victory Bond and a Certificate of Award by Harry C. Kopf (left), vice-president and general manager of the Central Division.

partial percentage basis. NBC, however, gave a peculiar bonus which did not include contract employees such as Engineering and Announcing, and left many persons extremely unhappy about the whole thing. NBC Engineers now seem to be the only Network Engineers not receiving a bonus. The WLS-WENR transmitter boys got a bonus . . . half from WLS and half from ABC or WENR . . . but quite a bit smaller than the ABC bonus would have been for their particular salary bracket. It certainly seems that those boys out at the transmitter are entitled to everything that studio men get, and maybe more.

There has been no action on ABC supervisors for Chicago, although I understand that was an unwritten part of the contract.

At a General Meeting, December 11, 1945, here in Chicago, Charles Butler, former ABC engineer who was ABC Production Man during the time of our strike and who was proven guilty of charges of engaging in strikebreaking activities, was fined \$1,000 (6% interest until paid) and given a 2 year suspension from NABET ranks. This is strictly a token, to keep you boys in line.

Although the "fees" clause was stricken from our latest contract, NBC last month issued an edict against any NBC employee accepting "gratuities" from outside sources. One hour lunch still sticking.

73 for now . . . Kermit Slobb

FCC Release No. 86162

The Federal Communications Commission has announced the establishment of a Laboratory Division within its Engineering Department.

The new division will study the civilian uses of radar as they affect frequency allocations, will conduct wave propagation and allocation studies, develop new monitoring equipment, test all types of transmitters for type approval, test diathermy and industrial heating equipment.

Chief of the Laboratory Division will be Charles A. Ellert, who is now technical supervisor of the Radio Intelligence Division (RID). Willmar K. Roberts, engineer-in-charge of the Laurel (MD.) Laboratory of the Field Division of the Engineering Department, will be assistant chief.

Functions of the new division will be correlated with the work of the Technical Information Division and other divisions of the Engineering Department.

"The recent FM hearings demonstrated the need for the type of work which the Laboratory Division will do on wave propagation," George Adair, Chief Engineer, pointed out today. "The information developed by other groups was either too general or too restrictive to serve the purposes of the hearings. Adequate information would have enabled us to shorten the hearings at a substantial saving of time and money to both the Government and industry."

Testing of diathermy equipment will be done to prevent such apparatus from interfering with radio communications. The Commission recently emphasized that diathermy equipment manufactured since May 25 of this year will be required to operate without the three frequency bands designated for that purpose in the Frequency Allocation

Report of that date with reasonable suppression of harmonic radiations. The Commission also stipulated that if the equipment is operated outside those bands, it must be operated in accordance with prescribed engineering standards to prevent interference to the various communication services including military, police, aircraft, and other services of particular importance in safeguarding life and property. Equipment manufactured prior to the above date will be permitted to operate indefinitely as in the past except that where interference will result from such operation steps necessary to eliminate the interference will be required.

Pending the promulgation and adoption of Standards of Good Engineering Practice, the Commission will test for type-approval diathermy equipment submitted by manufacturers designed to operate within one or more of the frequency bands allocated for such equipment. Equipment found to be capable of operation within one or more of such bands with reasonable suppression of harmonic radiations will be included in a list made available to the public. Although inclusion of equipment on the Commission's list of type-approved equipment will not constitute a guarantee of performance, it will afford the purchaser reasonable assurance that under normal operating conditions the listed equipment can be expected to operate within a band or bands allocated for such equipment.

Mr. Ellert was graduated from the Baltimore Polytechnic Institute in 1922, and received his degree in electrical engineering at Johns Hopkins University in 1925. He joined the Westinghouse Electric and Manufacturing Company at East Pittsburgh as an engineer in the educational department in the same year, specializing in developmental radio engineering work including pioneering

in frequency modulation and television. At various times he served as assistant chief engineer of KDKA, engineer-in-charge of the Radio Transmitting Laboratory, radio engineer of the Experimental and Developmental Section and radio engineer of the Marine Transmitter section.

In 1930, after an eight month period as instructor in radio theory and operation at a commercial radio school, he was appointed radio inspector with the Radio Division of the Department of Commerce, which is now the Federal Communications Commission. In 1937 he was appointed inspector-in-charge of the Third Radio District with headquarters at Baltimore.

When the National Defense Operations Section of the Commission was organized in 1940, he was made supervisor of the Central Atlantic States Area and successively held the positions of Traveling Supervisor-instructor and Technical Supervisor in the Radio Intelligence Division. He has been in charge of training new personnel for the RID, the special classes held for the military and for the Coordinator of Inter-American Affairs involving selected Latin-American radio representatives.

Mr. Ellert has directed many field investigations leading to the seizure of the operators of illegal or clandestine radio stations.

As a hobby, Mr. Ellert has taken all the courses given by the U. S. Power Squadron in piloting and celestial navigation work and has been an instructor in these subjects for several years.

He is an associate member of the Institute of Radio Engineers and has served as chairman of the Baltimore section of that organization. He is a resident of Baltimore.

The Laboratory Division will be located on the Commission's reservation at Laurel, Maryland.

hallicrafters *new Model* S-40

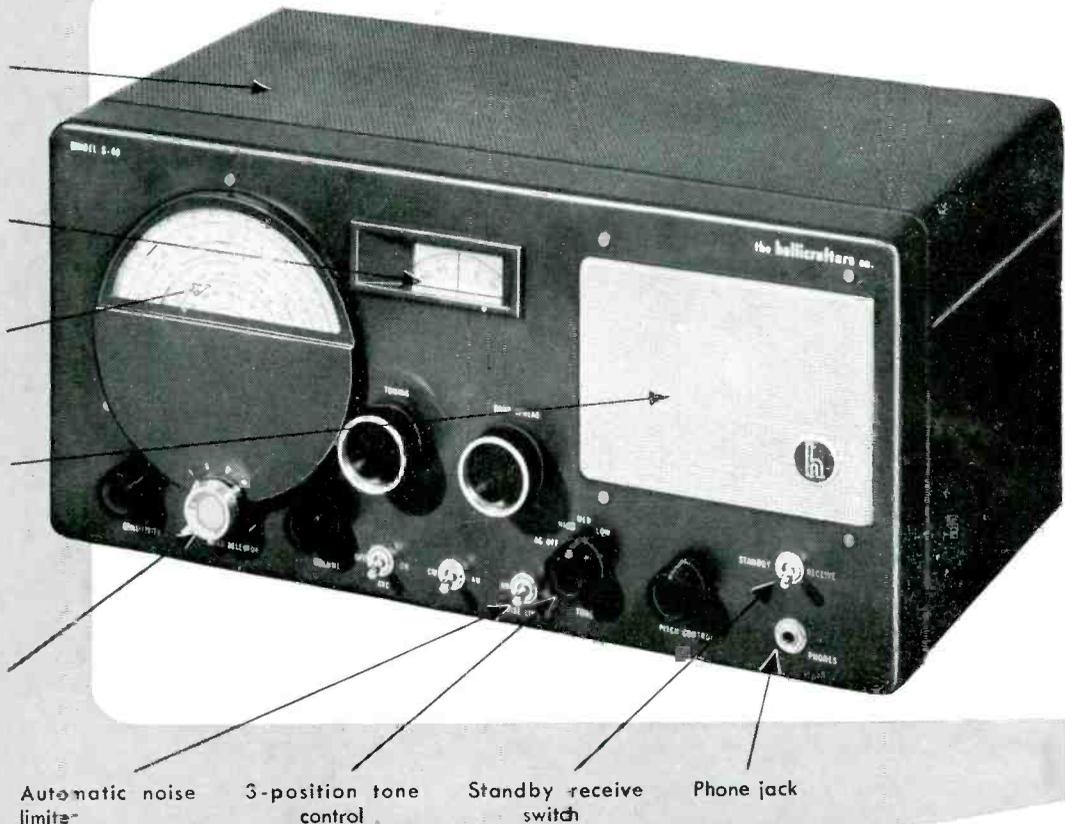
New beauty and perfect ventilation in the perforated steel top

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Self-contained, shock mounted, permanent magnet dynamic speaker

All controls logically grouped for easiest operation. Normal position for broadcast reception marked in red, making possible general use by whole family.



Automatic noise limiter

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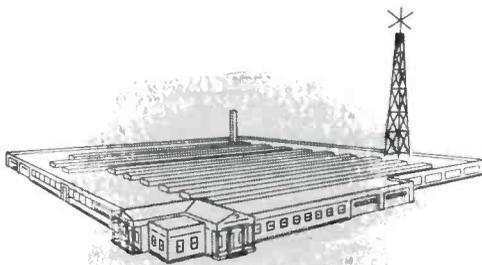
Phone jack

(APPROXIMATELY)
New design, new utility in a great \$79.50
new communications receiver . . .

Here is Hallicrafters new Model S-40. With this great communications receiver, handsomely designed, expertly engineered, Hallicrafters points the way to exciting new developments in amateur radio. Read those specifications . . . it's tailor-made for hams. Look at the sheer beauty of the S-40 . . . nothing like it to be seen in the communications field. Listen to the amazing performance . . . excels anything in its price class. See your local distributor about when you can get an S-40.

INSIDE STUFF: Beneath the sleek exterior of the S-40 is a beautifully engineered chassis. One stage of tuned radio frequency amplification, the S-40 uses a type 6SA7 tube as converter mixer for best signal to noise ratio. RF coils are of the permeability adjusted "micro-set" type identical with those used in the most expensive Hallicrafters receivers. The high frequency oscillator is temperature compensated for maximum stability.

From every angle the S-40 is an ideal receiver for all high frequency applications.



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This Report Comes To You By Way of **San Francisco**

By Jack Van Wart

THE first peace-time Christmas has come and gone so quickly that we hardly realize its significance. It seems like it was only yesterday that the Japs said "Uncle" but it must have been quite a while ago because we are seeing a lot of familiar people once more in civilian attire. Those who were fortunate enough to have been able to celebrate this first peace-time Christmas at home include Hal Wolf of the NBC announcing staff, Herb Haley and Hugh Turner of the ABC announcing staff. We also have word that Eddie King will leave Toyko January 1, and hopes to be back at work at NBC soon. Incidentally, both Hugh Turner and Herb Haley eat, sleep, and talk "Ham Radio." They were in PAA radio and Merchant Marine radio, respectively. Hal Wolf put his two silver bars and his Marine uniform in the moth balls after almost three years of duty. In NBC engineering, Bob Woods has returned. Bob was an apprentice when he left to join the Army, and returns as a group 2 in the studio-field group.

During the bond drive last December, NBC offered a \$100, a \$50 and a \$25 bond to those holding lucky numbers in a drawing. The numbers were distributed one with each \$25 bond bought. The engineering department copped two of the three. Tom Watson took the \$100 and Oscar Berg, the \$25. Just to make everything look OK, Greig McRitchie of the NBC staff orchestra got the \$50.

The fellows on the ABC staff (the Always Bonus Christmas Network) were pleasantly surprised just before Christmas when they received their Bonus Checks!

Earl Sorensen and Don Hall who hold down the maintenance and Master Control during the Wee hours could have saved a lot of mullah if they had really done their Xmas shopping on their half day off. They were off from 4 a.m. to 8 a.m. Sunday morning.

We are seriously considering founding a super exclusive club to which a select few throughout the country would be eligible for membership. A suggested name is "Chimes On the Blue" club open only to those NBC engineers who have caused the "Bells" to be heard on the ABC. All those interested, communicate with Harry Puccetti, NBC S. F.

On the ABC announcing staff there is a talented young fellow by name, Jack Webb. A while back a series of cartoons started to appear, with his initials attached, that gained much acclaim. It all started when the company sent out a directive making it compulsory that all ABC announcers remain in the booth on all standbys. The first cartoon pictured an announcer Chained to a mike with the balloon comment stating that he had given the best years of his life for "This." Then Jack turned his efforts toward the engineering staff. Samples of his work will soon be seen in this column. Upon investigation, my men learned that Jack did time in the Walt Disney studios in Hollywood, where his job was to put the Ears on Mickey Mouse.

I would like to take this opportunity to extend the thanks of the entire San Francisco Chapter to our local officials and to introduce them to other NABETIANS throughout the country. Our Chairman, Mark W. Dunnigan, is a studio-field man for the ABC. He commutes from Oakland where he has made his home for many years. The secretary-treasurer is Russell C. Butler, also an Oaklander. Few realize the amount of work involved in this job. To mention a few of his responsibilities, there is the collection of local and national dues; filling out the membership cards; writing the letters to the national offices and to other chapters, and distributing copies of our minutes to the other chapters. Elma Oddstad has generously taken on the task of keeping the minutes and typing them. The councilmen are the Contact men of the organization and deserve

the appreciation of all. Harry Puccetti is the representative of the NBC studio group. Harry lives in Millbrae, about twelve miles down the peninsula from SF. John R. McConnell is the councilman for the ABC studio men. He is a resident of Mill Valley in Marin County. The supervisors are represented by Ernest E. Jefferson. "Jeff" is almost a resident of Suto Forest in the center of San Francisco where he says that he has his own private hole in the fog. At the KPO transmitter it is Mort Brewer, at the KGO transmitter it is Kendrick Martin, their journal correspondent, and lastly, Roy C. Fell at the Dixon Shortwave Transmitters. We also have many committees whose job it is to handle such matters as grievances, membership, etc. Our sincere thanks to all for a job being well done.

Now that photographic supplies have become more plentiful, Andresen has promised more of his fine pictures for use in the Journal.

Syd Blank got tired of walking recently and bought a '36 V8. He says that is a lot easier to meet that 4:45 a.m. appointment at Radio City now.

Frank Barron is back, hale and hearty, after a harrowing experience with a perforated ulcer. Frank was in the hospital nearly a month, of which three weeks were supposed to have been his vacation.

Sam Melnicoe of the maintenance department, is eagerly awaiting the FCC approval of an application for a station in San Jose. Sam is going to do the engineering of the station and is also financially interested.

Frank Oliver has a new hobby, or maybe it is not a hobby. At any rate, he has developed a recording stylus sharpening technique and is open for business. Since he did not have the skill of lapidary, he had to resort to mechanical means, so built up jigs to put the just-right angles on the sapphires.

Don Hall has just completed a recording amplifier for the Santa Clara University. It



"Lucky" Berg, left and "Lucky" Watson right, shown receiving the bonds they won in a recent bond drawing. Also receiving a \$50 bond from Bond drive chairman Florence Crowell is Greig McRitchie of the Orchestra.



KPO Engineer Russ Butler and Announcer Frank Evans present Lionell Hampton with a birthday cake on the occasion of the 6th anniversary of the bandleader's first hit, "Flying Home". The hit tune, incidentally, had sold well over a million copies at last count.

is to be used in the Theology school to aid the prospective Fathers in their public speaking classes.

Mr. C. E. Kilgore, the ranking supervisor in these parts, has his very own phone now. With that revealing bit of reporting, I will

lay the dictionary away for a month and get ready to go out and have a turkey sandwich with Andresen. CUL.

NEW YORK TELEVISION

By
Jack Irving

ABOUT the most ambitious project undertaken by the mobile unit in recent months was the Army-Navy game at Municipal Field, Philadelphia. The unit did the fights at St. Nicholas Arena Friday evening, the Army-Navy game on Saturday and professional football at the Polo Grounds on Sunday. Our guardian angel had her fingers crossed.

A new song entitled "Plank by Plank" and a little too boisterous for publication here, was inspired when the heavy television truck sank in the mud to the hub caps and finally necessitated the laying of a corduroy road of planks over the soft ground.

Inasmuch as the camera units arrived at the stadium at 6 a.m., the crew perforce was there, too. Six a.m. at Philadelphia Municipal Stadium in winter in a cold drizzle is apt to put a slight strain on the love field men have for their sports assignments. An hour or so later, when the sun came up to give its all and hot coffee arrived on the scene, the picture developed a definitely rosy hue.

Cort Snell and yours truly are using toothpicks to keep their right eyes open because of the peep sight view finder we used to sight the 40-inch lense.

The Bellevue-Stratford and the Benjamin Franklin hotels looked with worried eye at the mud-spattered, sports-shirted crews marching through their fashionable lobbies, and no doubt breathed a sigh of relief when this motely crew checked out with no damage done.

Lugging planks for the makeshift road and

purchasing stadium boots for the cameramen did not hurt Burke Crotty's stock in the field. Speaking of Crotty reminds us of the fine showing he made at the Election Day broadcast. The image orth camera was being used and as there is no P. L. connection, Crotty was directing the camera by waving his hands. As Burke signalled "pan left, more left and more left" the camera finally picked up Burke frantically waving his arms. Burke celebrated his debut as an actor in the transmitter room where Frank McArdle was presiding over a pot of cold tea. The Theater Guild denies having offered Burke a contract.

Don Pike asks us to remind you gentlemen that he is a Captain in the bond drive and would like to become a general. So look him up.

"Petticoat Fever," directed by Fred Coe, was so good that even Eddie "The Mole" Hoffmeister, impressario of 5-F, enjoyed it.

Maggie Snyder kept her promise to the boys and brought her cousin and friend to the Christmas party. They reside at the Barbizon and are reportedly short of silverware. So if you have any extra knives or forks, Miss Snyder is acting as the collection agency. For some unknown reason, Tom Smiley made extensive preparations for the party, too.

Ollie Fulton is breaking in on lights, and Russ Nies will go to maintenance.

The Bill Waterburys are expecting in February.

The 3-H Coffee Clotch is now being sup-

ported entirely by Al Protzman. The boys own an electric coffee pot and the studio breaks are spent seeing who can brew the best coffee. The coffee, suger and milk were formerly provided through popular subscription.

Eddie Wilbur arrived at the Army-Notre Dame game prepared for any contingency. He had a large box of aspirin. A long length of coax that opened just before game time, gave him a chance to use most of his pain killers.

New faces in the field and studio, most of them Army or Navy returnees, are: Gene Hand, Lou West, Ollie Fulton, Sidney Davidson, Dusty Rhodes, Don Pike, Cliff Paul, Jack Burrell, Stan Peck, Joe Conn, Lou Climent, John Bangs and a Mr. Stevenson, whose first name we will announce in the next column.

During rehearsal for "You Can't Take It With You" one of the actors was to pretend to light a string of firecrackers. By some mischance, he actually did light the firecrackers, thereby providing a ten minute break.

Fights, basketball and hockey will take up most of the time of the mobile unit during the winter months. A special broadcast from Washington will be done early this month.

Our 3-H correspondent informs us that George Neumann recently took the name Down Under too much to heart and put his first plate Down Under—the table. It was the waitress's fault, of course.

WASHINGTON NEWS •

By
John A. McCollom

WRC Master Control was the scene, recently, of a heated argument between W. Van Beuren de Vries (former Washington correspondent for the Journal) and yours truly. Van thought the field of engineering offered him insufficient opportunity for the acquisition, some day, of real wealth. Violently disagreeing, I cited the example of an engineer who not long ago retired with a fortune of \$60,000.00. This not-to-be-sneezed-at sum had come through diligent work, enterprise, courage, initiative, attention to duty, exacting efficiency, prudent investment of his savings, and the death of an uncle who had left him with \$59,999.50. Van Beuren de Vries was still unconvinced, however, and soon thereafter joined the staff of WMAL as producer, giving us the cue to say, "Good luck, Van, and thanks for a swell job on the Journal and Yearbook."

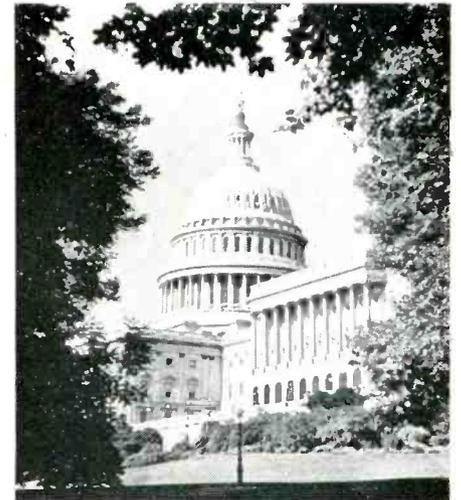
The Washington Chapter welcomes the addition of the eighteen studio and transmitter engineers of WOL. We take pleasure in introducing to their fellow NABET members, C. Andrick, W. Bell, T. Belote, J. Ballinger, M. Cooper, W. Cornell, A. Hallum, W. Herman, R. Kaplan, G. Malpee, J. Neff, E. Samaha, R. Stottlemeyer, M. Ward, Z. Bogar, C. Mengle, B. Miller, and H. Stark. Stand up and take a bow, boys—all except Ballinger who spent the Christmas holidays on Fulton Lewis's farm overindulging in horseback riding. He since has been riding gain in the correct posture for taking the hurdles.

Returning from the Services to the jobs they helped protect come Lt. (j.g.) Ralph Hamill after nearly three years' work with

airborne radar systems and electronic bombing devices to resume his post of Junior Control Supervisor for NBC; Lt. Commander William Simmons who concluded three years of operational radar work with navy patrol plane squadrons when he returned to his S.E. job with NBC (Bill was in Japan on V.J. Day); Lt. (j.g.) Edwin Burg, back to WMAL transmitter after three years as radar and radio communications officer with night fighter squadrons and twenty months overseas duty in the Solomons, Guam, Saipan, and on the carrier Bennington; Capt. Warren Bell of the Signal Corps and Capt. Raymond Kaplan of the Air Corps, both back to WOL from overseas' duty in Italy. To each one a sincere and grateful "Welcome Home."

Deciding that some of these new-fangled contraptions known as all-electric radios might at times fail to perk for people who buy the dern things, Ray Acton and Chet Emerson, who had hitched their star to a stylus, have entered the radio service business. Ray and Chet each has his own shop, and doing fine, too, we hear. Their former duties in NBC Recording are now to be handled by Jim Meline, ex-NBC S.E., and Ed McGinley who returned to us from the Merchant Marine. Glad to see you back with us, Ed, Archie Anspach has moved from WMAL transmitter to Capital Radio Engineering Institute for television construction.

CQ to west coast hams! There are a couple fellows in the nation's Capitol who are looking for you on 28 megs and more are planning to join them. In the case of Sam Newman, W3HN, if you can't hear his 600 watts on 28.448 kc., it's your receiver, Bud.



You needn't bother to adjust your antenna for east coast reception out there; Sam's 3-element beam has taken care of all that. The only thing worrying 3HN is the "you-haven't-heard-anything-yet" signal that Walter Godwin, W3ANJ, is about to unleash. After all, how can any of us, including Sam, compete with a guy who can get everything wholesale? Only W3HLH. Al Sears, remains unperturbed. He merely weaves around QRM with his Meissner signal shifter and you find him where the other guy isn't. Up to the present he hasn't been driven out of the band by any local Behemoth and is likely to drift in on your dial any moment now. Personally, this reporter plans to wait 'till he can put W3CNZ back on 40 cw—and wait—and wait. 73.

This Is Rochester . . . By Art Kelly

THE holidays are over . . . we've all had a wonderful time . . . again the radio industry presented a superlative series of Christmas programs . . . Mr. Stolzenberger's Yearbook was a commendable job and 1946 already gives promise of being a hang-up year.

The Rochester scene hasn't changed very much since last issue except that our guys are thinking of Spring and the activities that go with it. (Please interpret only as written). For instance, Howie Mouatt, Secretary-Treasurer of Rochester Chapter, has sent away for seed catalogues and is making elaborate plans for a combination vegetable and flower garden . . . Hank Boyce of the WHAM Transmitter has the coaster-brake on his bicycle all oiled and is looking forward to lotsa cycling around Canandaigua Lake. Charlie Snyder is buying a small sailboat that will fit snugly on top of his car (mast and sails down, not up) . . . Santa Claus gave my kids a black little devil of a

Cocker Spaniel. I'm awaiting open weather to see what kind of a field dog he will be . . . Fran Sherwood, Chief WHEC Transmitter op, is planning an addition on his house to make way for the Great Dane doggie he has. Fran says an ordinary five room house just isn't large enough.

To be serious for a moment, the Rochester ops are all glad to have Bum Holly back on the active list again. Bum has been on the sick list for about a year. He's OK now and back on the job in the WHAM Control Room.

The WHAM Control Room wants to know if an enlargement of Linda Christian (page 23 of the December Journal) can be had. How about that Mr. Editor or Norm Dewes of Hollywood? And by the way, you Chicagoties also have remarkable taste in things pictorial judging from the pic of Dorothy Claire you published last month. No wonder the peaks run so high out of Chi!!

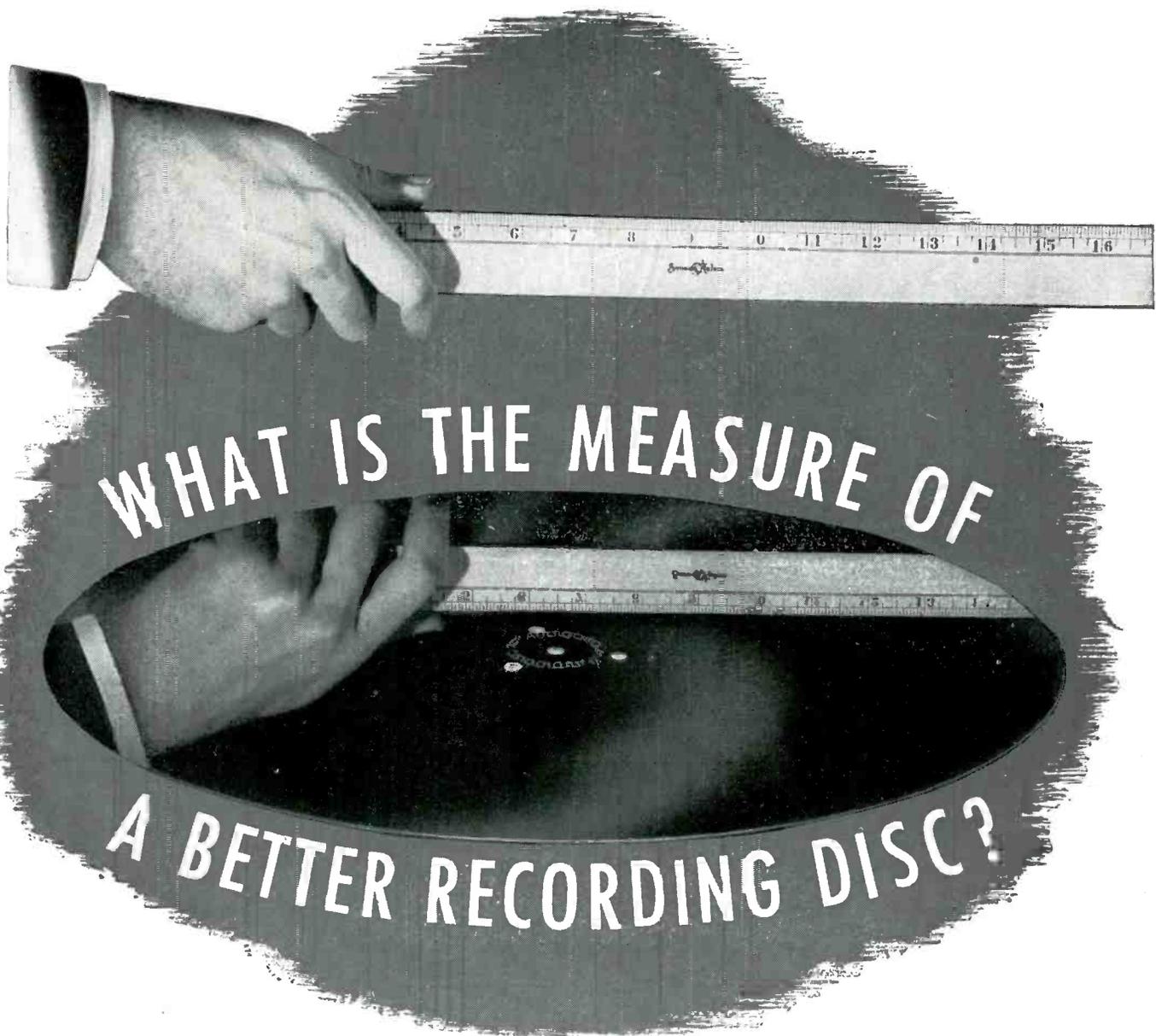
The WSAY-NABET dispute is still in a deadlock in Rochester. There appears to be no immediate solution to the situation.

Walt Harrison and Ray Gondek, both of WHAM, expect to be out of the service by early Spring. Walt is with the Navy and Ray with the Army Air Force.

Allan Barons, WHAM Control Op, is plenty worried by ol' Dame Nature. Al has a very fine Summer home on Lake Ontario. The lake is so high that it is slowly but surely taking over the Barons' Summer estate. Already a brick terrace, consisting of four thousand bricks, has been washed away and now the water is keeping the front porch clean.

Work on WHAM's new Radio City is going along nicely and the day draws nearer when the new quarters will be taken over.

That just about covers the Rochester scene for another month, so until later . . . 73—Kelly.



WHAT IS THE MEASURE OF
A BETTER RECORDING DISC?

JUST by the simple expedient of putting a ruler to a recording disc, you can, in one sense, "measure" recording quality.

The disc must reflect a *true* image. Any imperfection in the reflection means that you can expect corresponding imperfection in recording characteristics. That's just A-B-C.

But a *better* recording disc must possess many other in-built qualities in addition to a flat, smooth, mirror-like surface:

For recording, it must have (a) split-hair accuracy in thickness of coating (b) easy cutting characteristics (c) positive thread-throw with no annoying static and (d) these qualities must not change — *regardless of the age of the disc.*

For playback, it must have (a) brilliant high frequency response (b) no audible background scratch, even after many playings (c) no increase in surface noise from the time of recording to playback or processing.

— *And finally*, these qualities must last as long as the recording

is needed. *There must be no deterioration with the years.*

* * *

You cannot discover these qualities in a recording disc, by any yardstick we know of — except one:

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**By
Jim
Carter**

SEEING as how none of you guys saw fit to criticize me too severely for the stuff and things in this column, we'll try it again. Many of the boys have remarked, "Why don't you write the column like that guy in Hollywood does." I think one "Norman Dewes" should learn of the fans that he has in and around WOR (Hudson Chapter) N. Y., it's really the way the boys on this end of the wire, would like all columns written.

Well this month we have the able assistance of many of our "Paid-up members of NABET (pronounced "Nab it"). Bill Boher M/C, Dick Borner, Raye McEntee, Pete Severski, Skippy Dreisbach, Al Nilson and several others.

Rite on the nose, Bill Boher M/C calls his, "Master Control Dribble." Ed Scatterday recently returned and on the day watch with Bill giving Ed a refresher course on how we do it now for WOR. Bill was heard to remark, "Ed., this puts us back fifteen years when I pointed out to you at WCAE how we did it for Gimbels in Pittsburgh."—Blue-Orange-Green-Brown-Slate Dick Borner of Technical Facilities Division poised with a hot soldering iron in Master waiting the "GA" on the next modification.—Donniez, Hadden, and Boher, trying to figure out the best location for the new "Whisper Filter."—Dennis Connor, Charlie Thropp and Jim Chapman after sunset in Master writing notes to the Day Watch, "Please check this after 9:00 A. M."—Ed. Zajack the all nite M/C with one show "B. G." says, "All that glitters is not Gold" (Don't worry Ed. maybe next year B. G. will have enough Gold to remember you)—N. B. C. and American Masters always inquire if we are members in good standing when we feed or accept test material prior to an exchange of programs.—Johnny Thornton of Mutual in the Master "briefing" always signs off with "OK Pappy" before an overseas job.—Speaking of "Pappy" what's Mullaney of NBC or American doing? Also George Butler? Shades of WINS.—Radio! Ain't it wonderful? Monday through Friday, 9:00 A. M. to 6:00 P. M., you either eat it, rub it on you or perhaps scrub your skivies with it.

These few choice notes via Dick Borner, —Ted Kasna cleaning up on over-time,—New construction in Technical Facilities Dept. now completed with three tone color scheme, etc.—And this I know to be a fact, Dick Davis really busy like a bunny rabbit these days.—Carmen Auditor tied up with the overseas layout and installation for that tremendous Xmas Round The World Pgm,

Hudson Chapter News

that "now it can be told," came off so wonderfully! Dick says that a little bird told him that soon Auditor would be back at his pet diversion of "Drafting."—Some one said that Santa Claus was pinched in Times Square for "_____ under the Xmas Tree."

Raye McEntee says the following: Pres. Yeomans had a little help from the neighbors in heating his house on a recent Saturday morning. It took them no time at all to overdo themselves and just before the fire dept. arrived the front porch was serving as additional fuel. This in no way did any injury to that camera which may be used to snap our features.—Bart Simpson of the old school, yet ever alert, is watching the progress of television. His past experience with sound on film is being utilized at present in experiments. He records a .020 sound track on an eight mil. meter with a response much, much better than 4500.—George Corey our giant lumberman has a new set of muscles. It all happened when his wife sent him out in the woods to cut the winter's supply of wood, George says we are welcome to sit by the fireplace as soon as we buck-saw our share of the wood.—Douglas (Doug.) Hawkins spent the Xmas Holidays with his family at South Hampton. It required the aid of Danny Conover and his car to take Pappy to the train with his Xmas Presents.—Frank Ennis celebrated Xmas with his brother who just returned from overseas in time to make the Xmas dinner.—Has anyone an apartment for Bob Doherty? That appears to be his big problem. He will even move to Yonkers, "Poor Boy."

Ralph Schlegle—Spelled Schlegel—will soon announce the completion of the new Recording, pardon me, Re-recording Room, (Dubbing Room) Ralph wants to make it the latest in equipment and versatility, it will sport Two new Scullys.—The Recording Room sends Best Wishes for a Happy, Prosperous New Year.

The following, by Pete Seveskie S. E.—Mr. Bill Flynn (Alias Errol) is reported to have been seen pacing the floor in the Engineers' Lounge, puffing wildly on cigarettes like an Indian doing a war dance and sending up smoke signals. These terpsichoreal and pyromaniacal manifestations accompanied by hot flashes as attested to by Mr. Flynn himself. Cause—Great concern about impending big show—"Scoops Announcements." And should you hear a magnanimous sigh of relief and the expression "Big Deal" accompanied with a smile that goes around his head, you may be sure that Bill has completed one of his super dooper productions.—And, speaking of complacent, smug grins, Mr. Herb Sutcliffe S. E. is observed these days to be attached to one, and with good cause for Herb is the proud papa of a baby girl. Her name will be (more to follow, we mean; more information to follow)—Well, Herb really sweated this "thing" out and certainly deserves his claim to fame when He says, "Today I am a man." Congrats to both Mr. and Mrs. Sutcliffe.

Right here is as good a place as any to put in a remark your reporter heard Juddy McMahon or Alice (Thrush) Fraser make, to the effect that the above Pete Severskie S. E. might get married in the near future if he could find a place to live, Oh! Oh!

Mr. and Mrs. Herbert Sutcliff S. E. have the darlinest baby girl, Barbara Jean Sutcliffe, born Tuesday morning, 1:41:20:04 A. M. Dec. 18th, 1945. Kew Gardens Hospital, weight 7½ lbs. "Blue eyed, blonde? Giantess, beautiful and so intelligent it is said by a close relative. "At feeding time she wakes up, cocks one eye at the clock, if on the "nose," starts to Woof for production." Good luck and may you have a dozen more like her.

Got a card from Al Nilson F. E. with Gabriel Heatter in Fla. Nice, yes, very nice work if you can get it. While we freeze our ears off up here.

George Brazee, S. E. working so hard, that when I asked him if he couldn't just write me a few lines for this column when he got home, his answer was, "What do you mean, when I get home?"—Max Urlas and Eddie Conklin, those A.B.s from the "T.F.D." have expressed themselves in relief, and now that 14, 15, 16, are finished "It is," says George.

Look what comes to us from the WOR Sound Effects Dept. Miss Dottie Langley S., Jack Keene S., Bill Hoffman S., and maybe others, have put their heads together and come up with what I think is rite nice.

To Nancy With The Smiling Face.
Blessings on thee Little Girl
Sitting with your head awlirl.
Confused to death by all those phones,
But taking calls for Smith and Jones.
Calls for Page Boys, the maintenance crew,
The Studio's hot and the organ won't do.
The Sound man's late, the announcer's gone
dry

And one of the actors wants coffee and pie.
This never lets up from morning till night,
But you remain calm and outwardly bright.
And though all this goes on****and the pro-
grams ne'er stop
With every new show ushering in a fresh
crop.
You're poised and your graceful, 'mid prob-
lems galore
Resplendent in Lord and Taylor decor.
(Nancy the Hostess)

Walt Shaver S., (S for Sound Effects) tells me that Hal Reid S., Mr. James Halleck Reid of Teaneck, N. J., has joined WOR's Best Equipt Sound Dept., and we might add you're in with a smart crew, just look at that verse they turned out.—Next month we are going to show you something that will knock your eye out.—

Here's a little contribution that can not be left out as it was turned into us by an outstanding young man, none other than "Doc" Gene Clark S. E. of the Guild and Longacre Theaters. He (and a million others)

(Continued on Page Seventeen)

From BALTIMORE . . . By William Hoos

DUE to splendid work by National Representative Clarence Allen, the job of securing initial contracts has been concluded in Baltimore, with the signing by NABET and the managements of stations WCBM and WITH. That with WCBM was concluded the middle of December, and is a 2 year contract providing for an immediate increase in salary with a further raise during the second year. Improved working conditions, holiday pay, and a union shop were gained for the 6 men who at present operate WCBM, the Mutual outlet in Baltimore with 250 watts on 1400 KC. We might mention that Al Goldbach has been elected Councilman from the Transmitter, while Sam Houston fills the same post at the Studios.

As for WITH, the agreement is to be signed imminently at this writing, by the

HUDSON

(Continued from Page Sixteen)

would like anyone having an empty apartment to write, fone or wire, information, not to him, but to Pete Saveskie S. E. who to quote Gene, is waiting for a bedroom, parlor and sink so that wedding bells may ring." Gosh, this really does look like business.—Gene Clark S. E. also says he is waiting for weather to clear so he can get up to the country and dig his ham rig out of the moth balls. Ten meter boys look out for his 110 watts! His call W2HTA.—Our new Studios are "The Nuts." Wipe your feet boys.

See what a help it is to hear from so many helpful guys, get notes from all but the transmitter boys, but perhaps they have been shoveling so much snow or something that they couldn't quite make it, better luck next month.

Heard today that Johnnie Garlinger S. E. is quite sick, hope by the time this gets in print that he will be all O. K.—Saw Pat Miller S. E. and he sure should take it easy for a while after what he has come through.

There seems to be one more item left and then I'll call it quits for this time.

Skippy Dreisbach S. E. had a young woman guest in Studio No. 2 booth the other day, the YL was an opr. from the South visiting WOR to learn the tricks of the trade. Well the show was Jay Johnson's, with transcribed commercials piped in from Studio No. 5, so with Jay's cue, Studio No. 5 let the platters spin and Skippy opened his fader. After about the second time one of these "miracles" had happened, the YL could keep quiet no longer. "How on earth is that done" was the question. Well, said our learned master, you see it's this way, we have a high impedance coil in master control, in fact, it's so high that during the "dress" we feed the transcriptions into it and fifteen minutes later they come out at just the scheduled time. "Wonderful invention, RADIO." 73 Jim.

Maryland Broadcasting Company, agreement having been reached between the management and the union as represented by Mr. Allen. Pay increases, continuance of bonus, a union shop and holiday pay are among the features of this contract. Alex Beauchamp is our contributor from WITH and gives their story below.

INTRODUCING WITH — by ALEX

WITH is the youngest radio station in Baltimore, making it's debut March first, 1941. Our studios are located in the central down town area, between the business and shopping centers, just off Sun Square. WITH has been an independent station until Sept. 16, 1945, at which time we became an affiliate of the newly organized Associated Broadcasting system. (ABS)

Our xmitter is located in the uptown section, perched atop of a large building—the only penthouse xmitter in this part of the country. It has its advantages such as, sun bathing and the cool breezes, on hot summer nights. Of course, this time of the year, they become darn cold. At this writing (two a.m.) the mercury has just about drained out of the thermometer.

We are well supplied with xmitters, having a 250W (WE 451A-1) amplitude modulated rig, radiating on 1230 kc's, and a one KW frequency modulated WE503A-1 (call letters, W3XMB) operating on a frequency of 43.4 megacycles. This gives us the distinction of having the first F.M. broadcast station in Md. Those of you who have F.M. receivers, tuning the old band, have no fear of W3XMB moving to the higher band, W3XMB, stays put and is heard daily, 6:30 Baltimore, making its debut, March first, and blows a few condensers, or the frequency divider stops dividing, then we are off the air until parts are found.

WITH operates with a staff of nine Te's—most of them new to broadcast. Four of the M.C. men were trained at the local Radio Institute, namely: Vincent Conary, (M.C. Councilman) Harold (Butch) Stockslager, Robert Parks and Allen Hedrick, (just released from the navy) has rejoined our staff. Victor Guidice, from the Coast Guard, is a new member of the staff of TE's.

The xmitter hermits are John W. Lappe, Gilbert G. Boehl, Albert W. Rhine, Jr., and Otis R. (Alex) Beauchamp. John Lappe came to WITH by way of N. Y. State Police, where he operated the xmitter (calling all cars) and doing a bit of dispatching. Before John became interested in Radio, he was a performer on the stage, traveling the old Keith's circuit. Has played the old Garden, here in Baltimore many times.

Gilbert G. Boehl, arrived about a year after WITH's debut, by way of Bendix and the local Radio Institute.

Al. Rhine, our jr. TE at the xmitter,

worked for a local Radio service shop. He is also a member of the WERS. When Al isn't tuning the K.C.'s, you would be most likely to find him cruising down the bay, in his father's yacht. Not so long ago, Captain Al was using a blow torch to burn the old varnish off the rail of his father's boat. As the story goes, the flame jumped like R.F. to the can of varnish remover, his father was holding. The fire dept. responded promptly, but not before the fire was put out. Not much damage done to the boat—and his father owns a paint store. (plug) so not much loss in the varnish remover.

Otis R. Beauchamp, (Yours truly and xmitter Councilman) better known in radio as Alex, did not arrive. I was here, and they built the station around me. While I never was permanently connected with a broadcast station before, I have done special events jobs for, WCBM, WBAL and WFMD.

Well that's enough for the first time, maybe I can dig down a little deeper next time and uncover some Winchell scoops. Here's hoping to have a long and prosperous association with a swell outfit such as NABET.

WFBR NOTES

There's been a minor epidemic of the gripe among the fellows here. Studio Councilman Bob Briele was home for a week, and as soon as he recovered, the germs took hold of SE Ed Stover who has been unable to work for about 3 weeks. Also at the transmitter, Supervisor Bill Kelly has been in bed for a couple of weeks. This has meant doubling up by the rest of the fellows and quite a bit of shuffling of the watches. We're glad they are all recovered by now.

Congratulations to our star ad salesman for the Yearbook, Eddie Stover, who sold 2 $\frac{3}{8}$ pages of commercials for the big Journal. Here's wishing you even better luck next year Ed. That goes for both Eds—Stover and Stolzenberger.

Our Chapter Chairman, Harry Boone, has just been elected a member of the Society of Model Engineers. This brings the privilege of operating the Society's extensive model railroad system which we understand is quite a layout. This adds another hobby to the interests here.

When we asked the transmitter for news, all we got was that Bill Doster has been able to get a new tire at the end of rationing. Times being what they are, maybe that should be enough for a feature story by itself.

One of our postwar hopes has been realized with the addition of two of the new Fairchild 541 Magnetic cutter heads to our recording room to replace the crystals which we had been using. If these show up as well as hoped, it's planned to replace the rest of the crystal heads with magnetics.

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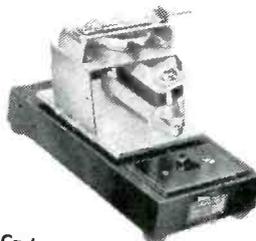


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FCC News Release

No. 85687

In order to permit assignment of thousands of additional calls without exceeding a limit of five symbols, the Federal Communications Commission has approved a new system of assigning call letters to identify amateur radio stations. The station calls will continue to be made up of numerals signifying call areas, preceded by letters signifying nationality, and followed by letters completing a call for each station distinctive from all others. The new system announced today has the approval of the American Radio Relay League.

Under the new system, the number of call areas was increased from nine to ten. Re-assignment of some areas within certain States will be necessary so no division of call area will exist within a particular State and in order to make the various call areas more nearly equal in amateur station numbers. It is also proposed to make full use of the prefix K in the continental United States, rather than in outlying areas only, reserving only distinctive 2-letter prefixes for outlying areas, such as KG6AA to KG6ZZ for Guam and KV4AA to KV4ZZ for the Virgin Islands.

It is fully appreciated that most of the amateurs who formerly held station licenses and who obtain new ones would prefer to be assigned their former call letters and, while the large number of amateur stations renders it imperative to assign calls systematically rather than on a request basis, nevertheless the Commission will continue its policy of assigning the same call to the station of the same amateur whenever appropriate. This principle has applied not only to renewed and modified licenses, but to new ones following a period of inactivity. It is proposed to continue this principle, so that if an amateur obtains a new license for his former location, it will ordinarily include assignment of the former call without change. It is also proposed to extend the principle to minimize any resulting changes so that most of these can be limited to a change in the numeral signifying call area. For example, a former call of the type W9AAA would be succeeded by one of the type W0AAA. It is expected that in a great majority of instances—more than 75 per cent—a former call can be assigned without any change.

The old system of assigning amateur call letters was based on nine call areas, identical with inspection districts long since abandoned. The call area boundaries cut through a number of States, tending to cause confusion and delay in processing applications. The areas differed greatly in numbers of amateur stations with the result that a letter series was exhausted in one area long before half of it was used in another. Particularly unequal was the use of W and K as the initial letters in amateur station calls—the W for all stations in the continental United States and the K only for the relatively small number in outlying locations.

During the war, the operation of some 60,000 licensed amateur stations was discontinued and the station licenses lapsed. It is

Broadcast Engineers'
Journal for Feb., 1946

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anticipated that the licensing of amateur stations will be resumed in the near future, and the ARRL forecasts a rapid increase to numbers dwarfing all pre-war figures. On August 21, 1945, the Commission threw open until November 15, 1945, the band 112 to 115.5 megacycles for amateur operation by eligible operators, and stated that before the end of the provisional period a further policy on future amateur operation will be announced.

The new call areas are as follows:

- | No. | Area |
|-----|---|
| 1. | New England (six States) |
| 2. | New York, New Jersey |
| 3. | Pennsylvania, Delaware, Maryland, District of Columbia. |
| 4. | Virginia, North and South Carolina, Georgia, Florida, Alabama, Tennessee, Kentucky, Puerto Rico and Virgin Islands. |
| 5. | Mississippi, Louisiana, Arkansas, Oklahoma, Texas, New Mexico. |
| 6. | California, Hawaii and Pacific possessions except those included in Area 7. |
| 7. | Oregon, Washington, Idaho, Montana, Wyoming, Arizona, Nevada, Utah, Alaska and adjacent islands. |
| 8. | Michigan, Ohio, West Virginia. |
| 9. | Wisconsin, Illinois, Indiana. |
| 0. | Colorado, Nebraska, North and South Dakota, Kansas, Minnesota, Iowa, Missouri. |

New Thyatron

A new all-metal "midget" thyatron electronic tube, GL-502 A, has been announced by the Tube Division of the General Electric Company's Electronics Dept.

With a net weight of two ounces, the GL-502 A's height is two and one-half inches and its diameter is one and five-eighths inches. Because of its low grid-anode capacitance, the thyatron is relatively unaffected by line-voltage surges.

Compactness and lightweight construction of this thyatron is an important factor in industrial, high-altitude and aircraft applications, according to J. E. Nelson, sales manager of industrial tubes for the Division. Specific applications for the GL-502 A include its use in controlling the speed of fractional horsepower motors, operation with phototubes and in sequence timers and electronic temperature control, he explains.

The GL-502 A is an inert-gas-filled, double-grid thyatron with negative control characteristics. The control characteristic of this tube is independent of ambient temperature over a wide range. It has high sensitivity characteristics because the grid current is low enough to permit the use of a high resistance in the grid circuit.

Further technical data may be obtained on request to Electronics Publicity, General Electric Company, Schenectady 5, N. Y.

Truth Will Out

Money, money, everywhere,

But here, dear friend's, the joke:

A frog-skin isn't famous for

The way it likes to croak:

"Come get me hungry engineer!"

So engineers, we say:

Money, money, everywhere,

So NABET! Now! Today!

—X. Ray.

A

A



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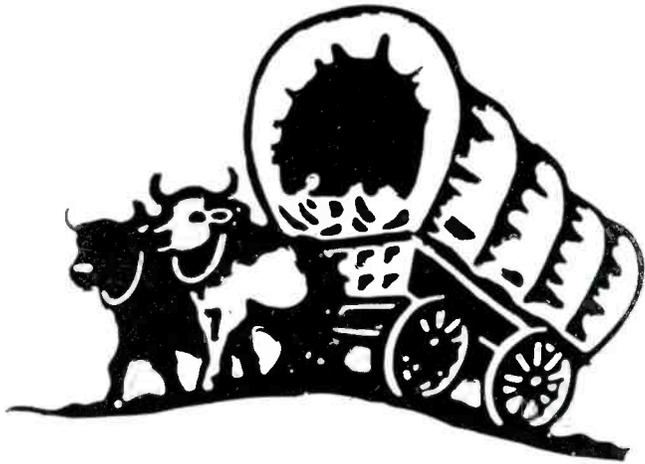
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Omaha News By Bob Rudd

MEET THE BOYS

FOR the past year we have presented the members of the Omaha Chapter NABET and now, starting with this issue, it gives us a lot of pleasure to present the members of the North Platte Chapel at North Platte, Nebr.

The first of the list is **Beuford Eaves** who will in future issues, present the other members of the North Platte Chapel.

Mr. Eaves was born on a farm at Bogota, Texas, August 29, 1909. His father was, besides being a farmer, a hunter and a trapper and **Beuf's** earliest recollections are the trips he took with his father to the woods to hunt squirrels, deer, wild hogs, and on occasion to fish and trap.

In 1919, when he was ten years old, his family moved to Western Texas—near Lubbock, to a small town called Floydada. He attended grade and high school there and helped his father to raise cotton and wheat. He graduated from high school in 1928. Many of the city boys of that day had a "jalopy" to get around in but not **Beuf**—he had a wiry little cow pony that was plenty quick and tough. He rode this pony to and from school and even rode it to his graduation exercises.

His interest in radio goes back to 1926, two years before he graduated from high school. It all came about when he found an old book on the fundamentals of radio, which contained a few diagrams of crystal sets and one and two tube sets. He had quite a time learning to read the diagrams, as no explanation was given as to what the symbols meant. He was unable to locate other books or magazines on the subject so he learned to read the diagrams by association. During the next year he had practically memorized the book and in addition, had come across a



BEUFORD EAVES
Chief Engineer KODY

publication called "The Experimentor". This publication was available on the newsstands and to him, it was quite a find. With the aid of this magazine along with the Science, Chemistry and Physics he was receiving in high school, the "going" became much easier.

Being exposed thus to radio it's odd that **Beuf** decided against radio as a career. Instead, he wanted to be an Electrical Engineer. Texas Tech was a new college located at Lubbock and he decided that he would go there after graduation and take up Electrical Engineering. He entered in the fall of 1928 and just got well into the course when things at home began to look serious; prices of farm products went down so that the crops were not worth harvesting. This meant that the family could no longer send him to school unless he found a job to pay part of the expense. He tried to get a job but nothing was forthcoming so he dropped the course which, he knew now, could never be completed.

This sudden change in his plans was the event that actually brought him into radio. He had an Uncle in North Platte, Nebraska, who was, at that time, Chief operator for the Department of Commerce Airways Radio (now CAA). He had told **Beuf** at one time that if he ever wanted to learn more about radio, he would be glad to teach him what he knew. With this in mind, he went to North Platte, where for the next six months his Uncle instructed him in theory and in the art of sending and receiving. **Beuf** knew the code but he could not read it by sound. He bought every book and magazine he could get his hands on and dug in for all he was worth. The theory was easy for him but he found the code very difficult.

In June of 1929 he decided that he was now prepared to take his first exam for a "commercial second" license and went to Kansas City for that purpose. He didn't qualify for the exam—losing out on the code by one word per minute. He managed to copy nineteen words per minute but after three trials was unable to make the twenty and thus was disqualified from taking the technical portion. He did, however, get his ham license and was issued the call W5IR, the W5 being assigned to him because his home was in Texas.

His next step was to acquire a Super Wasp receiver. This came in kit form and had to be fitted together and wired. After this was done, he got busy on the code in earnest and copied code at night after doing a hard day's work in the wheat fields. In October of 1929 he went, this time, to Dallas, and took the exam again. He passed it "by the skin of his teeth". **Beuf** says he passed the exam quite by accident because the code machine went on a rampage and kept sending faster and faster. The governor on the machine had gone haywire but when the RI adjusted the machine to the correct speed and started it over again, it was so slow by comparison that he passed the twenty word code test without a bit of trouble.

Now he felt that he was all set and that all that was left was to go to work. He felt that he could handle any job that came along. The expected job did not "come a'long," though he tried every station in Texas. He received some encouragement in the form of a promise of a job at a new station that was soon to be granted a license. While waiting for this to materialize, he went to Fort Worth and spent several weeks with the fellows at TAT helping, where he could, in the construction of transmitters to be used in transport work. Nothing came of the promised broadcast job so he went back to the farm.

In April of 1930 he received a letter from his Uncle

in North Platte saying that a broadcast station was being built there and he (**Beuf**) could have a job there if he wanted it! Of course he wanted it but he wasn't going to be hasty this time. He stayed home and waited, then one day it happened! He received a telegram from his Uncle to come to North Platte at once as a job was waiting him there. This was it! He arrived in North Platte May 18, 1930. The only evidence of a station was the hustle and bustle of workmen laying a foundation for a building. There wasn't another thing that even closely resembled anything connected with radio. Time went on and eventually parts were received and assembled by the, then, Chief Engineer, Herbert Spencer. The transmitter was a composite affair patterned after the one at KFAB, Lincoln, Nebraska. **Beuf** really received an education during the next three months. Spencer told **Beuf** what was to be done, then calmly walked off expecting to find the task done upon his return! He usually had the job done but as he says—"I didn't know what I was doing—I spent all of the time we weren't working trying to figure out what I had already done and why it worked or didn't work—as the case might be."

The station was finished at last and went on the air officially July 5th, 1930, with the call letters of KGNF. Weeks went by and Mr. Spencer and his partners in the venture decided to sell their interests in the station. When Mr. Spencer left **Beuf** became Chief Engineer. He was happy at the thought of his promotion but frightened at the responsibility that had suddenly been thrust upon him. He huddled down to the job and from then on lived and slept with the transmitter, building and rebuilding, cussing and discussing it. Some of the circuits used in those early experiments have never been found in any book or magazine.

It was about this time that **Beuf** met the future **Mrs. Eaves**. Her name was **Genevieve Goodmanson**. She had a program of songs and piano on the station at that time and it wasn't long until **Beuf** found himself paying less and less attention to the engineering side of radio and more and more to the program side. Especially that **One** program. He and **Miss Goodmanson** were married in January of 1933. Their first child was born in 1934 and was named **Gerhard (Gery)** for short) after his Norwegian great Grandfather. This same year **Beuf** joined the United States Naval Communications Reserve for a four year hitch.

Things went along smoothly for **Beuf** for the next couple of years and then the owners of the station decided that KGNF needed a new transmitter. He had known it for sometime but it was up to them. He was ordered to get prices on various makes but feeling the prices asked were too high, the management decided that it would be cheaper to have **Beuf** build one. He had been anticipating this very thing for quite a while and had done considerable research and felt that he knew how a good transmitter should be built. Through borrowing what he thought were the good points of all other transmitters and then combining them into one rig, he had the blueprints for what appeared to be the latest and best. It proved later to be just as good as anticipated. It went into operation in November of 1936, and remained so until WOW Inc. bought the station in December of 1943. There were some changes made from time to time, of course, but the transmitter remained essentially the same.

Beuf had reenlisted in the Naval Reserve so in October of 1940 he was ordered to active duty. He reported for

duty in Chicago aboard the Naval training Ship Paducah but was rejected because of defective teeth. He was not released, however, but instead was transferred to the Great Lakes Naval Training base. He went through boot camp there and then was sent on to New York where he was stationed until December of 1941, at which time he was put on the inactive list and shortly after discharged. He returned to North Platte and KGNF in January of 1942.

In December of 1943 Radio Station WOW Inc. purchased KGNF and applied to the FCC for a chance of call letters, power and frequency, and full time operation. This was granted and the station was changed from 1300 KC with 1,000 watts daytime only, to 1240 KC, 250 watts and full time operation. It shortly after became a member of the NBC network.

On December 11, 1943 at 5:15 P. M. KGNF signed off the air and **Beuf**, with the help of his assistant, **Bill Green**, started stripping the transmitter. By midnight of the 12th it was ready for a test on 1240 KC and 250 watts power. Officially **KODY** went on the air at 6:00 A. M., Monday, December 13, 1943. The management had been changed, the call letters had been changed, the transmitter had been rebuilt and **Beuf** was a wreck. **Joe Herold**, Technical Director of WOW, was with **Beuf** all through the ordeal and his experience and suggestions lightened the load considerably. **Beuf** says he could never have finished the job without **Joe's** help and expresses his gratitude to **Joe** for his assistance. The station that went on the air that cold December morning was new in every respect and the only thing that remained original was the building and since then even that has had some changes.

Concerning **Mr. Eaves'** family, it has grown some since the arrival of **Gery** back in 1934. **Gery** is now 11 but he has two brothers and a sister to tease him. Sister **Janet** is 9, younger brother **Jon Michael** is 6, and baby brother, **Beuford Allyn** is 3. **Beuf** is mighty proud of them all but he doesn't have near the time to spend with them that he would like to have.

Right now he is in the middle of a very tough radio and Television course. He says that if he gets through it OK, he will feel that his last fifteen years in radio have been well spent. He is very happy in his work and does not regret for one minute leaving Texas Tech and Electrical Engineering, to go into radio.

Beuf and **Genevieve** own their own home in North Platte. It is located near the station and is close to the business section of town. As for the future **Beuf** says: "Looking into the future and judging from the past, I could want nothing better than to continue to grow with **KODY** and get better acquainted and work closer with the boys at WOW—since WOW and **KODY** are in the same family."

DEWES' DAFFY DICTIONARY

- CONDUCTANCE: A dance done by a duck who's a "con" . . .
- AMP: A female imp . . .
- RELUCTANCE: Doesn't want to . . .
- OHM: Place there's no place like . . .
- SKIN EFFECT: Har!
-

New York NBC News

By G. F. Anderson, Jr.



Photo by Joe Conn

This Is ABC New York

By Gil McDonald

OH, ME aching back! Four days after New Year's Eve and it still seems to be the day after, and again this thing has to be doped out. We still think that Mr. Thomas Gootee would be the proper choice for this labor of love.

Hey, has anyone seen Markle's Bonus check?

The ABC, as you all know, handed out to their loyal employees a handsome bonus last Christmas and many were the gloomy looks that were displayed on the faces of the chappies that are employed by the rival network, meaning weuns.

The local fish and vegetable market has acquired two new customers and lost six old ones. Messrs. Herbert Riedell and Frank Thielker are the two lucky (?) fellas that now handle the 6:00 A. M. Market Pickup. Herb and Frank are supposedly Studio Engineers but we manage to get them out now and then to find out how nice it is to do a show in the wee hours of the morning with a nice cool breeze blowing in off the Hudson River.

Lieut. Colonel Walter Brown, formerly Walter Brown SE, NBC, has been dropping in to see the boys and to talk about his three months' vacation in Florida that he is taking very shortly. Walt is now on terminal leave after his years in Europe with the Army.

A bit of surplus equipment is beginning to appear here and there, James Hackett FE and Ed Schabbehar REC have purchased an Army Signal Corps Signal Generator, tis a cute little gadget, about eight inches square and is crystal controlled.

Westy Westover has an Army Ohmmeter and is rather pleased with it. The rest of us were waiting for the HRO's to be released as we had been told they would be sold for fifty dollars, so when they were released, the price was six hundred dollars. The following remarks were passed by the purchasers to be: "They know what they can do with them" "Keep them" "What" "Aw You're kidding" "Not for Me."

Our skiing enthusiast, Felix 'Chi Chi' Ghirlando has been at Lake Placid for the past two weeks with Lowell Thomas and is now on his way back to New York with stop-overs at Rutland, Vermont, and Pawling, New York.

Chi Chi was at Lake Placid, New Year's along with Claude Clayton. Claude does the Chesterfield show in the studios and the show was taken to Lake Placid for the New Year's Eve Party. Claude looks the same for his three day visit to the land of cold weather and snow.

Every payday it would be worth the time that it would take for
(Continued on Page Twenty-three)

YOU can tell an ABC engineer a mile off these days by the big grin produced by the nice bonus paid by the Always Bonus Christmas network. It really made up for the kidding we take all year round from the boys on that other net.

Bill Simpson tells an amusing one that happened on "Detect and Collect." Seems that one of the female contestants won a skunk coat as her prize. Al Jordan, one of the Ritz stage hands, was off stage with two skunks tied to leashes, and when the MC said, "Lady, you have just won two of the prettiest little skunks in the world." Al was supposed to march on stage with the skunks. But just before his cue, one of the critters bit Al on the hand and ran away, leaving him with only one. Came the cue and out walks the stage hand and one skunk. The walls of the Ritz are still shaking from the ensuing laughter.

Gil McDonald and John MacDonald (Mick and Mac) went over to Times Square a few weeks ago to put on The Real McCoy, a man on the street show. Just before air time at 11:15 at night, the crowd started to gather and as the program continued the mob got bigger and bigger and bigger. Finally the street was blocked and the crowd pushed out into the street and clear across Times Square until the road (I mean Broadway) was blocked and no one could get into the Hotel Astor. The taxis started to honk their horns and the Hotel people started to scream for the police. Well, we got off the air and McCoy and the production man beat it out the back way leaving us there to pack up the nemo stuff. The crowd meanwhile kept watching us instead of breaking up. We finally got out through the drug store on the corner and got out to a cab. Just as we got into the taxi, we heard screaming sirens and the Police riot squad pulled up to the hotel. Somebody nearly had to pay us overtime for sitting in the hoosegow the rest of the nite. This is one of the joys of being a night studio man in New York.

The New Year's advent saw the return of two old friends from several years in the service. Merle Worster, formerly of field, returned to studio as did George Fisher. Both saw plenty of service as Lieutenants (j.g.) in the U. S. Navy. Welcome back, fellows.

Just before the end of the year, two of our war replacement studio engineers checked out after several months of service each. They are Harry Smith and Millard Dickerson. No more. 73. Gil.

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NEW YORK NEWS

(Continued from
Page Twenty-two)

anyone interested in seeing a very special deluxe performance to take a trip to the Immigrant Savings Bank and wait around till Harry Alexander shows up.

As the taxi approaches the bank, with Harry, bells ring, gongs gong, and the guards rush around in a dither. Soon a group of uniformed flunkies rush out and lay a red plush carpet on the sidewalk from the curb to the Cashier's Office. Guards line up alongside the carpet and all pedestrians are stopped till Harry has been escorted into the bank.

As you enter the bank after Harry, you see all the tellers bowing low and the President of the bank comes out of his sanctum and greets Harry.

No one has dared as yet to venture a guess as to what would happen if Harry were to withdraw some money.

In the 1946 Year Book there appeared a full page ad that caused many comments here in New York. The title under the picture was, "It Ain't H. V. Kaltenborn," and the subjects in the picture were Ralph Edwards and New York's Johnnie Pawlek. Johnnie looks as if he was having a time trying to figure out which mike Ralph was going to use next—but don't worry, it won't be a slow fade.

Here in New York we have a new sound effects record—'tis an excellent recording of a person sawing wood—sleeping. Seems that Harry Gabrielson was taking forty winks one afternoon in the lounge and some bright characters lugged a mike up the hall from Studio 5C and had recording make a five minute cut of Gabe pounding his ear. The record is full of snores, grunts and groans with a few comments thrown in now and then by interested bystanders. MORAL—Never sleep on your back while in the lounge.

Anytime now the hall near the lounge will be filled with dots and dashes and assorted CQ's and Testing—one-two-three-four-test. The reason will be a new Echophone receiver that a selected few are trying to have purchased by subscription.

When the Echophone is installed, Jimmie Coleman SE, will bring in an Army SCR 399 that he wants to purchase, and Phil Falcone SE, will arrive with his Tank Receiver that came from France (with him?)

A very interesting discussion took place in Master Control one night recently between one of our feminine engineers and two of the MCD staff. Twas all about how much or rather how little clothing a gal may wear and still be dressed. The conversation stopping remark was "You may take it off here and there, clothing, and still be dressed as long as you don't take it off there and here."

In line with amateur activity, Walter Mullaney FE, is intending to construct a new transmitter as soon as he has enough vouchers to cover the cost, so far all he has is the cost of the chassis and panel for the power supply, George (Andy) Anderson FE, says he has the power supply and the chassis and panel but not the license.

A steady visitor to the Field Shop is McCarrel of Recording, he is always trying to borrow something. Either a mike or a lead or a case to carry the stuff that he has borrowed but as yet not returned—Wazza matta Mac dont'cha have no stuff of your own?

Well, that's all for now, or as we say, 'Field Shop, Mr. Shultis's wire, Anderson speaking.' Bye now, Buy Bonds.

WHAT'S NEW?

By

Jordan McQuay

DON'T expect those radio receivers of new design for several months. General reconversion of all industries running three to four months behind schedule, particularly radio-electrical. Slowdown in reconversion mainly due to strikes; partly due to government slowness in setting wage policies, establishing prices on many commodities. Forecast for new year not too encouraging: Strikes

(Continued on Page Twenty-four)

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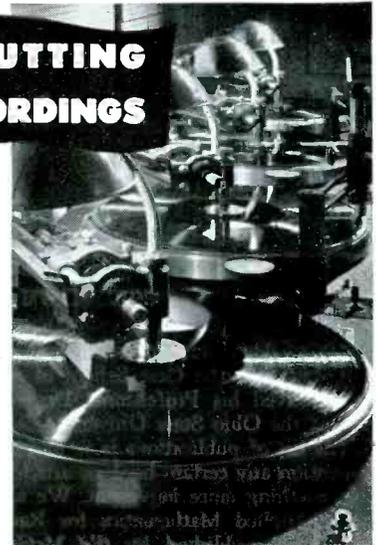
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WHK's Carl Smith

WRITING a biog about Carl Smith is quite an undertaking; it's difficult to decide where to begin. Carl has about seven pages full of degrees, colleges attended, publications to his credit . . . and other unusual accomplishments. And there is where we hit our first snag. The Broadcast Engineers' Journal is a monthly publication which has limitations of approximately 40 pages. That being the case, we'll have to do some trimming as we go along.

We first tried working through from page 1 to 7 . . . That lead to disaster and confusion before we reached page number three. In other words, we got lost before we got out of the State of Iowa. We then reversed out tactics by working from page 7 back to page 1. That didn't work either . . . We still failed to cross Iowa's borders with our Underwood.

Let's try again: Carl was born in Eldon, Iowa, November 18, 1906. That's an excellent time of the year to be born and we have yet to meet a person who says anything but the best of good old Iowa. Carl must have been pretty well sold on the State, too. He remained there until 1930 at which time he received his B.S. in E.E. from Iowa State College.

He then took Post Graduate Courses in the Moore School of Electrical Engineering, University of Pennsylvania at Philadelphia. He next specialized in Communication Engineering at the Ohio State University, Columbus, Ohio. He received his M.S. in E.E.



CARL SMITH — WHK

in 1934. This was followed with Modern Analysis courses in Mathematics at the Case School of Applied Science, Cleveland, O. Carl received his Professional Degree of Electrical Engineering in 1936 at the Ohio State University.

His list of publications is as long as a giraffe's neck. We hesitate to mention any certain book or article. We would be certain to leave out something more important. We will say, however, that his latest book "Applied Mathematics for Radio and Communication Engineers" was published by the McGraw Hill Book Company last July. Carl is now under contract to furnish material for five more books for the same company.

Carl Smith was Chief Engineer of radio stations WHK, WCLE when the war started. He went to Washington, D. C., in July, 1942, where he took the assignment as Assistant Director of Operational Research Staff in the Office of Chief Signal Officer of the U. S. Army. His immediate superior was Dr. W. L. Everett, currently president of I.R.E. Carl did quite a bit of traveling in conjunction with his Washington duties. They were assigned a

B-17 Bomber for this purpose. Trips to the Islands and South America were made by Carl.

Mr. Smith is now back home at WHK where he is Director of Engineering for the United Broadcasting Company. He is in charge of all Research and Development for stations WHK, Cleveland; WHKK, Akron; WHKC, Columbus, and the Ohio Network.

He is president of the Smith Practical Radio Institute. This institute was founded to meet the needs of a large number of Radio and Communication Engineers that wish a systematic presentation of engineering fundamentals in a Practical Home Study Course.

Mr. Smith is a member of the American Institute of Electrical Engineers and a senior member of the Institute of Radio Engineers. He is a contributor to Proc. IRE and other technical magazines.

—B. P.

WHAT'S NEW?

(Continued from
Page Twenty-three)

and labor trouble due for increase unless government steps in. Important industries in which wage increase demands backed by strike threats are yet to come: Radio receivers and parts, electrical appliances, telephones, aluminum, and chemicals.

* * *

The VT proximity fuse—ranking high in war importance—represents another radar development until recently kept secret from the public. The proximity fuse consists of a very small but incredibly rugged radio transmitter and receiver, no larger than a man's fist. Installed in an aerial bomb or rocket projectile, it radiates low-power high-frequency pulses during the flight of the missile through space—operating on the simple radar principle. When echoes of certain timing bounce back from enemy aircraft, vehicles, or the earth itself, they cause energizing of an electronic switch and immediate detonation of the explosive charge within the bomb or projectile. Use of the proximity fuse in aerial bombs causes the bombs to explode *in the air* before striking the surface of the earth; thus greatly increasing the damaging effect through lack of blanketing by surrounding terrain. Similarly, proximity fuses in rocket projectiles causes them to detonate whenever they pass *near* a suitable target; a direct hit on a target is unnecessary.

* * *

Power requirements of the Army's proximity fuse (see above) brought about development of a compact B battery, and a tiny wind-driven generator no larger than a pocket watch. Since the small radar set functions only a few brief seconds, *capacity* of power supply was unimportant. Tiny dry-cells were developed—the size of an ordinary pencil—giving the required A and B voltage. These proved impractical, however, at high altitudes and in extreme cold. The answer was a minute wind-driven generator—complete from recessed propeller to electronic output control—designed to fit into the nose of an aerial bomb or rocket projectile.

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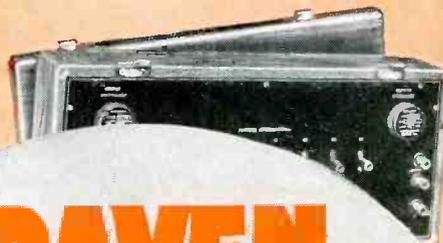
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