THE BROADCAST ENGINEERS' JOURNAL Ed. Stolzenberger, Editor

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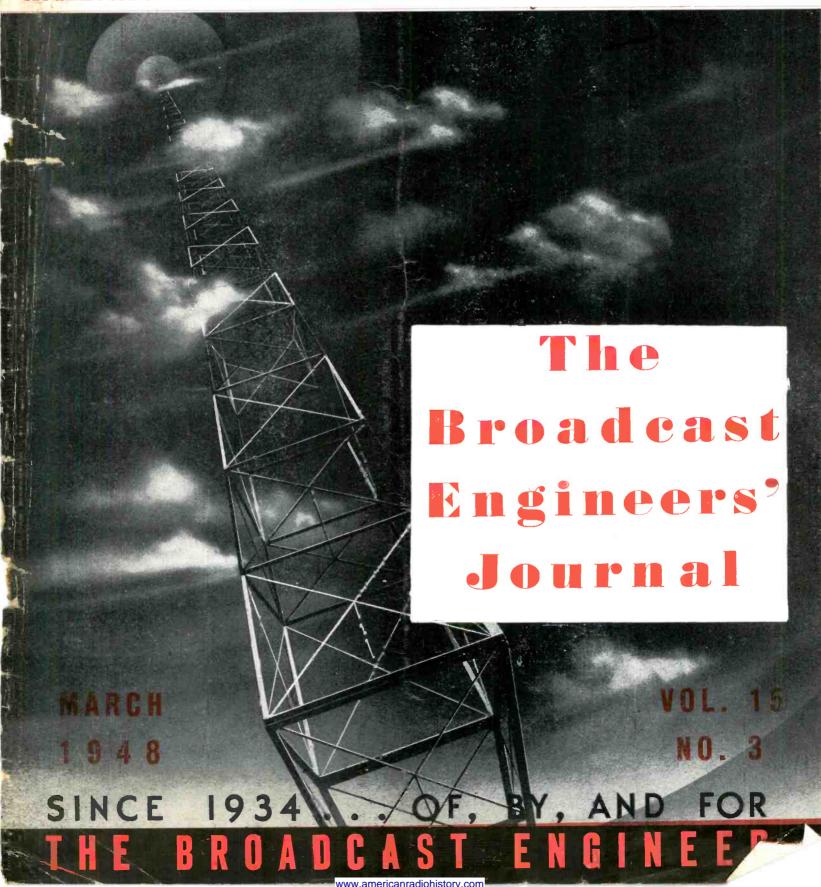
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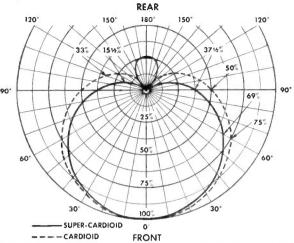
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#### Ed. Stolzenberger

Business Mgr.

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March, 1948

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Broadcast

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#### Technicians

- 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 action which your President might take.

Contact any of the following officers for further information:

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#### A Message to the Members of NABET

from

JOHN R. McDONNELL President, NABET

I feel deeply honored that the National Council elected me President of NABET. I trust that the events in the months to come will justify their choice.

My congratulations are extended to Arthur Hjorth, our new Vice-President, and to Donald Morey, newly elected to the Executive Board.

We have chosen three full-time officers to represent the Union,—Harry Hiller, Executive Secretary and National Secretary-Treasurer, and National Representatives Clifford L. Gorsuch and George Maher. I have every confidence that they can successfully carry out the assignments we have given them. To insure that success, let us all in NABET unite to give these men the support and cooperation they will need.

Let us also join in offering a hearty welcome and strong support to those engineers and technicians in the Radio Industry, who are not now members of NABET but who wish to join our ranks for the purpose of uniting in our efforts to improve the status of the Radio man.

Respectfully,

(Signed) J. R. McDONNELL, President.

Deadline is 2nd of every month. Example: copy received March 2nd appears in the April issue, in the mail April 1st.

Heading Cuts for Chapter news columns. Chapters without regular heading cuts and desiring same, should send in photo, cartoon, or drawing of subject matter that they wish used to identify and distinguish their column.

Ham Calls. Baltimore reports no hams among their membership. Mohawk calls and St. Lawrence calls listed in their respective columns this issue. Several Chapters still unheard from.

\*NABET Grows. Welcome and congratulations to the engineers of station WHBC, Canton, Ohio, who have joined the NABET roster as of Jan. 1st. They constitute the Canton Section of our Cleveland Chapter. WHBC is owned by the Ohio Broadcasting Co. The Washington Chapter reports the addition to its NABET membership roster, of the engineers of station WPIK, Virginia. Welcome to NABET!

If it concerns the Broadcast Engineer he will read about it in the Broadcast Engineers' Journal

# Special Meeting of the NABET National Council, Jan. 29-30, 1948

The special meeting of the NABET National Council was necessitated by two concurrent but unrelated events. The full-time leadership of NABET had been vacated by the resignation of former President Powley, and a new NABET Constitution had been ratified by 83% of the membership in secret ballot.

The new constitution made possible a reorganization of the NABET administrative setup.

En route to the National Council meeting, the NABET Executive Board, which consisted of Vice President McDonnell of San Francisco, Chicago Chairman Hjorth, Dixie Chairman Dean, and Hudson Chairman Clark, met with our attorneys in Washington on the morning of January 28th, and then proceeded to New York to join with the remainder of the National Councilmen. Before and after dinner, get-acquainted roving gatherings held sway in the various rooms of the National Councilmen, where the affairs of NABET were informally debated and discussed.

Vice President McDonnell convened the National Council at 9 A.M., January 29th. At midnight, the Council ad-



NABET'S FULL-TIME REPRESENTATIVES

Clifford L. Gorsuch National Representative for the Eastern Area Harry E. Hiller Executive Secretary National Secretary-Treasurer

National Representative George Maher was not available when these photos were taken. We hope to be able to publish his photo and biographical sketch soon.



THE BROADCAST ENGINEERS 4 JOURNAL FOR MARCH, 1948



TEN MINUTE RECESS FOR PICTURE-TAKING

FRONT ROW, left to right—Russ Butler, Chairman San Francisco Chapter; Cliff Gorsuch, National Representative; Arthur Hjorth, Vice-President, and Chairman Chicago Chapter; J. R. McDonnell, President; Harry Hiller, Executive Secretary and National Secretary-Treasurer; C. Westover, Chairman New York Chapter; John Lappe, Chairman Baltimore Chapter.

MIDDLE ROW, left to right—Ed Stolzenberger; Dave Lane, Chairman St. Lawrence Chapter; Edward Lynch, Chairman Rochester Chapter; Jim Brown, Chairman Hollywood Chapter; J. Willard Dean, Chairman Dixie Chapter; Roy Glanton, Chairman Omaha Chapter; Roger Ellis, Chairman Detroit Chapter.

BACK ROW, left to right—John Hogan, Chairman Washington Chapter; Don Muir, Chairman Syracuse Chapter; George Pogue, Chairman Rocky Mountain Chapter; O. C. Beitel, Chairman Pittsburgh Chapter; Eugene Clark, Chairman Hudson Chapter; Don Morey, Chairman Mohawk Chapter; Bill States, Chairman Engineering Chapter; Harold Brandt, Chairman Cleveland Chapter.



THE BROADCAST ENGINEERS 5 JOURNAL FOR MARCH, 1948



THE NABET EXECUTIVE BOARD

Front, left to right: Arthur W. Hjorth, Chairman Chicago Chapter and NABET Vice President; John R. Mc-Donnell, NABET President; J. Willard Dean, Chairman Dixie Chapter. Back row, left to right: Eugene Clark, Chairman Hudson Chapter; Donald Morey, Chairman Mohawk Chapter.

journed until 9 A.M. January 30th. By midnight of the 30th, the special meeting concluded—a tribute to the tireless and indefatigable efforts of the entire Council and National Officers.

The National Council decided on an administrative steup wherein the President of NABET would be a working, employed broadcast engineer. When this decision was made, Vice President McDonnell was unanimously elected President. Arthur Hjorth of Chicago was then unanimously elected Vice President, also a working, employed broadcast engineer.

A vacancy existed on the five-man Executive Board, and Donald Morey of the Mohawk (Schenectady area) Chapter was elected to fill the post. The NABET President and this Executive Board are to determine policy and guide the affairs of NABET during the interim

period between National Council meetings, and their dictates are to be executed by a full-time Executive Secretary, National Secretary-Treasurer, and one or more National Representatives.

Harry E. Hiller, the incumbant National Secretary-Treasurer, was appointed and ratified as Interim Executive Secretary and National Secretary-Treasurer.

Clifford L. Gorsuch, the incumbant National Representative, was appointed and ratified as National Representative, and will primarily operate out of the NABET National Office in New York.

George Maher, former NABET National Secretary-Treasurer, was appointed and ratified as National Representative. He will be headquartered in the Chicago area. This new office will be activated April 1st to serve the mid-west areas.

The continued enthusiasm and growing success of NABET can be directly

attributed to its high purposes and ideals as set forth in Article I of the NABET Constitution:—

"IT'S (NABET's) objects shall be to promote the social and economic interests, welfare and integrity of position of radio broadcast, recording, and television engineers and technicians and all technical activities in connection therewith by affording a competent and authoritative organization for dealing with the employers of persons so employed concerning wages, rates of pay, hours of employment, conditions of work, grievances and labor disputes; to advance the science of radio broadcast and television engineering and all fields in connection therewith and to develop and enlighten in the public mind an appreciation for their national importance; to foster cordial relationships among persons engaged in such



DAVE MOLONEY Chairman of the Board



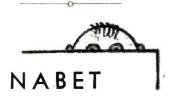


THE JOURNAL'S BOARD OF TRUSTEES

Upper left, Chairman of the Board Dave Moloney; lower left, Board Member Arthur G. Popple. Group photo, top, left to right: Board Member Bill States, Chairman Engineering Chapter; Board Member Gene Clark, Chairman Hudson Chapter; Board Member C. Westover, Chairman New York Chapter. Bottom row, left to right: Board Member and NABET President McDonnell; Harry E. Hiller, Secretary-Treasurer of the Board.

activities; and to fill an existing need in the radio broadcast, recording and television industry for an organization capable of effectuating the aforesaid objects."

Those individual or collective groups of broadcast, television, and recording engineers and technicians who freely subscribe to these high purposes and ideals are invited to communicate with any of the NABET officers listed herein on page three.



is the *only* union of broadcast engineers whose sole concern is the welfare of the broadcast engineer.

#### BALTIMORE CHAPTER NEWS

#### By Royce I. Heintz

Well it has been a long time since we have passed along any news about Baltimore. This bit is coming from our newly appointed associate editor, Royce I. Heintz, also known around here as "Prof". This job came as a complete surprise to me as I was suddenly selected without any pre-warning.

Cliff Gorsuch negotiated our contract with WITH in December. The old contract was kept and extended into 1948 with two amendments. One was a two dollar increase over the old wage scale. The other was that the company recognizes 7 holidays. All men working three years or more to receive pay for the holidays in the form of one additional week of vacation with pay. Men working less than three years will not receive holiday pay or will not get the extra week vacation in lieu of holidays.

WITH-FM is making progress on their new transmitter location. Excavating has begun and the steel antenna tower has been delivered. It is exected to be on the air sometime in early 1948 with 20 kw. Baltimore also welcomes two new standard broadcast stations, WSID and WBMD. Both stations are daytime operated. WBAL-TV is expected to be on the air any day now.

Not long ago John Lappe had a gremlin in the WITH-FM transmitter. For no apparent reason the thing suddenly popped off the air with a nerve shattering BANG! All circuit breakers tripped. Johnny thought a rectifier let go. It was not until several nights later after the transmitter heat had speeded up some natural processes that an unearthly smell permeated the transmitter shack. The midnight man did some sleuthing

(To page 13)

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BROADCAST ENGINEERS' JOURNAL-MARCH, 1948-PAGE EIGHT



# Review of Current Technical Literature

By Lawrence W. Lockwood

# Journal of Applied Physics, December 1947 A Magnetron Resonator System—E. Ohress

The present exposition deals with the multisection spectrum of a multisectorial cavity or vane type magnetron and specific applications involving the evaluation of the  $\pi$ mode wavelength thereof.

#### Frequency Stabilization of Microwave Oscillators By Spectrum Lines—W. Smith, J. Garcia De Quevedo, R. Carter, W. Bennett

A 2K50 microwave oscillator has been electronically coupled to the NH3, 3, 3 rotational spectrum line at 23,870 megacycles in such a manner as to maintain the frequency of the oscillator at the spectrum line frequency. The theory of the "spectrum line discriminator" designed to produce this frequency stabilization is developed.

# Bell Laboratories Record, January 1948 Portable Microwave Tower

Description of a new type of easily erected tower which can be used in preliminary field tests of microwave system, with a series of photographs showing it in various stages of construction.

#### Waveguide Hybrids-W. Tyrrell

Description of various types of waveguide hybrids or junctions used for different purposes with drawings showing the fields and polarizations.

#### Proceedings of the I. R. E., January 1948

#### Phase and Amplitude Distortion in Linear Networks—M. Di Toro

All practical communication networks exhibit distorions from the ideal linear phase and flat amplitude (all-pass) characteristics. Certain relations between phase and amplitude bandwidths are shown necessary to avoid step and impulse transient response overshoot arising from excessive phase distortion.

#### Class-A Push-Pull Amplifier Theory-H. Krauss

Two tubes operating in push-pull, class-A will produce more than twice the power output of a single tube using the same operating voltage and with optimum load values in each case. This is treated analytically and experimentally.

#### Methods of Tuning Multiple-Cavity Magnetrons —R. Nelson

Several methods have been developed for tuning multiplecavity magnetron oscillators over wide frequency ranges. The most successful of these involves simultaneous variation of both the inductance and capacitance of all the resonant cavities by a single tuning motion.

#### A New Type of Waveguide Directional Coupler —H. Riblet and T. Saad

A type of waveguide coupler is described which combines the advantages of high directivity, low input standing-wave ratio, ease of design, and universality of application.

#### Printed Circuit Techniques — C. Brunetti and R. Curtis

A very comprehensive treatment of the complete field of printed circuits is presented. Production details as well as precautions and limitations are discussed. Many applications and examples are presented including printed amplifiers, transmitters, receivers, hearing aid sub-assembles, plug-in units, and electronic accessories.

#### QST, January 1948

#### What Is Single-Sideband Telephony-B. Goodman

A technique similar to television's vestigial sideband transmission is being proposed for amatuer work.

# RCA Review, December 1947 Interlocked Scanning For Network Television —J. DeBaun

The benefits of operating the scanning systems of two or more independent television broadcasting plants in locked coincidence are discussed. The problem of producing locked coincidence is explored and methods of achieving the desired results are indicated. Some of the possible benefits of using stable (high inertia) frequency sources for scanning systems are noted.

#### Technical Aspects of Television Studio Operation —R. Clark and H. Gronberg

This article describes the operating procedures employed in a television studio for the presentation of a live talent program. It is divided into two parts, one covering the operation of the technical equipment and the other describing the improvements that have been incorporated in the equipment as a result of operating experience. This latter section includes discussions of camera dollies, lighting, micro-

#### NABET EMPLOYMENT SERVICE

Due to the day-to-day changes in status and availability of unemployed NABET members, it has not been deemed practical to publish such a list of names in each issue of the Journal. Instead, each available member should immediately notify the National Office, with copies to his Chapter Chairman, of availability together with brief resume of experience, etc., and notify them immediately of any change in status or availability. The Chapter Chairman for the area, and the National Office, each of whom are called upon to fill vacancies, will thus be kept up-to-date to the mutual advantage of all concerned.

THE BROADCAST ENGINEERS 9 JOURNAL FOR MARCH, 1948

phones, microphone boom, iconoscope cameras, dialogue equalization, audio perspective, transcription turntables, communication and cue systems, and the control room.

# Tele-Tech, January 1948 The Design of Audiocompensation Networks —W. Savory

Application of the correct equalization for various commercial phonograph recordings has an important effect on character of reproduction.

#### British Developing Projection TV-

Olympia exhibit revealst hat most receivers have 8 x 10 direct view tubes; fixed tuning simplifies design and construction.

#### U. S. Radio Statistics, 1948

Radio-electronic output and complete home-set census. Production and use tabulated for industry's past 26 years.

#### Performance Characteristics of FM Detector Systems—B. Loughlin

An analysis of operating features of two classes of currently used detection methods for FM receivers—advantages of each.

#### Method for Determining Receiver Noise Figure —M. Allen

Practical means for making measurements that reveal limiting effect on sensitivity represented by shot effect and thermal agitation.

#### Noise Neutralizing Detector Circuit—D. Hings and W. Garstang

Static-free system of detection on entirely new principle for continuous wave and carrier shift transmissions.

#### Central Television Distribution System Engineering

Engineers tackle problems of providing multiple viewing outlets in a variety of ways—some practical and projected methods described.

## Television, January 1948 WBKB's Mid-West Relay Circuit—A. Brolly

Description of station-owned, inter-city relay circuit primarilly installed to enable the broadcasting in Chicago of the Notre Dame University football games played at the University Stadium in South Bend, Ind.

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#### DO WE HAVE YOUR ZONE NUMBER?

#### Electronics, January 1948

Design Trends In Television Transmitters-

Video transmitters offered commercially by DuMont, General Electric, and RCA reflect basically different approaches to the problems of modulation, sideband suppression, and power tube cooling. The whys and wherefores are reviewed in this survey of available equipment.

#### Fremodyne FM Receivers

Description and evaluation of measurements made on a novel superregenerative superheterodyne circuit offered for low-cost mass-produced FM receivers. Figures are given for sensitivity, quietingsensitivity, distortion, audio response, selectivity, and radiation.

#### N.Y. - Boston Microwave Television Relay

New seven-station radio relay operating in 3,700 to 4,200 MC band provides two 5 MC channels in each direction over 220 mile route. Horn antennas with metal focussing lenses provide total gain of 100,000,000 per hop. Unique frequency control systems are used.

#### Propagation of Very Short Waves

A definite statement, based in part on the experience the MIT Radiation Laboratory of some of the factors governing propagation at frequencies from 100 to 30,000 megacycles. This installment, the first of two, treats one way transmission.

#### Audio Engineering, January 1948 Experimental Noise Suppressor—C. Cole

Complete data on a noise suppressor developed by the General Engineering Department, American Broadcasting Co.

#### The Design of A New Lacquer Recording Stylus —I. Capps

Description of a modified lacquer recording stylus available now. The modification relates to the burnishing facet which is an important part of the standard lacquer recording stylus.

#### Audio Frequency Response Measurements In Broadcasting—A. Richmond

Describing the proper technique of testing broadcast audio apparatus.

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

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#### By Norman Dewes

WELL . . . . the WEATHER has been so darned TROPICAL out here in these latitudes of late, that we haven't felt very TOPICAL . . . nor much like shutting our various selves up with a stuffy old typewriter and endeavoring to recount life, when it's so much MORE fun LIVING it . . . . among many OTHER nice things, Santy brought us a very fine new GOLF bag for Christmas and we have been out dragging it around the local fairways with other local latitudinarians, in pursuit of the elusive pellet in the SUNSHINE . . . which we . put in CAPS because we weren't, simply an old Tee shirt 'n boat slacks, and letting the sun have us as she wilt..... and twixtimes from golfing, down to the BEACH to check on our new boat which is being built and should be ready for launching ere soon . . . she is to be a handy little craft and eager for the sea and we will tell more of her later ... and if you're around and off a month or so from now, be sure and be ON HAND for the BOATWARMING .... she only sleeps two, (at a TIME, that is ....) but she'll sail like a witch ... we're ALREADY taking applications for the crew for her maiden volage, the only requisite being that you must be a MAIDEN . . . .

TV . . . . in the Far West is making rather unobtrusive but ne'ertheless DEFINITE progress since last we took a look, and many members of various branches of the Audio Art out thisaway are beginning to have that SNEAKED UP ON feeling whenever the mysterious word VIDEO is whispered . . . . in

fact, we were nearly FLABBERGASTED the other day when we chanced to drop down to tthe basement in Radio City in search of something or other and found that the whole DANGED PLACE was stacked full of crates and packing cases bearing, upon closer inspection, such enchanting lettering as "Video Channel 2" and the like . . . we ALSO noticed little piles of SAWDUST and shavings on the floor, under little round holes in several of the cases, which could only have been "sampling" holes made by OTHER curious ones in the dead of night perhaps, trying to find out just what the H--was IN those boxes . . . WE tried to peer in one of the LARGER ones and all we could see was some big black things that looked like WELL-DRILL-ING RIG . . . discrete inquiry later disclosed that there was over a half-million of TV gear down there and that NBC anticipates the need for some forty additional men for Video Engineers and that ... but WAIT! and DON'T grab the next rattler out here, 'cause it will STILL be some little time before those cases are unpacked, they say . . . . to FURTH-ER assuage OUR curiosity, we siphoned some gas into our '36 Plymouth and steamed up Mt. Wilson on our day off and were AGAIN somewhat stashed to see a veritable CLOUDFULL of antennas and arrays and pipes and plumbing up there . . . it was a little cooler that Billy-be-damned and the WIND was blowing like Hell-o Central but we managed to crawl around a bit and take some pix of various weird-looking things on poles and ask a few answers from the guys who were holed up up there . . . . when we finally had to get in the car to warm up, we inadvertently parked by one of the shacks out in front of which was setup a large dish affair with a little curley-cue dingus in the middle and IMMEDIATELY a guy came running out and started throwing rocks at the car and yelling "Get the h --- outa here, you're BLOTTING us OUT!, so we cranked up and left, sensing that SOMETHING was wrong and that we'd maybe better READ UP on this Television business. As soon as we get time to print the pix, will report on this Mt. Wilson place. As for what you can see in the 'scopes' around town, Paramount's KTLA seems to be doing most of the outside pickups, and a FINE JOB of them too . . . the stuff of the Tournament of Roses and the Rose Bowl game in Pasadena was VERY GOOD, what with the new "Zoomar" rapid-focus lens They have several portablemobile truck channels and are using the

parabola or "dish" reflectors set up on adjacent buildings to kick the stuff up to Mt. Wilson. They also do a weekly shot from Tom Breneman's of an audience participating quiz show, which is good but shows some production problems. The boys in NBC Maintenance usually have a receiver set up for testing and when there's a Vine Street pickup SOME pixie engineer will ALWAYS run outside to "get in the picture" and wave at the fellows back in the shop, which is always VERY FUNNY, but we suppose you guys back in NOO YAWK have outgrown such antics by this time . . . . and to quote several of our constituents, if we ever get off our "BFA", we will bang out a complete TV story on Hollywood, with some pix, etc. Things are simply "movin' too fast", THASS all . . . .

WE WELCOME . . . . . rather belatedly, we guess, the NBC Air-Conditioning men and the NBC and ABC Traffic and Communications men to our MIST and wish to say that we-all is HAPPY to have you-all amongst us . . . weather men include Messers Van Newman, Eugene Reed, Wilber Roser and Ora Wilkins, ALL of whom are very obliging about making it cooler or warmer or damper or dryer whenever asked . . . theirs is a MOST important adjunct of broadcasting, for few realize that the studio air-conditioning not only keeps the audiences, actors and musicians comfortable, BUT must be maintained within narrow limits or else all the musical instruments will go out of tune and the actual acoustics of the stages will change, a factor which assumes particular importance when an orchestra is being picked up with a high, over-all mike, since the transmission of "highs" thru the air is altered by increased or decreased humidity. We won't list those of the Teletype Crews until NEXT time, because we haven't MET all the fellows in Traffic yet, but we UNDERSTAND that there are some MESDAMES up there TOO, who are really TWX CHIX, so gird yer loins, gals, for we're COMING UP

NBC . . . . studios, halls and corridors have AGAIN had their annual paint job, which isn't such a flash to you guys who don't get to SEE it, but to US inhabitants it is a never-failing source of wonderment and SURPRISE, to open the doors the morning AFTER and cautiously peek at what colors came out THIS time . . . we FIRMLY believe that they paint the studios PSYCHOLOGICALLY, for there seems to be no OTHER way to account for the yearly chameleonic metamorphy . . . . except

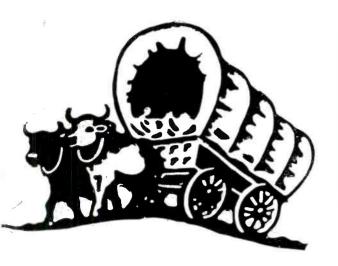
maybe the Company finds teriffic buys in surplus paints, which come in cans from which the labels have come UNSTUCK and disappeared and are sold AS IS . . . f'r instance, Studio "M" is now several shades of APRICOT, or perhaps peachy-PEACH, while "L" next door is a nice CHARTREUSE, trimmed in (Vud you biliv it . . .) FIRE-ENGINE RED . . . . all seriousness ASIDE, tho, some of the audience studios are really VEERY PITTY in pastel greens and silver and gold, and no doubt contribute somewhat esthetically to the renditions of the artists, 'cept if yer COLOR BLIND in which case you are strictly on yer OWN . . . . . Managed to find our way down to Recording, and place is REALLY colorful ... everything so new and shiny, including three very recent RCA Recording Channels with Type 73-B Recording Machines, which with the ten Scullys and the four Prestos make seventeen channels in all now . . . also noted a new dubbing "jeep" which makes three of those mobile three-turntable Re-Recording units available for dubbing the AFRS stuff which still comes thru in large hunks, and also "Groucho Marx" and other shows which are assembled and played back later on ABC . . . buttonholed RE Willis Oborn, the nite stylus stylist, who brought us up to date on recent RE's, to wit Bob Ellis who was summer relief but now in the GROOVE for the winter . . . ALSO shook hands with Bob Schuetz who recently completed the installation of the new Studio "E" and "F" at Radio Citee and while waiting for construction of the Television studios to start is filling in again, (Just thot of a double peachy-keen BON MOT about when yer trudging upstairs behind a VISION with the OLD LOOK and you just HAPPEN to glance up and note two trim twinkling Terpsichorean tidbits captured in sheer nylon with seams straight as an ARROW, why what happens but UPSTARES, uv cus . . . . .) anyway, upstairs again and she went clear to the THIRD FLOOR . . . but got away before we could think of a suitable VERBAL OPENING to begin negotiations . . . so while we're HERE in ABC country, let's scrounge around for some BLUE material . . . . .

ABC . . . . Engineering Office has undergone an amoebic cleavage and now ABC Engineering Manager Bev Palmer reigns in regal SOLITUDE in his own private suite, while they have blasted a hole in the wall for a DOOR, on the other side of which is now Denny Denechaud, Operations Supervisor, and their lithsome secretary Trudy, (who cutely

signs all her little billets-doux to the engineers with ". . . yours Trudy" . . . CUTE, huh . . .) this makes for more much-needed privacy and now Denny can harangue us on his several telephones at HIGH LEVELS and at GREAT LENGTHS without QRMing Bev ..... back DOWNSTAIRS, taking the elevator, and recalling the McGaughey Story about our man Bob McGaughey's ACCI-DENT in the thing, which is automatic and has two sets of successively closing doors and won't TAKE OFF unless both sets are CLOSED and Bob and this Lovely Thing from "Three, please . . ." get in and the FIRST set of doors slide shut but the SECOND set WON'T and there they are, STUCK and unable to come or go and Bob unable to GET OUT, so he wrenches his CHEST trying to get the SECOND set of doors CLOSED . . . . this SEEMS perfectly natural for, as Bob sez "... after ALL, we wanted to GO UP, didn't we . . . but after thinking it all over, several OTHER vistas present themselves and it's rather SAD to think that we'll NEVER KNOW just WHAT happend in that elevator .... ANYWAY, Bob is having to wear a HIGH GIRDLE for several weeks and is sueing the Company for Workman's Compensation . . . . with the advent of KECA/FM, ABC has added two more ment to the Engineering Staff, as threatened last month, to wits, Ed Starr who was erst with us as vacation relief last summer and whom we WELCOME BACK, and Joe Craig, formerly from BACK EAST and WOR, to whom we say Howdy! . . . Ed has resumed as evening MCD man mostly and loe was well indoctrinated by being attached to a recent Raysdale safari to Coloma, California for the Discovery of Gold Centennial, the tale of which is WELL worth telling and will be told as soon as pix and data are collected . . . . . these two gents swell the total of ABC techs to thirty-seven, which from the Original Four in '41 is QUITE a quickening . . . . as a RESULT of all this, Wilson, R.W. was kicked upstairs to the FM studio exclusively and became so enamoured with the Free Music and stuff that he had a RUBBER STAMP saying "FM" made, to use in filling out his daily work sheet . . . . then dropped by the Bing Crosby Productions Dep't and were invited IN by Jack Mullen of the Palmer Company of San Fran, who spins the Magic Tapes on those super Hi-Fi magnetic tape recordes, to hear an "A-B" test . . . they were cutting, or perhaps should say PERMEATING a Crosby take from the Studio down the

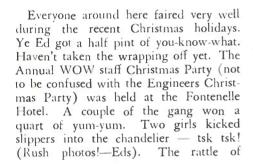
hall and during the music Jack turns the monitor speaker wide open and throws a key switching it from the output of the Studio to the output of the tape... and there was no difference, as far as WE could tell.... "Okay?" says Jack, and we replied, "Okay. .!"

AROUND 'N ABOUT . . . . a halfpage ofmiscellanea is all we feel Stolzie has ROOM for, so will index a few of the facetiae as they come off the HOOK . . . . out in the Main Corridor in the middel of everything where the Beauteous Creatures used to sit at an enclosed desk and answer the Call Club and RATE (Radio Artists' Telephone Ex-change) phones there is NOW a BLANK PANEL in the centre of which is a small black dingus which looks like a pay telephone, junior size, only instead of you TALKING into it, out comes a roll of paper and it WRITES MES-SAGES to you . . . it's called a "Telautograph" and if there is a call for you it writes yer name on the paper, in a neat FEMININE hand, yet . . . . so out of natural curiosity, we tried to write BACK to the thing and get in touch with the member of the OTHER SEX who must be on the other end, but all it would answer in reply to our carefully worded offers of dinner and a show were the words "GET LOST" . . . the MACHINE will be Man's undoing YET, we say . . . . didia notice the VEDDY FINE publicity one of our ilk got in "Newsweek" for January 26th . . . it's under "Radio" and is titled "Music Mixer" and starts out this way, quote, "He is the least credited man in radio. Hep performers pay him deep obeisance, but the listener rarely knows he exists. He is the radio engineer.", unquote. Be SURE to read the REST, for while it euolgises one Charles Grenier of CBS in no uncertain terms, it will do ALL of us much good . . . . TUTTI, that is . . . . dropped into Gents' Parlour at end of Studio "E" 'n "F" dressing room hallway for a moment of quiet meditation and approached the fountain and there, floating the placid waters was a slip of paper with a MESSAGE on it saving "Dale—call Stan Meyers. Santa Monica 6-2020" . . . . new undercover Call Club starting up maybe?? . . . anyway, we quitely backed out and moved NEXT DOOR, for Dale obviously hadn't dropped in for his mail yet .... which brings to mind the time the wall plumbing in the Engineers' Powder Room got out of wack and wouldn't perform AT ALL and then they FIXED it, and HOW . . . . . and now it's better not to approach TOO CLOSE, lest when it's



#### OMAHA NEWS

By Cy Hagrman





The Omaha NABET Chapter held its first annual Engineers Christmas Party, Dec. 23rd, at the Omaha Athletic Club. The Chapter plans to make this a yearly event. The wives attended, but appear in another picture. Around the table from left to right are: Mark McGowan W NZ; Louis DeBoer W AXY Johnny Brunken TE; Dick Peck SE; Glenn Flynn W MHV; Bill Kotera Chief Engineer; Roy Glanton W GTC; Larry Sibilia SE; Bill Dunbar SE; Joe Herold, Tech. Director; Bob Rudd W EUT; Al Maller W DCQ; and Cy Hagrman ex-W9DWB.

bones was heard at times too, but don't know if anybody won a large pot. Roy Glanton got a beautiful wrist watch which includes a calendar. Bill Dunbar got a new Pontiac—smooth is the word. Louis DeBoer on 80 with a surprise rig; his better-half got him a ten meter beam for Xmas! Dick Peck built himself a miniature railroad complete with switching yards, relay control circuits. etc. Bob Rudd worked over a hundred stations during the month of Dec., 10 to 80;

Dec. was his 20th anniversary as a ham. Johnny Brunken is working like crazy on his CREI course and has now arrived at the television section. Mark McGowan is on 80 with a surplus VFO (BC-459A). Glenn Flynn won the DX contest for Nebraska last Feb. but we just learned of it. Such modesty. . . . Cy Hagrman busy as a bee building amplifiers for control room, and Al Maller on 80 with a BC-654. That's all for now.

#### HOLLYWOOD-from p. 12

triggered the resulting FLOOD engulfs you . . . . one of our more pre-occupied men FORGETS occasionally however, and as is his CUSTOM, trips the release EARLY and invariably finds it necessary to remove his shoes and wring out his socks . . . . . we intended to have some more dope on THE CONTEST for a name for the column, but have been working on the First Prize (the Girl Detector) and have been having some TOUGH LUCK . . . . the thing has developed a sort of HOMING effect which we can't trace down . . . it detects GIRLS alright, but just as we get within RANGE it blows its FUSE and we look up and the GIRL is always MABEL .... d'ya suppose she ... but no, we KNOW she doesn't know anything about electronics . . . . also had some facts about the "Skugerrak", our BOAT which is nearly completed, but will hold until we can get some pix of her when she's launched on her MAIDEN voyage . . . that is, if we ever COME BACK. . . . .

TAG . . . . seen on Hollywood Boule-

vard . . . a costly-type swanky convertible swishing down the Avenoo, with top down and a FANCY FELLOW driving all decked out in whites and tans and sitting beside him was a lovely blond COLLIE DOG and when WE glanced at the pair, the fellow was gently biting the lovely dog's ear . . . . Oh, well, maybe they were friends of LONG STANDING or something . . . or maybe he was only looking for TICKS . . . . BCNU. . . . .

#### BALTIMORE-from p. 7

around and finally discovered the origin of above mentioned odor. An unfortunate little mouse had entered the conduit carrying the antenna coax into the transmitter from the outside. He inadvertently tripped across the high voltage bus. PHIZZ—roast meat!

Al Hedricks hair stood on end about two months ago when the FM monitor issued forth an eerie screamie-meemie howl. The trouble? The telephone co. just put a test signal on the wrong pair. The phone co. pulled a boner on Gil Boehl and Mel Buttner, when they accidently cut all lines to the transmitter and leaving Gil with no program and no way to get communication to the outside. Luckily the program was only off for four minutes—a short eternity.

Bud Chell has been selected by the company as our new assistant chief engineer. He also recently had a new addition to his family, a baby girl. In lieu of cigars he passed out liquor miniatures to the men and boxes of candy to the ladies.

Bob Parks also has a new addition—a '47 Ford Sportsman auto. He says it is a good thing it doesn't have running boards. It makes it so much easier to beat the excess women away. Hi Bob. That's all for now.

#### NABET

100% of, by, and for the BROADCAST ENGINEER

THE BROADCAST ENGINEERS. 13 JOURNAL FOR MARCH. 1948



#### WASHINGTON

By Warren Deem

The field television group of station WNBW welcomes a new member, Mr. Vernon W. Swiger who hails from West Virginia. Vernon was formerly with the 1524th Eng. Div., U. S. Army. Vern

has been a resident of the District for the past 19 years and is married.

Four WNBW men recently purchased the \$120. 630TS Kits. The fellows are eagerly awaiting the arrival of the kits so they can start assembling them. Jim Weaver, Bill Wells, Bill Simmons and Warren Deem are the eager beavers. Their wives are hoping that they will all get the sets working and hope they are able to find a good-looking cabinet for the set so they can use it in some room besides the basement!

Joe Colledge and Bill Herson recently spent a pleasurable two weeks in Florida and returned revitalized and ready to go again. During Joe's absence Johnny Rogers was the field supervisor and really came through a baptism of fire with remarkably good results. At the time Joe left two camera chains were in operation and three new ones had just came in. One of the first two cameras broke down and left Johnny with only one working, but by the time Joe got back four video chains were in operation and Johnny Rogers had emerged a full-fledged supervisor.

Speaking of winter vacations, Frank

Spain spent a week in the sunny south down Mississippi way. February in Washington was just too cold for "Clag". Before leaving, Clag constructed an F.M. receiver utilizing a 6AL5 two 6AK5's and a 6J6, taking power from his table set and running audio through same. The total cost was \$7.50. The cost wouldn't have been that much if he could have found the right type of tuning condenser and a couple other parts in the shop "junk box". The IF transformer of the receiver consists of a 2 watt resistor around which is wound 35 turns, both primary and secondary, of No. 36 wire and it is still a mystery as to the exact IF frequency. But then why go to the trouble of measuring itit works!

Jim Weaver took on a giant sized job when he started taking inventory of WNBW's master control equipment. It took the electricians six months to install all of that equipment and from the looks of things, Jim having started in January, must still be at it. . . . .

Bill Simmons hasn't smoked since last December, yes it's hard to believe but it's true . . . . no more of those familiar long seegars.

Changes in the downtown WRC studios include Don Cooper as the new chief engineer, Bob Terrell as operations supervisor, Ralph Hamill is now senior control supervisor, and Bill Chew is junior control supervisor while Dorson Ullman steps up to relief supervisor.

The new man down at WRC is Marvin Cooper, newly appointed Group 2. Marvin was formerly with radio station WOL.

Bob Shenton is forsaking his ham duties and the cause is his growing interest in building model railroads.

Speed Clark has his new Packard and Sherman Hildreth is now the owner of Speed's old Chrysler—yep! it still runs.

No news from the gang at WOL. Thanks, Andy, for trying to scare up some material for me, but it seems as though the WOL engineers have hibernated for the winter.

Wally Ward, W3IQU, is active again on his ham band after a lull that was caused by his moving into the new home.

Each morning the first thing that Mac McClelland and Johnny Rogers do upon arrival at work is to tune in WWV and check their surplus navy boat clocks for accuracy. Mac's looses one second at night and gains one during the day, so everything balances out nicely. Joe Colledge made a good buy of one also.

Mac McClelland and Mike Vossler of WNBW are to be congratulated on their



recent advancements. Mac was promoted from Group 12 to Group 13, and Mike went from Group 11 to Student Group 10. Nice going fellows.

Another new-comer to WNBW is Mr. Philip K. Horton, Group 10. Phil is a Washingtonian and comes to us from station WWDC. During the war, Phil served with the Merchant Marine. He is married and has one child.

. . . And speaking of children, your Washington Editor is the proud father of a new baby girl, little Carol Alice, who was born last January. My wife, Alice gets a little credit for this too, in fact she gets about 95% of the credit!

I wish to extend a welcome to the new members of Virginia's near-by radio station WPIK who have just recently joined

#### MOHAWK HAM CALLS

W2AIX	TY SCHUMACHER
W2AVG	GEORGE HOFFER
	ROY STIGBERG
*** ****	IOE DECKER
	EMIL NICKLE
W2GM	NEUT BARNES
W2HOA	TOM McDERMOTT
W2HUB	RALPH DeGRAFF
W2ILA	STAN PAWLIC
W2JHQ	FRANK BOUDREAU
W2JRY	HOWARD WHEELER
	MAYNARD CUMMINGS
	ELMER SCHOLES
	MARCEL REEDS
TAT ATTOM	IOE GAGNE
	BOB VADNEY
W2PGV	DON MOREY
W2TTN	GUS COOPERSMITH
VV 2 1 1 1 V	GUS COOPERSMITH

If It Concerns

The Broadcast

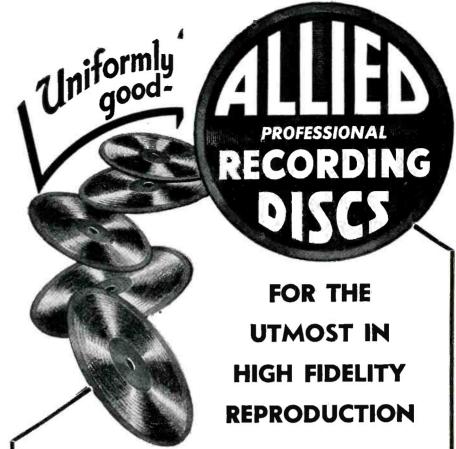




ENGINEERS'

**JOURNAL** 

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#### ST. LAWRENCE

#### By Aleen A. Corbin

The hams of WWNY have passed on their calls to me, so I'll forward them:

W2SCY—Robert A. Bouchard—all bands—CW, and phone.

W2RZU—George P. Gebhard—20 and 40 CW.

W2NMK—William J. Walck—80 CW—inactive at present.

George maintains his station at the WWNY transmitter, and Bouchard does most of the operating at present. Willie Walck wants to know if anyone has TM on the BC 221? If so, will he please forward to W2NMK c/o WWNY?

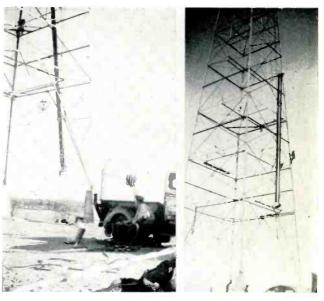
At first we were all happy at Geb's apparently rapid recovery from pneumonia. But about the second week of January he suffered a relapse more serious than the original attack. Consequently, he felt he was unable to discharge his duties as chapter chairman, so new elections were in order. Dave Lane was elected chairman, and Betty Gillespie inherited his old job of secretary-treasurer. We hated to see George relinquish a position he filled so well, but, since there was no other choice, Dave is the most logical and able successor.

In the vital statistics department, the Glenn Hall stork winged its way here three weeks ahead of schedule to deliver Carolyn Ann, five pounds, fourteen ounces, on December 17, just in time for Christmas. The Mike Yonkovigs have confided that they are adding to the station family in the late spring.

Being a couple of hundred miles from nowhere up here, it isn't often that we have any news or info to compete with the big stations. Right now, however, Operation Snowdrop, Pine Camp, New York, (about eight miles from us) is getting nation-wide publicity. WWNY has hopped on the bandwagon in a big way and has done several field recordings up there. Glenn Hall, Pappy Davis, and Mike Yonkovig covered the assignment. One morning they came dashing in, grabbed up the TONS of equipment and REAMS of wire necessary for the job and dashed out . . . only to call back in about twenty minutes to say they had forgotten the Op 5 and would we please send it up to them right away? Pap caught his finger in the new tape recorder the station is trying out, and, despite the praise accorded it in some quarters, Pap refuses to recommend it to anyone. At the camp they used an announcer in a plane on an Army SCR 193 with two announcers on the ground with 193's, one feeding directly through the remote amplifier. A 300 FM job was used by a trooper describing his descent en route. Two SW receivers were feeding into the nemo amp, and the works was going into the tape recorder. The possibility of an accident prevented live airing. Operations take place in three phases—unit, company, and regiment.

Our FM is coming along in fine fashion, and we started broadcasting February 14. The studios have had a complete face lifting in preparation for the great event. The station Manager was moved out of his office next to Studio A and into a suite of rooms at the end of the hall. His old office was made into a control room, a very small studio just for FM, and a store room. A section of the wall in A was banged out so that the studio could be used for both FM and AM. Now this doesn't sound like news, but you should

SEE the color scheme. I can safely say that you have NEVER, ABSOLUTELY NEVER, seen anything like it. The AM control room is (and will remain for another year) a dirty light rose. Studio B is a two-toned blue as is the FM storage room. The FM control room and the little studio are a deep rose with some dark color on the bottom of the walls which the painters decided after some debate was called ecru. The reception room is being papered, a dark brown background with a string trio on it, and here and there are some musical notes floating around. Our sports announcer was sounding off about what he thought about it, and asked who the h—had picked it out. Whereupon the station manager told him that he obviously knew nothing about the fourth dimension or he would appreciate it. By this time the sportscaster KNEW who had picked the paper.



Left, base of the WWNY-FM transmitter. Right—"Skyward Bound."

Now we get to studio A. This is the studio common to both systems, and I guess the station wanted to be sure that no one would miss it. The top of the sidewalls are a bright canary. The bottom was going to be ecru, but after it was all painted they decided that it didn't go well with the reception room paper, so they painted it some sort of light tan. Dave Graves, an announcer, came in the other day and stood looking at it. I had heard just about all the complaints I could stand in one day, so I said, "Now, Dave, be tolerant. Don't say anything." To which Dave replied, "Say anything! I've got all I can do to keep from (a synonym for regurgitating)!" But who cares as long as the commercial manager's wife thinks it looks nice with the green linoleum.

We have a lot of new equipment, not that we need it, of course. The station bought two new RCA tables and two Prestos. We bought a new console for AM and put the old one in FM. You can't get inside the pushbuttons to clean them, and every once in a while one pushes out in the middle of a network show, or we can't contact a nemo at the last minute. The engineers told the control ops to clean them by pushing the buttons in and out when we weren't in net. Very effective. Then when we first got it, there was a little trouble with the gain dropping down to pratically nothing and a terrific noise blasting through the

program amplifier. Pappy and Mike worked until the wee hours for a couple of mornings and finally put in a new

input transformer.

Along with all this decorating has gone a lot of building, noise, and confusion. The pounding was so loud that the announcers had to hibernate in the record room where the engineers set up a mike for them. Even this wasn't much of a retreat when the carpenters and electricians moved into the control room to drill on the speech rack, and string pipes all over the place to carry wires from the revised speaker system. We control ops didn't mind the noise so much, but it did make us a little nervous having the workmen climb over the console and turntables like that. After all, they could have broken a head, one of the turntable's that is. Things are almost in order now. "A" is no longer being used to store unused equipment, and the recorders will soon be moved into the FM studios enlarging our rathole, affectionately referred to as the control room.

Everything has been set to go at the FM xmitter for a month now. The place is heated by electric heaters and gives off a terriffic DRY heat . . . sort of like an announcer's breath when a girl control op is on the board. Frequency is checked by RCAC in NYC, 365 miles for line-of-sight. The engineers expect rig to really get out FB. Tests show noise on the FM line to be down to about 90 DB—that's right—90 DB!! The one bad feature of the trasmitter is its location in view of the weather and snow we get in this hyar part of the country. It's located on the second hill out State Street, and the elevation rises so steeply and quickly that you can feel your ears pop out while driving out. There was so much snow when the test equipment was moved in (N. Y. please note) that the supplies had to be moved in and out on a tobaggan, which also served to move in the control desk . . . in sections. Right now we have the most snow we've had this season, and if the temperature would only come up to zero, we'd almost think we were in Hawaii or some similarly torrid place.

Nemo boys will soon be moving over to the 1,000 Islands to cover the ice harness races (yes, they race horses on the frozen St. Lawrence River). Even if the Seaway wouldn't be any use in Winter, we're determined to keep the river busy. Our schedules will be so tight when FM comes that

the fellas will need a helicopter to commute.

Now that Winter has really set in, the boys at the AM xmitter will be getting out their muskrat traps. The building is right on the edge of Beaver Meadows, a big swamp that freezes over in cold weather and serves very nicely as an ice skating rink. However, it's a little inconvenient when it isn't cold enough to freeze, but the pond is covered with about two feet of snow. The fellows have to go by it when they check the towers, and more than once they have come back wet to the knees, their pants already starting to freeze, because they misjudged the distance over a certain span of water, having to rely on their memories to tell them where the water holes are. Of course, they don't stay chilled for long. The language they use is enough to warm up an igloo. Now the boys trap for the fun of it. Pre-Union it was an economic necessity.

A couple of week ago the station put on a show to raise money for the March of Dimes. From 10:30 P.M. until half past one they aired a musical show called "AT YOUR REQUEST." Everything was very informal, and everyone had a wonderful time. The management invited the orchestra up from the grill and a couple of good singers from around town. People called in their donations, and the an-

(To Page 20)



#### HUDSON NEWS

By Al King

Congratulations from the Hudson Chapter to the newlyelected National Officers. Looks like a tough year ahead, but we're sure that they'll pull us through.

Well, W2WUM, the "1440 Club" amateur station, finally took to the air from the engineers' lounge. Tests were made on 75 M fone, and all went well until someone opened a mike in Studio 6 and several Metropolitan New York FM listeners heard the melodic voice of Jim O'Connor (our club president) booming out via WBAM (WOR's FM station). Operations have been temporarily discontinued until we find the little men who are steering our signals into the studio equipment. We have purchased several feet of co-ax preparatory to erecting an antenna on the roof. The transmitter at present is a Mark II. Better gear will be obtained as tests warrant it.

Ed King's wife, Lorraine, recently underwent a serious operation and is recuperating in great style. Best of luck to her.

Warning! If you're not receiving your Journal, be sure that your address is correctly registered with ye olde ed.

Bob Albrecht's sporting a new Studebaker. How's the pick-up Bob? (Female, that is.)

Gene Clark in Washington recently to confer with our attorneys along with the rest of the executive board. Next day to Brooklyn for National Council Meeting. Meetings were so lengthy that he was unable to commute and was stranded for three days without even a shave.

Oddest job at the moment belongs to John Ruddley of the WOR construction department who is drawing up plans and elevation of a control house to be built several hundred feet above ground in the new WOR television tower. John, by the way, has a column in the WOR NEWS called "Under Ether," and generously offered to cover the Ten-Year Club Anniversary party at the Waldorf-Astoria. Strictly business, you know!

Speaking of the WOR Ten-Year Club, it's interesting to note that 50 per cent of its members are in our engineering

department.

Jerry Kenmore of T.F.D., who is quite an amateur artist, prefers to work on textiles. Each day this past week we've seen him wearing a tie with a hand-stenciled design of his own creation wrapped around his swam-like neck.

Ed Kenny (Air-conditioning) and Ted Kasna (T.F.D.) have announced themselves shuffle-board and checker champions of WOR and are accepting any and all challengers!

Dick Borner (T.F.D.) is organizing a WOR softball team. How about it, boys? If you're in "condition" maybe Dick will sign you up.

#### Labor History — V

From the Labor Information Bulletin

Emergencies of the abor movement as an influential national economic group did not take place without opposition or temporary set-backs. In the 1890's the new large corporations which had appeared on the economic scene vigorously fought efforts at unionizing their employees. At times, these clashes resulted in death, injuries, and other violence.

Two bitter and bloody conflicts marked this period. The unsuccessful struggle of the Amalgamated Association of Iron and Steel Workers against the Carnegie Steel Co. at Homestead, Pa., in 1892, was climaxed by a pitched battle between company-imported Pinkerton detectives and the strikers. Ten deaths and the intervention of the National Guard resulted.

Twenty-five persons were killed and 60 injured during the strike of the American Railway Union led by Eugene V. Debs against the Pullman Palace Parlor Car Co., at Pullman, Ill., in 1894. Federal and State troops were used and court injunctions obtained against the union.

After 1902, following a period of rapid union growth, employer oppposition appeared to stiffen and take on a more organized character. The years from 1902 to World War I were characterized by a definitely increasing antiunionism.

At first these tactics halted the growth of AFL membership, but after 1902 the upward trend was resumed, although at a somewhat slower rate. Despite general employer opposition, an increasing body of "trade" or collective-bargaining agreements resulted from direct negotiations between unions and employers. These had the effect of stabilizing industrial relations and establishing job security.

Unions in the AFL concentrated on raising wages, establishing the 8-hour day and other improvements in working conditions through extension of the area of collective-bargaining agreements. They resisted the efforts of various political forces in the labor movement to gain union support for partisan programs.

Out of the debate of this issue in AFL conventions at the turn of the century grew a policy of nonpartisan politics, summed up in the dictum "To defeat labor's enemies and to reward its friends."

On this basis, labor was frequently successful in obtaining legislative reforms. Laws protecting women and children in industry and reducing industrial hazards were passed by several states.

Workmen's compensation laws were adopted by most states. Congress created the Department of Labor, with cabinet status, in 1913. In 1915 Congress passed the Seaman's Act regulating many of the conditions of employment for American sailors, and in 1916 enacted a basic 8-hour day for railroad workers in interstate commerce.

Opposition to the "pure trade-union" policies of the AFL unions came from the Socialist Labor Party, the Socialist Party, and the Industrial Workers of the World. The IWW was formed in 1905 by several dissident union and political groups and pledged to abolition of the wage system and to organization of the great mass of unskilled factory workers and migratory laborers. Successful for a limited period in the wheat fields, mines, and lumber camps of the West, the IWW declined rapidly after 1913, although it still continues a nominal existence in a few localities.

During World War I, increased industrial activity and la-

bor shortages brought a rapid expansion of unions. A War Labor Board was created to promote union-management cooperation and to aid in the settlement of potentially serious disputes. For the first time in the history of the country, a Federal labor agency specifically spelled out the right of workers to organize in unions and to bargain collectively with empoyers through their chosen representatives. Union membership increased in mining, shipbuilding, on the railroads, and in packing house, textile, men's clothing, food, leather, and metal-trades industries. Unions seriously concered themselves with organizing semi-skilled and unskilled workers.



#### CHICAGO

By Minor J. Wilson

JIM PLATZ, who has been a member of the NBC Chicago engineering staff for some 19 years, has resigned his group 6 position to raise apples and pears in Oregon. Jim has purchased a 34 acre orchard near Hood River, 60 miles from Portland. Jim is moving to Oregon "lock, stock and barrel" to say nothing of ham radio equipment. A farewell party was given for him at the Well, Saturday, January 24, at which time the hams made schedules with him and the poker players took his money. And we all wished him prosperity and "lots of apples."

Coincident with Jim's resignation several promotions were made: AL OTTO going to group 6, VERN MILLS to 5 and FRANK GOLDER to 4: Congratulations fellows.

HAROLD ROYSTON was the recent victim of too many coincidences. He was having QRM troubles and after a lot of work he traced it to a germacidal lamp in a local meat market. In checking the lamp he exposed his eyes to too many rays which inflamed them, a doctor put drops in the eyes and Harold was going around the place half blind. He slipped Harold a 30 bill to buy coffee "his treat he called it" but when Harold tried to pay for the coffee with the \$30 bill the cashier just looked at him and smiled sweetly as she said "I'm afraid I can't change that so early in the morning. "Harold took a quick look at it and paid for the coffee himself. Wonder if he ever got even with Ross.

FRANK GOLDER purchased JIM PLATZ's telephone pole and was to move it to his own place. Wonder how he is progressing?

As reported here several times in the past, VERN MILLS has been apparently making progress in persuading wife Ardith to allow a beam on the Mill's mansion. At last we can announce another victory for a fellow ham. Ardith has

purchased and presented to her husband the necessary pipe to mount the beam. We knew all along that you would win Vern.

The WALTER LANTERMAN'S announce the birth of a daughter. Glad to have you join the rest of us new papas WALTER.

BYRON SPIERS sure does wear loud shirts.

#### NEW YORK FIELD

#### By George Anderson

In the line of Amateur (HAM) Radio we find that the Field Department is represented by Harry Grelck, W2DZR on 2 meters; Felijx Ghirlando, W2VQY on 2 meters; Merle Worster, W2HTW, running a kilowatt-California type on 20, 10, and 75 meter fone; Jaime Hackett, W2NT at the present on 40 CW; George Anderson, W1QBO on 40 CW and 10 fone with a half KW; and Irv Grabo, W2AEB on 10 and 20 with a 1/4 KW fone.

At the present time Fred (WOOJIE) Walworth is sunning himself on the shores of Miami Beach, courtesy of Water Winchell and John Bourcier is currently staying at home while Sammy Kaye is in the Capitol Theater here in New York.

Our own Dewitt (RED) Shultis is capably handling the Engineering Surveys of neighboring towns for the many WNBC Salute days.

If some of you laddies that file copies of the NABET Journal will dig back a few years, you might run across an item regarding the proceedings that take place at a local bank when FE Harry Alexander, on payday deposits his bundle of booty. The point of this little tale is that since Harry has been attending the RKO Albee and The Capitol Theater with Andy Anderson for the past 10 weeks he has found himself in an uncomfortable position. On the 15th of January, Harry presented himself at this Banking Institution's portals, the red plush carpet was laid from curb to the deposit window, Trumpets announced his arrival—as usual-the guards were at attention and the Vice-President in Charge of Special Accounts was at the receiving window. Suddenly a gasp arose from the gaping throng that attended these functions twice a month — HARRY WAS NOT GO-ING TO THE DEPOSIT WINDOW, -NO- he went to the PAYING WINDOW. When questioned about this unprecedented deviation from a custom of centuries, pardon—years, we Quote "Gee Bois but I'm sorry—that guy Anderson keeps me working so hard, an' for free, that I am compelled to withdraw some money to pay his expenses." Unquote.

Should anyone care to spend a comfortable day or two listening to a monologue we suggest that you drop into Room 593 and ask Jake how his SON—Richard—born December 23, 1947—is faring at the present.

With that from Room 594 we say 73's 88's and 161.

HAM ISSUE DEADLINE NOTICE: Insufficient response makes it necessary to move the tentative deadline from March 20th to May 20th. We are waiting on complete list of Ham Calls and brief description (with photo) of one or two ham stations—from EACH Chapter.

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# New York Regretfully Says Farewell To NABET President and Mrs. McDonnell

On November 15th, John R. and Mrs. McDonnell and their two children found themselves uprooted from their relatively quiet Mill Valley, California, surroundings, and transplanted to the environs of New York City.

Four months later, Mac's labor in behalf of NABET has been completed. His quiet, straight-forward and keen analysis of NABET's internal and external problems has commanded the overwhelming support and confidence of the NABET National Council, the NABET member-

ship, and management representatives with whom NABET has contracts.

Those who have had the opportunity to witness McDonnell at work felt a sense of personal loss as the time approached for him to return to the quiet of Mill Valley. Spontaneously, a farewell dinner took shape at Shines, well-known New York eatery. In attendance were, President and Mrs. McDonnell; New York Chairman and Mrs. Westover; Engineering Chairman and Mrs. States;

Hudson Chairman Clark; Executive Secretary and Treasurer Harry Hiller; National Representative and Mrs. Gorsuch; former New York Chairman Charles Bennis; Editor and Mrs. Stolzenberger.

Farewell gifts were presented by Messrs. Hiller, Gorsuch, and Mrs. Blum, of the National Office Staff. McDonnell made a brief extemporaneous speech; all present agreed that a fine time was had by all and hoped for an opportunity for another reunion!

#### TRADE NEWS



Slip-drive, clutch type volume controls to take attachable shafts are announced by Clarostat Mfg. Co. These controls used mainly in auto radios and also in home radios with motor-driven operation, provide the essential slippage if the control shaft is turned beyond the end limits, thereby avoiding damage.

A new 172-page 1948 catalogue of

radio parts and equipment is available without charge from the Allied Radio Corp. of Chicago.

RMA announces that 200 million radio tubes were sold to RMA-companies during 1947, about 3% under the 1946 volume. 132 million went into new sets; 43½ million were replacements; 23 million for export; and 5/6 million went to government agencies.

Shure Brothers, Inc., of Chicago, introduces a new line of wire recording heads. Recording, playback, and erasing features have been combined into one small compact unit. Write on letterhead for complete information.

IRE 1948 Convention, Grand Central Palace, New York, March 22-25, is expected to exceed in scope and attendence the recording-breaking 1947 IRE Convention.

The New England meeting of the IRE will be held on May 22, at the Hotel Continental, Cambridge, Mass. It will include morning and afternoon technical papers, and a large number of exhibits.

When the Western Union pole line

between New York and Philadelphia went out during the recent storms, RCA microwave carrier telegraph was utilized and provided uninterrupted service. The microwave equipment operating in the 400 MC region is capable of handling 1152 separate Western Union telegraph printers in each direction, and is invulnerable to storms, etc.

UTC has announced a new line of Commercial Grade transformers to meet the requirements of industrial electronics, hams, and public address systems. Included in the line are audio components, input, modulation, power, and filament transformers.

G.E. announces that it plans to produce more radios during 1948 than during any year in its history.

G.E. also announces a new RF Capacitometer, type YCL-1, which is expected to have wide application in component manufacturing, research and developement labs., etc. Calibration charts are used to convert dial readings for the measurement of capacitance in the range of 0 to 20,000 mmf, and of inductance up to 10,000 microhenries.

#### ST. LAWRENCE—from p. 17

nouncers read their names, pledges, and their requests on the air. The goal was \$500, and the town and surrounding villages went over the top with over \$800, which everybody agreed was a marvelous response, one for which the local foundation was very grateful.

I really must get in a couple of suggestions. About a title for the Hollywood Column, will Hollywoo Hash or Glamour City Glop do? If I win I can't use the prize (of

course I could loan it to Bill Walck for helping write this article) . . . unless, of course, it could be tuned for detecting males also. That would be a different story . . . and I could lend it to Caroline, too. Bill got some ideas from those pix the Hollywood chapter sent in (no! that isn't what I meant). He says it's a shame to let the feminine stuff we have around the station go to waste, so beginning with the next issue or so, we'll start parading them. After all, what has Hollywood got that Watertown hasn't? Don't tell me! I prefer to go on living in Fool's Paradise. (All my friends are here.)

THE BROADCAST ENGINEERS 20 JOURNAL FOR MARCH, 1948

# WHAT MAKES A GOOD RECORDING BLANK GOOD?

# The COATING PROCESS

So secret have some disc manufacturers kept the actual process of disc coating that even the crude method illustrated might seem none too bizarre. The development of the Soundcraft disc coating to combine low surface noise with high mechanical strength (quietness with high response) demanded application of heavy viscosity (fine grain) lacquer.

- To coat smoothly such a molasses-like liquid precluded the use of such common processes as dip-coating wherein layer upon layer of thin lacquer built up the required thickness as the disc rotated half submerged. Spray build-up was also out of the question.
- The answer was flow-coating, a method by which lacquer is virtually dropped on the disc. To obtain uniform distribution by flow-coating, highly specialized equipment was developed. So accurately does this Soundcraft machinery control not only the direction and rate of flow of lacquer as it hits the disc but also the movement of the aluminum base, that the heavy film is applied almost as though a dry plastic were being laid over the aluminum.

• To visualize such a process is often difficult. Final evidence of it, however, is the precision surface of your Soundcraft disc-one more factor that minimizes uncertainty and establishes disc recording anew on a standardized, predictable basis.

\*Watch this space for succeeding ads in this informative series on how Soundcrast discs are made.



The Broadcaster' The Playback' The 'Audition' The 'Maestro

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## TONE COMPENSATING ATTENUATOR TYPE LAC-720

. . . frequency characteristics follow the hearing response curves of the human ear. Base frequencies have smaller lass than the middle or upper registers. (Pat. Pend.)



#### FREQUENCY METER TYPE 838

... frequencies read directly to 100,000 cycles with an accuracy of  $\pm$  2% of full scale in use ... 7 ranges available ... law input voltage requirements ... large, easy-to-read illuminated meter ... mounted on a  $5\frac{1}{4}$ " relay rack panel.



#### TRANSMISSION TEST SET TYPE 8A

... a portable, 12-pound battery operated set ... receiving amplifier measures levels down to -50 DBM ... contains an internal 1000 cycle oscillator ... can also serve as a bridging V.U. indicator with range of -40 to +23 V.U.

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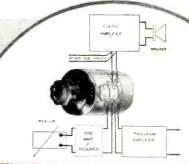
particularly in engineering and design. Many of our developments have been incorporated in the equipment of broadcasting stations, sound recording studios, and electrical laboratories throughout the world, and are specified as standard.

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switching mechanisms . . , also available with built-in switchette for a pilot light . . , may be obtained on Ladder, "T", Potentiometer, and Ladder Foder controls. (Pat. Pend.)