

The Broadcast Engineers' Journal
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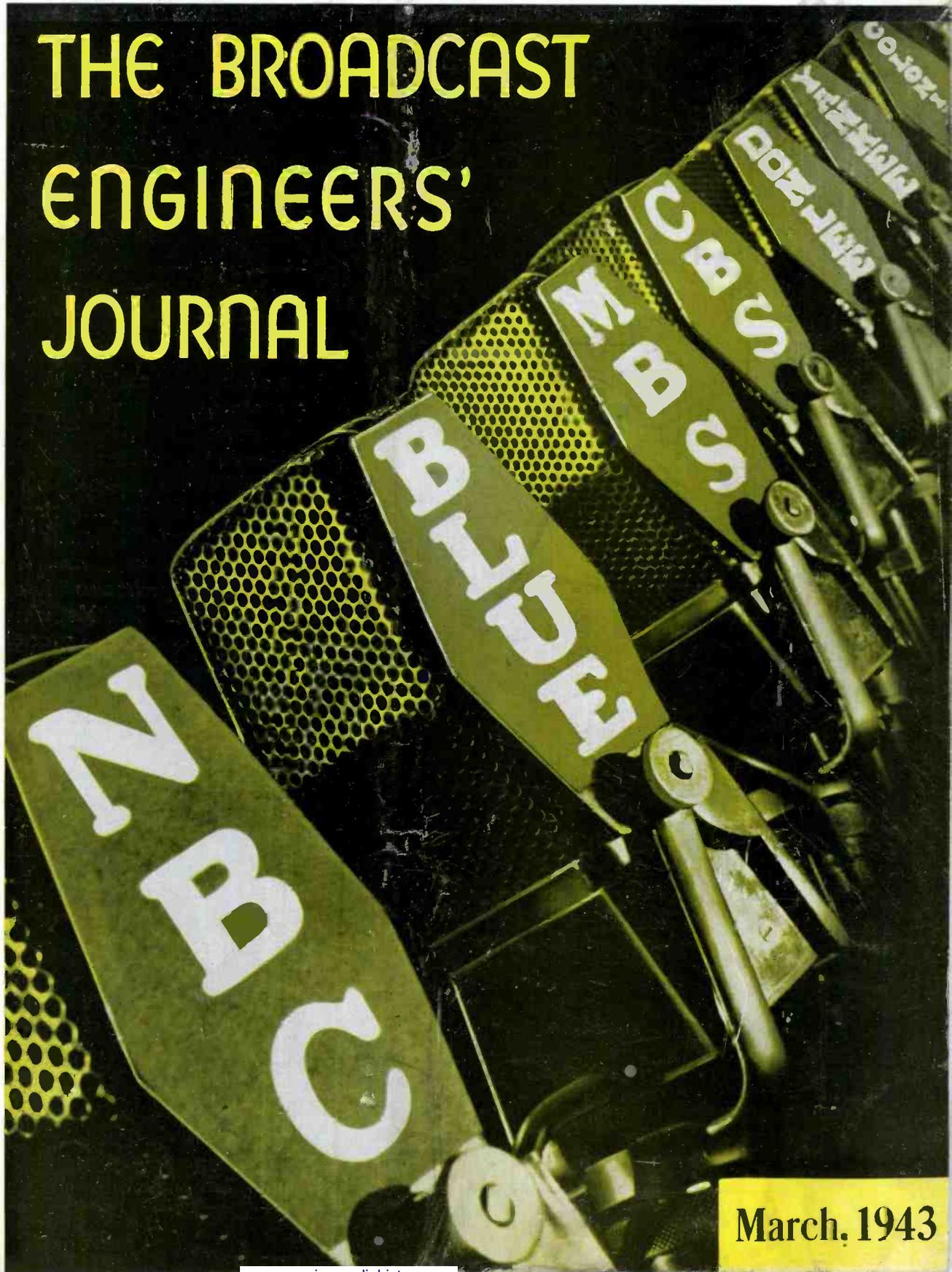
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THE BROADCAST ENGINEERS' JOURNAL

V L I F T O S H I F . . .
(See FCC Report--Page 9)



March, 1943



Wheezes, Wows, Squeaks, Noises,
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NO GREMLINS

in GOULD-MOODY'S sensational
"Black Seal" GLASS BASE

Instantaneous
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— DON'T BE A GREMLIN!**



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RECORDING BLANK DIVISION

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NEW YORK, N. Y.

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THE BROADCAST ENGINEERS' JOURNAL

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Music, truly, builds morale. Music makes men and women work harder. Music lifts up their hearts. And Music is one of the big, big jobs of the National Broadcasting Company. In the program services of The Network Most People Listen to Most, Americans will continue to find, in fullest richness and variety, the music they turn to for strength and for renewal...

SOME OF NBC'S PUBLIC SERVICE MUSIC PROGRAMS

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SKETCHES IN MELODY—Thurs., 1:15-1:45 P.M.

MUSIC FOR BRAZIL—Classical and popular music with orchestra and soloists. Mondays, 6:30-6:45 P.M. Alternate Mondays.

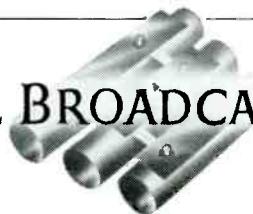
U. S. MARINE BAND—Fridays, 1:15-1:45 P.M.

U. S. COAST GUARD ON PARADE—Coast Guard Academy Band. Saturdays, 11:30-12:00 noon.

NBC SYMPHONY ORCHESTRA—The 1942-1943 season offers a series of 24 concerts, 12 conducted by Arturo Toscanini, 12 by Leopold Stokowski. Sundays, 5:00-6:00 P.M.

*The Music America
wants is heard on*

THE NATIONAL BROADCASTING COMPANY



WOR News By A. W. Stanford

WE PROMISED that in this issue we would compile a list of our former colleagues who are now in Uncle Sam's armed forces. True to our word, we herewith submit the fruit of our efforts, although the list is not complete.

First Lieutenant George Brazee, formerly SE, when last heard from was somewhere in England.

Clifton Foss is in some spot in Africa (not too dark we hope) and is connected with Pan-American Ferrying Service. Clifton was one of our SE.

Captain Charles Kibling, one of our ex-remote engineer's, is somewhere in Africa with the Army Signal Corps. Kibling was heard a few times from Algiers testing Mutual's circuit previous to scheduled broadcast of Mutual's foreign correspondent from that point. Although he did not identify himself, his voice was recognized immediately at Master Control. He was recently promoted from First Lieutenancy.

Second Lieutenant Daniel Ehrenreich, ex-SE, location unknown. Second Lieutenant William Schlegel is out on the West Coast somewhere giving Uncle Sam's Signal Corps a willing and able hand. Schlegel was one of our SE. Harry Bryant, we hear, is with the U. S. N. in Washington, D. C. His rank is unknown to us. He is a former SE.

Second Lieutenant Charles Davidson is somewhere in Puerto Rico with the Signal Corps. We understand that the boys sent Charley a nice Christmas package which came back, after considerable battering about, with the notation that "Addressee unknown." Charley if you happen to read this please send us your correct address. (Ed.—Does the Journal go to P. R.?) Charley held the post of PA and Remote Engineer with WOR.

Walter Payne, a former SE is now with the Army Air Corps Communications, and he flies through the air with the greatest of ease, somewhere. We don't know Walter's rank.

Charles Singer, formerly Technical Supervisor of WOR and W71NY, is now Assistant Director in Charge of Maintenance Unit in the Office of the Chief Signal Officer in Washington, D. C. Singer's job takes him all over the country and after seeing all that can be seen, he told us he still thinks that "The WOR Transmitter is one of the best stations in the U. S. A."

Former SE Neil Spencer is now a Sergeant in the Army Communications. His present whereabouts are unknown.

Lieutenant (jg) Raymond O'Neill, U.S.N.R., formerly TE, was one of the first to answer Uncle Sam's call. He has been in the service over a year now. Present assignment unknown.

LOCAL QRM: Leslie Learned one of the late comers to WOR is on the night trick at MC. He is one of the nicest persons you ever want to talk to. Happily married, has two boys, one one and one-half years old and one nine. Lives out in Port Washington where there is plenty of elbow room for his hobby of photography and gunsmithing. In the bygone days of peaceful era he used to fly his own plane. Has about 400 hours in the air. He came to WOR from WNYC . . . William C. Taylor, a recent addition to WOR, holds down the post of SE after he announced at W71NY for awhile. Comes to WOR by the way of WPAY, Portsmouth, Ohio, and WCPO and WLW, Cincinnati, Ohio. Has a very colorful background. Studied dramatics at Cincinnati

Conservatory of Music and was a bank clerk before coming to radio. Married, no children, but still hopes. Collects coins and match folders. Hails from Troy, N. Y. . . . During the recent extraordinary cold spell, the boys at the transmitter had quite a lot of unexpected fun when in the ten-below-zero temperature they had to go out to the towers to do coupling house maintenance. A brisk northwestern was blowing doing its very best to blow them off the towers and by the time they got back to the plant, you could literally hear their individual joints creak. Ruckstuhl (one of our TE) claims he'll never be the same . . . One of the fellows who is very anxiously scanning the skies now-a-days, is James J. Gavigan of the TE group. He and the Mrs. expect their first horn anytime now. Jim has been with WOR since May, 1941, and comes to us via WHAI, Greenfield, Mass. He was born in Providence, R. I., and is inclined to baseball, basketball, tennis and skiing. Lives up Bronx way and commutes over to Jersey every day . . . The latest score on photography stands thusly: In the still photography column we count Schlegel, Donniez, Learned, and Stanford; while on the movie side we lined up Hadden, O'Connor, Cook, Robinson and Stanford. Five to four in favor of the movies.

PURELY PERSONAL: Greetings to Lorenz, NBC, Hollywood. He and I graduated from RCA back in 1926 together. Always did like him. Nice chap. Tried to QSO him back in ham days, but my punny 25 watts couldn't quite make it. His 1,000 watter pounded in here regularly. Understand you have a beautiful home, Lorenz. Well, "Tempest Fugit." 73.

Ray Lyon asserts very firmly that the new WOR "Veritone" recording studios are absolutely the very latest in the recording technique. He says he has put his heart and soul in it. Congratulations, Ray, it certainly looks and sounds good to us. Ray is supervisor of our recording department.

VIA WESTERN UNION

Ensign Don Hale, recently of WOR Engineering and president of A.T.E. of WOR, had a three-hour confab with NABET's prexy, Jim Brown, at Hollywood relative to stuff of Mutual interest.

NABET Representation on Board of War Communications

NABET President Jim Brown advises that he and Allan T. Powley, Assistant to the President and member of the Washington (DC) Chapter, have been appointed to the Board of War Communications, Committee IV — Domestic Broadcasting.

A Rehearsal with the Maestro

By Serge de Somov



Arturo Toscanini and the NBC Symphony Orchestra as seen from the Engineer's position in the control booth of 8-H. (All photos taken by the author from the Control Booth.—Ed. S.)

IT IS twenty minutes to four . . . on the clock in Studio 8 H of the National Broadcasting Company. The tuning up of an eighty-four piece orchestra stops very abruptly, one only hears light footsteps, then—out of the dimmed studio aisle of 8-H there emerges a figure of a man whose hair is white as snow; the man marches to the centre of the stage, steps on the conductor's platform, curtly bows, then pauses . . . the man is Toscanini . . . He quietly names the selection, raises his baton, and the rehearsal is on.

As soon as he starts conducting he becomes the impersonation of music itself, nothing matters to him but the correct interpretation of the given work. He is obviously as severe to himself in this respect as to the musicians. Accuracy and simplicity are the keynotes of his phenomenal conducting. His dynamic personality is reflected in all the music he conducts. He possesses a tremendous musical "Lift".

The fact that Toscanini rehearses without using a partiture shows that he actually spent time to learn the latter by heart, each part of every instrument, note by note. This is invariably proved by his corrections. At the end of a symphony movement well played by the orchestra he generally says "Bon!", then pauses, and then draws a long "ONLY" followed by a detailed explanation to different instruments of the mistakes they made during that movement.

He has a great sense of humor, a trait not overlooked by the musicians. His emotions are always clearly indicated on his clean cut and strong face. Once in a while during a rehearsal an expression of pleasure shows up on the latter and he starts smiling as if to himself. The Maestro has a terrific speed in his arms and body, his baton technique is unique because of its precision and lightness of form. His fortissimi are always accompanied by the index of his left hand pointing downwards. Toscanini wears a black frock so that his hands would be better discernible to the musicians.

His knowledge of English (He coined the word **SHORT-
ISSIMO**) is above average but he rarely uses it when angry. He interprets the word **FURIOSO** — **PLAY LIKE MAD-
MEN**.

Considering music to be a universal language he often speaks in the same way. Every once in a while you hear—**BITTE, PEUT-ETRE, OH MON DIEU**, but no matter what language—the thought is there.

One really can't help but to forgive him the sudden outbursts of his temperament which generally manifest themselves in a fast tirade directed toward the musicians, mainly in Italian, and consisting of very amusing epithets like "Pharmacists," "Ignoramuses" or even "Donkeys" but with a little twinkle of the eyebrows. A sure sign of his being in good mood and that no trouble is to be anticipated is a piece of hard candy which he keeps behind his left cheek. He does everything wholeheartedly and expects his musicians to do likewise.

The Maestro: "I give you all—you give me back all."

According to him: The "**NOBILITY**" of a symphony orchestra depends upon the balance between the different parts of the latter (strings, woodwinds, brass and percussions); and as to the ability of the same to play well—the whole secret consists in playing music exactly the way it's written; but take it **CUM GRANO SALIS**, don't be more royalist than the king.

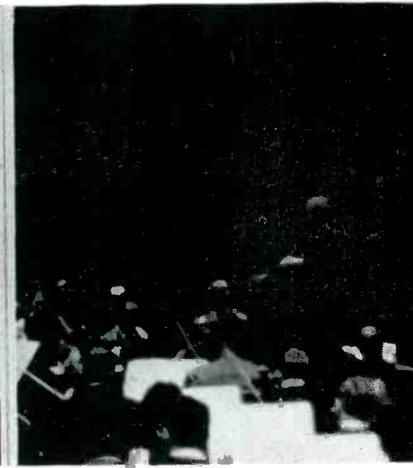
At the end of any rehearsal, which generally has only one intermission of about ten minutes, the Maestro always says "**THANK YOU**", then names the next date.

We are always sorry to see him leave the stage. I don't know about the people in the studio,—but in the control booth we all feel as if the great spirit of music has left us.

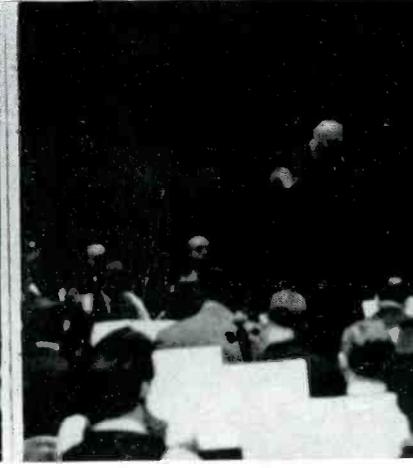
Such is the hypnotic personality of this grand old man—
Arturo Toscanini.



Mezzo Forte



Sostenuto



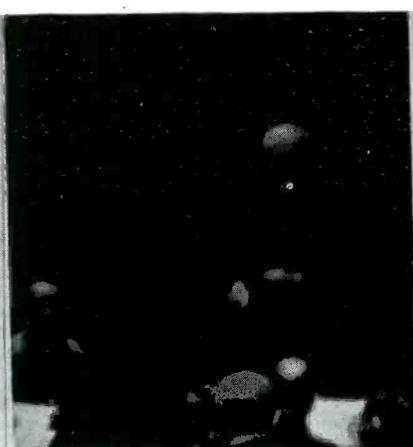
Singing the Requiem



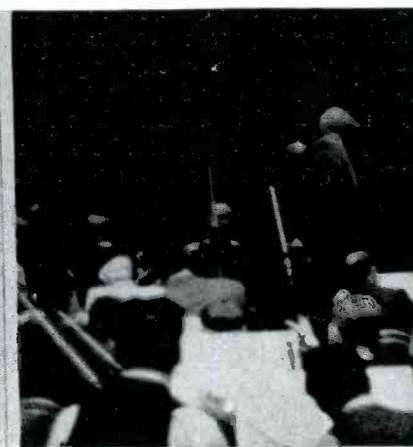
Sentimental



Pianissimo



Vergogna



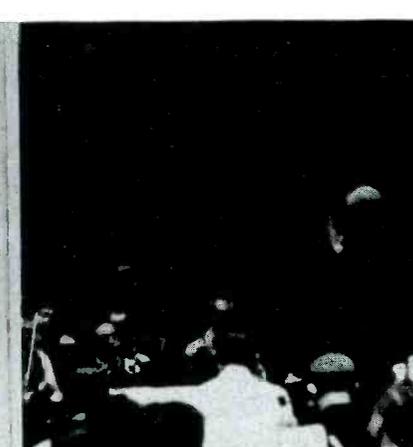
Dunque? dunque?



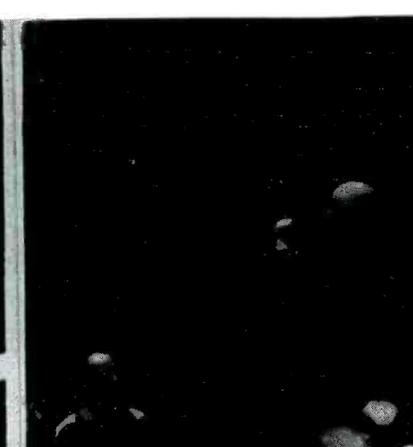
More piano



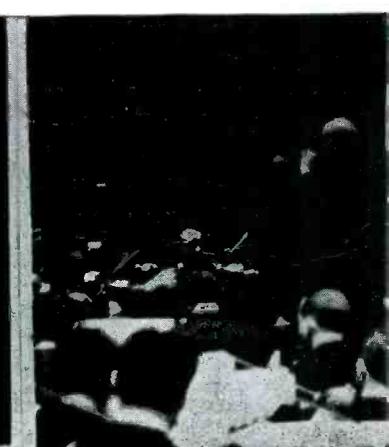
Shortissimo



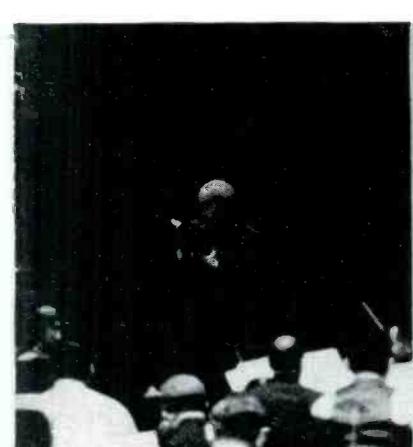
Dolce



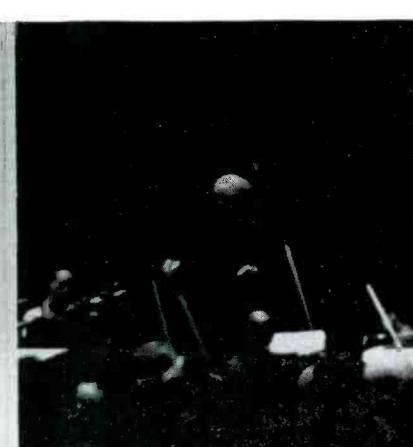
Close together



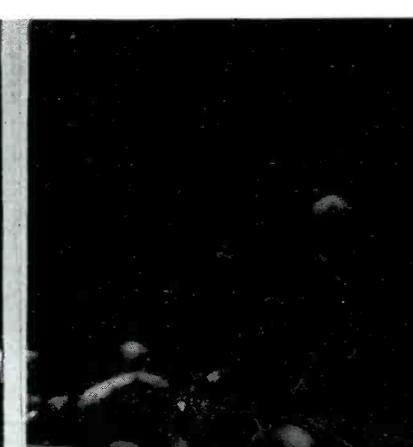
Staccatissimo



2 bars before letter 'D'



Forte, Pessimi Violini



Pensoso



Largo

Notes From the Nation's Station

WLW—WSAI—WLWO

EVERY issue of your fine magazine, The Broadcast Engineers Journal, is read from "kivver to kivver" by all hands here, and greatly enjoyed. Your correspondent notes that it is addressed to "Technicians Lounge" here at the Nation's Station. Brother, them's fightin' words; for thereby hangs a tale: There is a Technicians Lounge here at the Crosley Square studios—it says so right on the blue-prints, and also it says so on the door, but if you were to enter that same door, you wouldn't find any technicians. Since all the offices in the building aren't completed, someone is in someone else's space and the second someones have left the technicians out in the cold temporarily. Although we've bourne these tragic circumstances manfully, it is now time to share our burden with the world and let our hair down with a little confession: The Announcers have taken squatters' rights on our lounge! We've tried cajoling, intimidating, Flit, Terminex, Vat 69, and several home remedies but to no avail. They won't budge until Specialty Sales gets out of the Announcers' Office, and until then, you'll find the technicians "lounging" anywhere from Jack Abram's Salon (oops—I spelled that wrong) to the Happy Hour Pool Hall on Court Street.

* * *

The above notwithstanding, we're mighty proud of our new layout here at Crosley Square in downtown Cincinnati. It is complete except for studio A and a few offices on the fifth and sixth floors. Come with the writer for a brief tour of the studios. The main entrances on Ninth and Elm Streets are reached via a flight of steps to the second floor where is located the main reception room, executive offices, and audition room. Below this floor is the first floor (amazing deduction) where is to be found the "workin's" of the joint, namely, Master Control, Technical Office, Recording Room, Traffic, PBX, News Room, and seven studios. Five of these studios are "standby" and transcription studios and the other two are large enough for dramatic shows and small musical shows. Studio E on this floor contains one of our pipe organs. Master Control is an impressive view through the observation window. Immediately opposite this window is the main operating position with its myriad lights, 30

VU meters, jacks, keys, telephone dials, etc. Flanking the desk on either side are 20 equipment cabinets forming a U-shaped arrangement.

We proceed to the third floor which houses offices, studios C & D which are of proportions suitable for an orchestra; and studio B, which at present is our largest. At one end is a terraced stage flanked by the control room and clients' room. The balance of this studio is occupied by theatre chairs for an audience. As the large Wurlitzer organ is in B, it is the originating studio for the popular "Moon River" program.

The fourth floor is all office space and the fifth and sixth floors, when finished will have offices and studio A. The entire building is air conditioned—nothing has been spared to make it one of the most modern broadcasting plants in the country.

* * *

No description of Crosley Square would be complete without mention of our neon sign out in front. It is truly a sign to end all signs. Mounted on a large pole, it flashes to the local gentry that this is "Crosley Square, W-The-L-Nations-W Station, WSAI, Cincinnati's Own Station" reading from top to bottom. It is a riot of color and a riot among Cincinnati's caninedom. It is no stretch of the imagination to state that there are always several dogs waiting in line for their "turns" at the pole. One of the current rumors has it that one local airdale comes fifteen blocks just to "use" our pole. While speaking of the flora and fauna at Crosley Square, it would not be amiss to mention the flock of starlings that tenant the upper recesses of our Ninth Street enblature. When we moved into the building in December, we thought we were having a white Christmas, but it was only our little feathered friends playing their nasty little game of what we shall modestly call "Chersez la Chapeau."

* * *

The latest addition to the Fighting Forces from WLW is Raymond Murphy (SE) and we send him off with our best wishes. Other members of the studio group who have recently joined the Army include Hu Kern, Larry Dammert, Charles Guffin, and Bob Kleiber. Space does not permit naming all the men from all of the departments who are in

the service, but we certainly haven't forgotten them and we're all looking forward to the day when they're all safe at home and once more working with us.

* * *

Some of the recent additions to the studio engineering staff and their alma maters include Bill Coddling, WAIM, Anderson, S. C.; Bill Nungessor, WKMO, Kokomo, Ind.; Leon Lamkin, WIBC, Indianapolis, Ind.; Bob Henley, WAOV, Vincennes, Ind.; Gil Earp, WRVA, Richmond, Va.; and Herb Crawford, Wilmington, N. C.

* * *

Honors for being the most-recent father are shared by Phil Underwood and Vernon Madill, studio engineers, to whom the stork paid visits in December and left a she-bundle and a he-bundle, respectively.

* * *

The PASS-THE-ASPIRIN DEPT. (with apologies to "New Yorker") contains two gems this month to cause engineers to moan and groan. Recently the Ohio legislature passed a bill declaring the Buckeye state to function on Eastern Standard Time, which, if you have your slide-rules handy, is one hour slower than Eastern War Time. (They'll want to secede from the Union next.) At any rate, the city fathers of our fair city nixed the idea and as a result of action by the City Council, Cincinnati will remain on Eastern War Time, at least throughout the summer. Now, if you cook up a date with that blonde who waits tables at the Ninth Street Coffee House for 1 o'clock, you have to say 1 o'clock which time. Confusing? This is only the beginning. Since WLW is a clear-channel station and blankets several states including Ohio with its powerful signal (ADVT.) it will operate on Ohio Standard Time; while its sister stations, WSAI and WLWO will operate on Eastern War Time which is one hour faster. The biggest headache will occur when we play those Gruen Watch transcriptions where they sing, "It's nine o'clock, tee-deedle-dee-dum-tee-dum." To this, all we can do is to give a resounding raspberry and shout, "The h—I it is!"

The other headache as mentioned in the first sentence concerns the "all-night" shift—or haven't you heard? Since WLW is operating 24 hours per

day until such time as the legislators proclaim a 26-hour day in Ohio, someone has to cover the shift from midnight to eight a.m. Being a democratic little group of workers we have divided the 30 studio and master control men into 10 groups of three men each (Lemme see, does that work out right?) and each group works two weeks on the "hoot-owl" watch before passing it along to the next group. We've worked out a very excellent schedule for this shift and we pass it along to you readers, if you're still with us, for what it's worth. You arrive home about 8:30 A. M. and kiss the kiddies good-bye as they leave for school and then you're off to beddy-bye for your daily joust with Morpheus (I, personally, find "morphine" more relaxing). You awaken about 4 P. M. and have "breakfast" and after this repast, you feel so worn out and the day is practically gone anyway, so you take a flyer at the davenport for a nap before dinner, which is lunch to you. Friend wife, not realizing that you have eaten but two hours previously, chides you at the evening meal for not eating heartily and this leads to one of two results: either she thinks you are ill, and trots you back to bed; or, she thinks you don't like her cooking anymore, and this leads to tears and harsh words along with threats to "go home to mother" and you find yourself in Ye Olde Dogge House. After this meal, the kiddies rush off to their rooms to do their lessons and mommy's in the kitchen doing the dishes, and you're left to your own devices, soooooo—you decide to take a little snooze before going to work. Which you do. As you leave for work at 11:30 P. M., let's add up all of our activities for the day and see what we have accomplished:

Time at the studio.....	8 hours
Time traveling	1 hour
Visiting with family.....	1 "
Eating	2 hours
Sleeping	13 "

Total 25 hours

Surprised? Not a bit. You can do it in Cincinnati!

APOLOGY

We regret that due to circumstances that were beyond our control, the following advertising was inadvertently omitted from our February issue:

Frank L. Capps — sapphire styli.

Scully Machine Company — recording machines.

Shure Brothers — microphones.

Sun Radio Company — equipment and supplies.

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2. Apply to your purchase order the AA2X preference rating which you have received under the revision of War Production Board order P-133 dated February 4, 1943, part 3037.

3. In ordering replacement parts or equipment renewals give your distributor the serial number of the equipment to be repaired or replaced and the part number as shown in your instruction book. Apply the AA2X priority to your order.

★ ★ ★

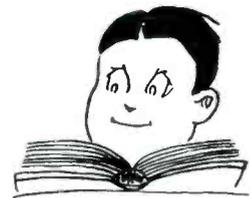
Buy Presto products through leading radio distributors or any branch office of the Graybar Electric Company.

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TECHNICAL PRESS REVIEW



By Ed. Stolzenberger

A digest of leading technical articles in the current contemporary press.

[In these busy times few engineers can spare the time required to read all the current technical literature. It will be the purpose of this regular feature to provide an index of current technical articles on radio broadcasting and related subjects.—Ed.]

Proceedings of the I. R. E. for February, 1943

Voltage-Regulated Power Supplies

By A. B. Bereskin

Power supplies with low regulation have always been an important consideration in the electronic and allied fields. This naturally dictates the use of voltage-regulated power supplies of the types described previously by other investigators. This paper discusses some of the problems involved.

The Measurement of Transcription-Turntable Speed Variation

By H. E. Roys

Speed constancy or freedom from speed fluctuation (wows) is becoming more important due to the widespread use of records in radio broadcasting. Equipment of a simplified nature which will evaluate the wow content as a single figure is needed for standardization purposes. Some of the existing equipment is reviewed, and the importance of having a meter with proper ballistic constants for measuring the wow content is shown.

Loop Antennas for Aircraft

By George F. Levy

While the theory of operation and the procedure for measurement are similar for all loop antennas, the electrical and mechanical design of aircraft loop antennas differs considerably from that of other types. In this paper those characteristics, requirements, and design considerations which are associated uniquely with aircraft loop antennas operating in radio range or beacon band extending from 200 to 400 kilocycles are discussed. Polar characteristics are given for a number of loop antennas; iron core loop antennas which have been used quite extensively abroad are considered separately and comparison is made with the more widely used air-core types.

Deionization Considerations in a Harmonic Generator Employing a Gas-Tube Switch

By W. G. Shepherd

A description is given of an experimental investigation of the properties of a thyatron operating as a high-frequency switch in a circuit which permitted the generation of a wide band of harmonics. The experiments indicate that there is an operating frequency below which no difficulties in deionization occur and above which stable operation requires that the grid potential fulfill certain conditions dependent upon the frequency, wave form of the grid voltage, and circuit constants. It has been found possible to operate certain standard thyatrons at switching frequencies as high as several hundred kilocycles per second. For these higher frequencies the deionization of the tubes is incomplete but normal switching behavior is obtained.

A Note on the Characteristics of the Two-Antenna Array

By C. W. Harrison

The definition for the "effective length" of a transmitting antenna is used in deriving expressions for the radiation function, radiation resistance, directivity, and gain of a two vertical-antenna array, when the relative phase of excitation and current amplitudes are of arbitrary value.

Electronics for February, 1943

The War and Radio Standards

By H. P. Westman

Standardization of radio components, reduces variety of sizes and shapes, assures complete interchangeability of equivalent units and establishes methods of test and inspection which enables inexperienced personnel to carry out, effectively, inspection operations.

Simplified Electron Microscopy

By C. H. Bachman

Brief history of the development of the electron microscope leading to the introduction of the General Electric instrument with horizontal electron path; with electrostatic lenses; with simplified operation.

Test Generators and Chambers

By W. W. MacDonald

Component parts used in much of today's electronic equipment must be subjected to simulated severe field conditions during design and production if they are to render satisfactory service. Typical machines with which such work is done are described.

An Electronic Curve Tracer

By P. Padva

Electronic instrument forces a spot of light to follow a curve to simplify the job of the control engineer.

Bell Laboratories Record

Alarm and Comparison Circuits for Reference Frequency Equipment

By F. R. Dennis

In connection with the reference frequency equipment described last month, an alarm system is described that would give immediate indication of any appreciable deviation from the normal frequency.

Communications for February, 1943

Automatic Aircraft-Radio Recorder

By R. G. Peters

Audio pick-up devices are installed in airplanes during test flights and successively modulate the plane's transmitter. The sequentially modulated transmitted signal is recorded on the ground, and should the plane be lost due to

defect, the point of failure is definitely known. This system also relieves the test pilot of much statistical work, and he can therefore devote all of his time to getting the "feel" of the new plane.

IRE Winter Conference

By L. Winner

An interesting resume of the New York IRE Winter Conference is presented for those who could not attend.

U-H-F Circuit Contours

By Dr. C. D. Haigis

Facts and figures are presented on the useful range, and calculation of the normal useful range, of uhf signals, with a discussion of their utility beyond the general conception of "line-of-sight" transmission.

An Analysis of R-F Transmission Lines

By G. B. Hoadley

Another article on the treatment of transmission lines, taken from an ESMWT uhf course by the author at Brooklyn Polytechnic Institute.

RCA War Training Aid

Prepared especially for use in radio war training centers, the RCA Tube Picture Book provides visual instruction in the constructional details of various types of vacuum tubes. Consisting of sixteen large-size pages (17" x 22"), it contains eight charts printed on one side of the sheet only to facilitate their use for display mounting. The charts show structural details of representative receiving, transmitting, cathode-ray, and special tubes. Readers in the United States and Canada can obtain a copy of the RCA Tube Picture Book from RCA Tube Distributors or direct from Commercial Engineering Section, RCA Victor Division, Radio Corporation of America, Harrison, N. J., at a price of 10 cents.

FCC Report

F. C. C. Report No. 57 (RULES AND REGULATIONS) Public Notice No. 66751, March 2, 1943.

The Federal Communications Commission announces a new classification of radio frequencies into seven major bands, effective immediately.

As a result of the Commission action, Section 2.5 of the General Rules and Regulations will read as follows:

Sec. 2.5 **Useful radio spectrum**—"Useful radio spectrum" means the total number of frequencies or wavelengths which may be used for the transmission of energy, communications or signals by radio. (3)

(3) At the present development of the art the useful radio spectrum is considered to extend from 10 kilocycles to 30,000,000 kilocycles or 30,000 meters to 0.01 meters. These frequencies are classified into bands with designations and abbreviations as follows:

Frequency in Kilocycles	Designations	Abbreviations
Above 10 to 30 inclusive	Very Low	VLF
30 to 300	Low	LF
300 to 3,000	Medium	MF
3,000 to 30,000	High	HF
30,000 to 300,000	Very High	VHF
300,000 to 3,000,000	Ultra High	UHF
3,000,000 to 30,000,000	Super High	SHF

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Photos by Joe Conn

New York News By C. A. Younger

AFRICA SPEAKS: Because of its picturesque interest we present herewith a letter from one of our ex-studio Engineers.

Somewhere in North Africa.
January 30th, 1943.

Hi Gang:

The lost and forgotten man finally writes a letter. I have finally come to earth and stopped long enough to hang my hat to a palm tree. After travelling all over the northern part of the globe I finally land up in North Africa. I went to England from home and stayed there in several spots for a while during which time I visited London and met up with some of the old NBC crowd. I spent a couple of days with Howard Nussbaum and Art Feldman. London is quite a place and all those pictures of the blitz are true all right. I visited all the places of interest—yes, I said interest—in a historical sense, but was laid up with a cold for a few days so didn't see too much. I have done most everything in the Army so far from being a watch officer at sea to piloting a seventeen truck convoy of mailmen sorting the Xmas mail. The sad part of it is I haven't even received one single letter or word from home since the day I left. I guess my mail is stuck some place and will eventually catch up to me if I stop long enough. We had a good trip across the Atlantic . . . but didn't even have an alert for those sea termites the entire trip. I had a swell trip from England down here and it was more like a pleasure cruise.

Well gang, N. Africa is some place. It is warm and even hot in the sun around noon but, oh, at night it gets colder than hell. I am sleeping in a private house . . . with some other fellows and it's not so bad . . . I use four blankets every night and then it is a little cold. But all I have to do for breakfast is reach out the window and pick a couple of oranges off the tree in the yard. They grow like grass here and sure are good. We also get a lot of lemons—yes, the real big honest to goodness fruit . . .

I can't tell you much about what I am doing for military reasons but . . . things are going swell and I am as busy as hell working seven days a week and plenty hours, no NABET down here and no Gallant to check your schedule . . . I haven't had a day off since last August.

Jerry came over and paid us a visit . . . You fellows should go through some of these raids. The first one you just stare and wonder, then it becomes a matter of course and annoys you by keeping you awake, but I have got used to them now and sleep through some of them. We had a good one one night and I watched two Jerries go down in flames from my balcony window. The house shook a bit, all the doors flew open and the windows are still intact—otherwise everything is good all over . . . These air raids remind one of a super Fourth of July Celebration.

Well gang, that's about all . . . but send a few letters this way . . . Send me some copies of the Journal . . . Let me have all the news and where all the old gang are these days. So Au revoir, with a toast of champagne (\$1.25 per qt.) with every meal and the best too.

With Best 73s to All,

Brownie (RB).

Mail to Brownie should be addressed as follows: Captain Walter R. Brown, No. 0-918852, Signal Section, Allied Field Headquarters, A.P.O. 512, New York, N. Y. . . . Three other New York members are now on the Dark Continent along with Brownie. They are A. J. "Bill" Perry, First Lieutenant, USAAF, and Second Lieutenant Vic Tervola and Staff Sergeant Jack Arber, both in the Signal Corps.

* * *

OTHER NABET NOMADS who keep in touch with us are Captain Charley Grey who dropped in on a quick visit from Washington the other day. He says there is no 40-hour week in the Army Service of Supply . . . Mild mannered Jerry Truhlar—recently drafted—sent us a card from Camp Swift, Texas, where he is training to become a

rough and tough M. P. . . Taciturn "Nels" Nelson, who spoke so seldom during the months he was with us, unwound to the extent of a two-page letter after he had arrived at Camp Crowder, Missouri. Nelson was drafted about the same day that Truhlar was . . . Ensign Ed Bertero dropped us a card from the Navy School in Tucson, Arizona . . . Warrant Officer Merle Worster did likewise from his school in Key West, Florida . . . Sergeant Phil Falcone, we hear, is at the Officers Candidate School at Fort Monmouth, N. J. . . . Dewey Sturgell, safely arrived in Honolulu, sent us a long letter describing his enthusiasm for the Island Paradise. It exceeds even an Iowan's regard for California . . . Harold Flood, First Lieutenant, Signal Corps, doing Sound Movie work, drops in occasionally to make sure we are handling his shows satisfactorily . . . And after over a year's absence we were delighted to see Ensign Fred Montilla once more. He was in NY for several days before going to Maine for special study for the Navy at Bowdoin. He expects promotion to Lieutenant (jg) any day now.

* * *

RIGHT AROUND HOME: Ed Gundrum has been appointed by Division Engineer Wankel to act as Instructor for the large number of Apprentices we have taken on in recent months. Ed's heavy experience and intimate knowledge of Radio City circuits and equipment make him the ideal man for the job . . . Transferred from the WEAF transmitter to NY Maintenance is M. D. "Maury" Holland . . . ME Fleming on his way to Chicago NBC to cover a special assignment . . . SE's Harold Luedeke and Bob Ward now reclassified to 1-A . . . FE "Joe" College, SE's Charley "Doc" Dickson, Jack Stody and this newsboy have applied for Commissions in the Army as has SE Bert O'Leary. SE Clarence Westover has done likewise with the Navy. Looks as though that threatened Man-power shortage is becoming more and more imminent.

* * *

FUTURE FANTASY: It is just ten minutes before the broadcast of a Super-Duper-Colossal-High-Crossley Commercial Program from, let's say, Studio 8H. A tense air of expectancy pervades the few people loitering about the Eighth Floor Foyer. Suddenly a Temple Gong sounds distantly—an elevator door opens—and Red and Blue Pixies dance forth, scattering myrrh and ambrosia. Following them come two extra large Nubians, (4F's, of course), carrying between their shoulders a gorgeously appointed Sedan Chair. As the Caravan proceeds toward the Studio, Production Men salaam and Agency People applaud. A Guest Tour stops and gazes in wide-eyed wonderment while the Guide points to the occupant of the Sedan Chair and reverently whispers, "That—Ladies and Gentlemen, is the Engineer."

* * *

MY APOLOGIES for missing the deadline last month. My sked for making up the Journal material was thrown out of whack due to a five-day tussle with sore throat and gripe. I hope it won't happen again . . . Has Hollywood's Ralph Reid gone Native 100%? Or doesn't he know that the LA Weather Bureau's thermometer has a Chamber of Commerce bias on it which never lets it get below 75 even though there's ice on all the mud puddles from Santa Monica to Figueroa Street?

* * *

FLASH! As we go to press, C. P. "Doc" Dickson, well-known NBC-New York engineer, leaves for active service as a Captain in the Army.

HT-4B



HERE is that high-powered rig you have always wanted to own . . . one that you can depend upon for peak operating efficiency. Hallicrafters have built into the HT-4B the resultant experience from years of engineering research.

Model HT-4B delivers a carrier output of 325 watts on phone and 450 watts on CW. The preamplifier supplied with the transmitter can be mounted conveniently at the operating position, controlling volume, keying and standby . . . once adjusted to any band the rig may be operated remotely.

When, once again, we are permitted to sell communications equipment for civilian use — your HT-4B will be waiting for you.

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World's largest exclusive manufacturer of short wave radio communications equipment.



Behind the Mike By Con Conrad

R. A. LIMBERG, NBC engineering department to the U. S. Army Signal Corps as a Lieutenant. Lindy reported for duty at Ft. Monmouth, his duties with NBC for the past thirteen years have been in the field department of the Chicago office. Many of the men in our associated stations will remember him for the many pickups he has made.

H. C. Eckland has been added to the engineering staff of NBC Chicago as a studio engineer, replacing one of the many engineers that have been called to military duty. His



Lt. R. A. Limberg

Lt. R. B. Sturgis

past duties give a wide range of broadcast and other radio background.

R. B. Sturgis, NBC engineering staff of Chicago, reports early in March to the Army Air Corps as a Lieutenant, and communications officer. For the time being Sturgis will be stationed in Miami. His past with NBC shows twelve years of duty, first as a studio engineer, having run the Vic and Sade show from the start, then into the main control room as a supervisor. He goes to the Air Corps with plenty of flying experience on his own, and several operating jobs prior to NBC.

Lieutenant A. L. Hockin, formerly of the Blue Network Engineering staff in Chicago returned to Chicago for a few days, during which he was entertained at luncheon by many of the NBC and Blue staffs. Hockin has just completed his duties with the Navy at Corpus Christi, Texas, and is now on his way to further activities with the Navy, and Radar equip.

Major P. H. Clark, formerly of the NBC engineering staff in Chicago, has just been heard from. He is now with the Army Signal Corps operating in the Southwest Pacific. Clark entered the Army as a Captain, and since he has been in the Pacific area has been raised to the rank of Major.

Lieutenant T. G. Bombaugh, formerly of the WENR transmitter, is the source of the above news. While on duty with the Navy in that area he met up with Clark and they had a fine gab fest of the Good Ole Days at NBC in Chicago.

Lieutenant D. J. Kempkes, formerly of the NBC engineering department in Chicago, has completed his present assignment with the U. S. Army Signal Corps and is now off on another tour of duties, by the time this reaches print, we expect to have a letter from Dave in some foreign port.

Major F. C. Shidel, formerly of the NBC engineering

staff in Chicago, has been transferred from his duties with the Signal Corps at Ft. Monmouth, to Davids, California. On his new duties Fred will have charge of a Signal Corps school. Taking over Shidel's duties at Ft. Monmouth is Lieutenant P. J. Moore also formerly of the NBC Engineering Department in Chicago. We have from some rather round-about sources that Moore has been upped to a Major, but at this writing we are awaiting confirmation.

Hugh Abfalter, formerly of the NBC engineering department, reports to us from very near Pearl Harbor that he has failed to see much of the grass skirts and such in that area. Hugh is there working on some important radar equipment, and also is schooling men in that area in the operation of same equipment.

A. E. Scarlett, formerly stock clerk for the engineering department of NBC, Chicago, has been transferred to the studio staff, with full engineering duties.

D. R. Fitch has taken up instructional duties in his spare time at the Illinois Institute of Technology, working in a Signal Corps training program. His regular job keeps him plenty busy on the NBC staff in Chicago. With the addition of Fitch to the ranks of those engaged in important teaching assignments in their spare time, from the NBC staff, the total is now fourteen.

Holly Pearce, for the past few years engineering supervisor for the staff of WBBM in Chicago, has been appointed program traffic manager, same station.

William Hanna has been added to the staff of WBBM in Chicago. He is new to radio, and has taken up duties replacing one of the many men who have left for military duty.

Marshall Davie, formerly of the engineering department of WSB, Atlanta, has reported to the Signal Corps Officers Candidate School at Ft. Monmouth.

Al Smith, chief engineer of WOWO-WGL, Ft. Wayne, has taken military leave and has been assigned as a Lieutenant with the Army Signal Corps. He reports to Ft. Monmouth.

Donald Calahan and Stanley Reynolds of the engineering department of WGN in Chicago, have taken leave and are now with the Signal Corps in Civilian capacity.

Lieutenant Clyde J. White, who left his post as senior supervisor of WGN engineers to report for active duty with the USNR on February 25, bids farewell to co-workers. Left to right are Robert Sibold, who succeeds White as supervisor; Lieutenant White, Robert Baird, who succeeds Sibold as assistant supervisor; and George Lang, chief engineer of the station.



San Francisco News

By E. L. Parkhurst

WANTED—By all members of the San Francisco Studio Group. A "universal" microphone sign, for use on type 44 microphones. Must be readily adaptable and quickly and easily changed from one to any other of the following conditions.

1. Inverted or upright microphone position.
2. KPO lettering.
3. KGO lettering.
4. NBC lettering.
5. BNC lettering.
6. Must fit 44-A and/or 44-B microphones.

Send your suggestions to Cliff Rothery, care this station.

POULTRY and similar food-item shortages hold no fear over E. Jefferson, CR Supr., who has recently acquired an "egg-a-day-or-off-with-the-head" flock of New Hampshire's pride. Brings to mind the tale told on "Genial Guy" Cassiday. Seems Cass invited some friends to his country estate for fried chicken dinner. He served hamburger instead. When pressed for an explanation, Guy broke down and confessed, and I quote—I just couldn't kill 'em, they are my friends and they trust me—unquote!

DÉPARTURES—Was getting pretty "drafty" hereabouts for Bob "Red" Ryan, SE, and Herv Fritch, KGO TE, so the Merchant Marine gains two good men at broadcasting's expense. To greener (?) pastures in Hollywood goes Hal Platt, SE. Good luck to you all, and drop us a line sometime.

ARRIVALS—At KGO, "Ken" Martin, from a long spell of "tape-punching" at RCAC in SF. At SF Studios,

Toby Hamma, from KYA, who is studying law, (of all things, J. Brown notwithstanding!) in his spare time.

And from KOA, comes that "Ole Man of the Mountains," Carl Schuknecht, who spent a few months with us some years ago. His impression of us and San Francisco was so great that he welcomed the chance to become a permanent part of the scenery. 'Fraid he will miss Coors, tho.

Welcome, all three of you.

HOUSING PROBLEM finally solved itself for Jim Summers, CR Supr., who, with Mrs. Summers, is "threeing" next month. Jim found an unfurnished place, quite by accident, and sallied forth on a furnishing spree. All was well until he bumped smack into WPB. At last hearing, Jim had bought a small gas plate to tide them over while his request for stove-buying priority found its way through official Washington.

VICTORY GARDEN Dunnigan, we calls him. Not much competition these days, with Platt gone. Some of us, who can't even grow weeds, envy Mark and his terrific success with all kinds of garden produce.

OAKLAND'S FINEST now claim O. A. Berg, Maintenance Supr., as a member of the Auxiliary Force, and have issued Oscar a billy, a tin hat, a badge, and,—**AUTHORITY**. How are you on traffic tickets, Boss-man?

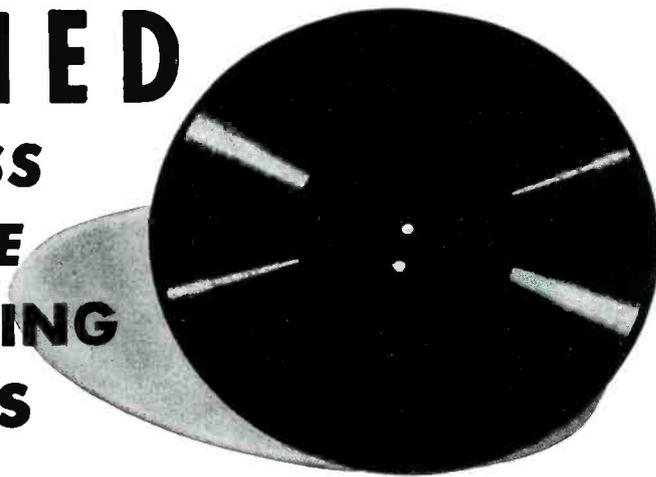
ENGINEER'S LOUNGE takes on a Dairy Lunch appearance, what with an ever increasing number of fellows bringing it with them, instead of paying from six bits to a dollar for a four bit meal.

UNUSUAL number of Blue programs from Pacific Northwest keeps Red Sanders wondering if he will get home from the last one in time to start out again for the next one.

(Continued on Page Seventeen)

If you have not been using or have not yet tried Allied's New Glass Base Discs, a trial will convince you of their merits and superior quality — at no premium in the cost to you. We invite you to try this disc — that is how we obtain new customers. We feel certain that you will reorder — that is how we build sales volume — from satisfied users. Your telephone call, letter, wire or cable will receive our prompt and courteous attention.

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Statewide Ohio News . . .

By Bert Pruitt

SOMEONE once made the statement that the most difficult thing to do, to his way of thinking, would be the delicate job of extracting a hen's teeth with a pipe wrench. I have never studied dentistry, therefore I am not qualified to agree or disagree with a statement of this nature. I will, however, say that the second most difficult task would seem to be the job of starting a Special Feature in the Broadcast Engineers' Journal.

You sit relaxed in your favorite armchair while gazing at the dancing flames in the fireplace . . . then Presto! . . . an idea pops into your noggin . . . There's nothing to it! Just write letters to the different radio stations in Ohio and you'll soon have a Special Feature that will be the talk of the town from Afghanistan to Timbuctoo! That trend of thinking, we have found to our sorrow, is verging on the brink of unrestrained imagination. When given a trial under practical conditions this idea withers up like a plucked cabbage leaf.

In the first place we have the human element to consider when it comes to letter writing. I'm typical of this element, so let's try self-analyzation to prove this point. I have carried a certain insurance policy since back in the early '30's. I realize, as well as Prudential, that the premium due-date falls on the 15th of each month. But without fail I receive a notice on the 17th, then I promptly mail them a check. They, of course, understand human nature, otherwise they would change the due-date to the 17th. They realize that a change of this nature would merely advance the calendar by two days. They wisely leave well enough alone!

You overlook little inconsistencies like these until you try to start a special feature that will give you credit for what someone else writes. Now I leave it to your unbiased judgment . . . Is this the proper treatment for an amateur journalist to receive from the hands he's trying to bite?

Walt Widlar, WGAR Engineer, says, "To heck with this theorizing stuff!" He then pushes his typewriter to the tune of:

"Our Washington correspondent advises us that Chief Engineer Morrie Pierce left the country on February 6th after spending several weeks in the Nation's capitol . . . Lloyd Wingard, Act-

ing Chief, loaned his photo-floods to the official WGAR photographer, Ray Spencer. Ray accidentally let the hot lamps come in contact with the paint on our hotsy-totsy cabinet housing the transcription turntables. The resulting blisters make one think of the ancient Mound Builders who are said to have lived here in Ohio long before the Engineers' Journal went to press.

The mystery of Bill Slater's, on again off again, mustache has been solved. It seems that the Slaters were visiting the Atwaters. Slater demonstrated his new hydra-headed electric shaver. Atwater didn't approve of Slater's technique, so he took the shaver and made a few grandiose sweeps through the air with it . . . Just as he was coming out of a fancy figure eight the cord accidentally hooked the leg of a nearby chair and the buzzing shaver went through a portion of Slater's mustache like a bumblebee going through your Uncle Henry's clover field.

Claire Taylor is enjoying a little rest on weekends since the Cleveland Symphony Orchestra began its recent tour of the East.

Ralph Quay is back on the job after a week in St. Luke's Hospital. "You can't keep a good man down," is the general comment at WGAR.

R. Lloyd is studying "Pre-pre-flight" at the Cleveland Airport. We have reports that Ken Sherman is developing a new secret weapon. Ken has been seen with some strange circular toothed objects in the workshop.

I know it's a breach of journalistic etiquette to jump feet first into Walt's story, but people who know me agree that I chuck ethics to the four winds when anyone mentions the word "teeth." Hen's teeth are the one exception, however. When I hear that word I invariably think of Nathaniel Hawthorne's book of "Tanglewood Tales!" Who could ever forget his story of "The Dragon's Teeth"?

In this story, a fellow named Cadmus becomes enraged when a dragon gobbles up all of his friends in one mighty gulp. Cadmus draws his sword, rushes at the monster, then jumps into the dragon's cavernous mouth. This unparalleled act, as you can well imagine, surprises the dragon and makes it possible for Cadmus to get two strikes across before the dragon can focus his batting eye proper-

ly. Nevertheless, a fierce struggle takes place before Cadmus steps forth victorious!

"What shall I do now?" Cadmus says this aloud as he gazes at the deceased monster.

"Cadmus," advises a mysterious voice, "yank out the dragon's teeth, then plant them in the earth like you would plant a sweet potato!"

Cadmus does just that, then Lo and Behold, the earth begins to crack like your favorite brand of pop corn. Cadmus blinks and rubs his eyes when spears emerge from the earth where he has planted each tooth! The spears are followed by helmets, then out of Mother Earth pops a regiment of the toughest looking warriors it has ever been his displeasure to frown at. Each soldier is dressed in the rattling armour that was all the vogue when Robin Hood was zinging arrows with uncanny accuracy!

"Cadmus," advises the mysterious voice, "heave a stone into their midst!"

Cadmus picked up a bolder and lets fly . . . "Clink" goes the bolder as it clips a fierce looking warrior on the head! Now this warrior is human, the same as you and the guy who's trying to get your job, so the warrior naturally figures someone is trying to do him dirt. He, therefore, smacks the fellow standing nearest to him . . . This fellow follows suit and in no time they are all swinging haymakers with deadly intent!

If Walt Widlar reads his own news items he will likely faint when he sees what I've done to his efforts . . . If he does faint, I'll pass the buck to the fellows at the radio stations here in Ohio. If they had sent some news items I would have been so happy I probably wouldn't have thought of the story of "The Dragon's Teeth."

Walt concludes his news by saying Don McCollister and Bill George finally chased down an elusive harmonic out at the transmitter . . . As an afterthought he adds that Dwight Howland is still house hunting . . . And Gene Toth, night maintenance, is the father of an eight pound boy. Congratulations, Gene, and I'm sure most of the Journal readers smoke good Havanas.

* * *

Chief Engineer Bob Morrison of WMRN, Marion, Ohio, reports a Gremlin and the devilish work the Gremlin did on a recent nemo broadcast. The

Super-Cardioid Simplifies Sound Pickup Problems *in Studio and Remote Broadcasting*

Army-Navy "E" award was being presented in Galion, Ohio, when this little rascal messed up 55 minutes of two otherwise perfect blank discs. It seems that Gremlins don't get paid during test cuts, for the tests were swell. However, when the cutting stylus was lowered at the beginning of the program the little devil bit a piece of sapphire off the stylus. The resultant lopsided groove was discovered an hour later when the boys at WHKC, in Columbus, played the program back. They used two engineers that evening; one to "Ride Gain" and the other to ride the pickup head!

Chief Morrison apologizes to Chief Ed Anderson and the Staff at WHKC.



Lt. T. C. Gootee, on leave from the Journal staff, sends this foto from "Somewhere in England."

This, incidentally, marked the fifth Army-Navy "E" award that WMRN has broadcast during the past six months.

* * *

Perry L. Wilson, Chief Engineer of WMAN, Mansfield, Ohio, writes that Roberta Barfield, formerly of the Control Staff of WLBC in Muncie, Indiana, has joined the Staff at WMAN as Control Operator and Transmitter Technician.

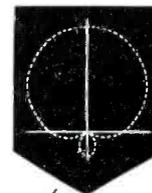
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Broadcast Engineers' Journal, March, 1943 **15**



Model 556A for 35-50 ohms, Model 556B for 200-250 ohms, Model 556C high impedance—at only \$75.00 list.



FEATURES

- ★ More unidirectional than the cardioid—yet has wide-angle front pick-up.
- ★ Decreases pick-up of reverberation energy and random noise 73%.
- ★ Improved wide-range frequency response—from 40 to 10,000 cycles.
- ★ Symmetrical axial polar pattern at all frequencies.
- ★ Highly immune to mechanical vibration and wind noises.



Solves tough wartime pickup problems.

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By J. Willard Dean

NEW orders came through from the First Fighter Command, Wilmington, N. C., allowing WPTF (key station) to leave the air from 2:00 A. M. 'til 6:00 A. M.—first break in program time in over a year. Studio and Transmitter boys standing-by just in case. The vocal chords of Waldo Rood (SE) have already been adjusted to the situation. Incidentally, the message was aired in nothing flat. The ether waves were spreading it to the great populace in 29 seconds after instructions to air message had been received. Felton Williams (TE) frankly admits that the oft-needed humoring of rectifiers was just about nil . . . says they just strained a point and took it like a veteran! Even the machine age understands War.

Caretaker Andy Radford, chief replenisher of the tower lights, says this business of signing off is a bit of "All Right." Ascending to cold steel is much better. The old Rig can stand a little maintenance and the TE's tell me that they're really giving her the polish. Then too the SE's welcome the opportunity of being able to find out what kind of equipment they're playing with. It's rather difficult to familiarize yourself with the intricacies of new apparatus when it stays hot on around the clock basis.

Chairman Sugg informs me that President Brown has requested photographs and biographies of members of the WPTF Section for future publication in the Journal. I shall attempt to supply this material from time to time in an effort to acquaint you readers with this end of the organization.

Two rather amusing incidents occurred recently when a couple of guys, with a number of years experience in radio service work, decided the going was too tough after having witnessed the control room "rat race" during the 12 noon to 3 p.m. drag, and quietly made their exit, not having returned at this writing.

Received a letter from the Shark, Sam Liles (TE). Sam is stationed with Uncle Sam's Naval Forces in North Africa, playing around with strange creatures bedecked in white robes but says they're definitely anything but Ghosts!!

Donald Moye, newest addition to the engineering staff, who is already taking a regular trick in the Control Room,

hails from Beckley, West Virginia, but insists that he is a Tar Heel born.

Vacation schedules have just been posted with the Engineering Department personnel, rating two weeks each, with the exception of the more recent members of the staff.

Charles Wright taking Electrical Engineering at North Carolina State College has been engaged on a part-time basis for studio and field work.

Since the operation of the Air-Cooled tube was perfected, I haven't been in the position to express my sincere gratitude for such marvelous ingenuity. A word of commendation is definitely in order for the responsible party or parties . . . I used to be WATER-BOY on the five kilowatter.

Warren Barfield, former WPTF employee, now with the U.S.N.R., stationed at New River, N. C., was in the studio the other day displaying a couple of stripes as a radioman, second class.

I hear some screwball is dicking with the idea of picking up Lincoln's "Gettysburg Address" and recording it. Contending that the signal is still floating around up there, minute as it might be. Sounds like scuttle-butt to me. I guess after it dissipates into heat you go through the highly scientific process of changing heat into sound then it's merely a matter of amplification in order that the signal may be made audible. Simple, ain't it??

Does anyone know anything about the new Critch-Low slide rule? An Army Officer was telling me that it had really simplified the operations of the mathematical genius. Understand it's of cylindrical design and even I could use it with some degree of accuracy!

Announcer Tommy Williams now convalescing around the studios after having undergone an operation just recently. It's not often you meet a fellow that will correct his physical conditions to meet Army requirements at his own expense. That's the kind of a guy you want to fight beside.

Jim McMurphy, former announcer who has been taking Civilian Pilot Training, has resumed announcing duties temporarily awaiting orders from Uncle Sam.

Jerry Soesbee is the newest addition to the WPTF announcing staff. Jerry hails from St. Petersburg, Florida, with

the worries of an expected father, formerly connected with WSUN.

This past fall, following the Army-Navy football classic, I remember NBC switching to Athens, Ga., for the Georgia vs. Georgia Tech game and somebody by the name "Penfield" was doing the play-by-play but I don't recall having heard him on the network since. Somebody's missing the boat . . . *that guy was really good.*

By the way, first catastrophe of the new studio lay-out has taken its bow. I failed to witness the scene first hand, but they tell me it was a hectic one . . . The other night when everything was all-quiet and peaceful just after the Network had taken over for the evening and the skeleton force on hand had slouched back in the most restful easy-chairs, discussing varied and sundry things in the form of a good old-fashion "Bull Session" announcer Joel Lawhon very nonchalantly inquires "I wonder what that is?" Holy Mackrel, Neuse River (a branch the Rabbits take in stride) must be overflowing, yells receptionist Peggy Fox, as she spotted a stream of water seeping across the reception room floor . . . All on hand (announcers Tommy Williams, Jerry Soesbee and Lawhon, guides Tommy Briggs, and Worth White, transcription clerk Frank Lilley and the receptionist) rushed down the corridor to discover a BUSTED water line in the men's "Powder Room" that already had taken on the appearance of NIAGARA ON THE LOOSE. Immediately they all began shedding their shoes and socks and gathering pails and mops, in order to slow up the progress of the RAPIDS until building Engineer could be reached for the manipulation of the cut-off valve. (Metcalf, SE, trying frantically to locate him.) After the janitors arrived on the scene they just stood around like one of the supporting columns until Lawhon got so infuriated that he burst forth with a "Get the H—l out of here if you can't help!" Finally after the Engineer in charge succeeded in putting the brakes on the shut-off valve, the water moppper-uppers tallied the score to the tune of sixty-eight pails . . . Announcer Stewart Spencer patiently waiting downstairs in cafeteria playing nurse-maid to three extra meals that he had ordered two hours previously for some of the crew, wondering if he had better call the special events department, for it looked like a session with the dishes for him with a total of a buck and a half on his person and the cafeteria management making demands for the sum of three dollars and eighty-five cents . . . Cause of Flood accounted for—just a weak connection of copper tubing over-lapping one-eighth of an inch when it should have over-lapped a couple of inches (in reality a cellophane connection). Well, Paw always did tell me—when you want anything done and done right—DO IT YOURSELF!—Dean.

San Francisco News

(Continued from Page Thirteen)

Red says travelling not what it's cracked up to be these times, but he's always rarin' to go. Good thing "John Freedom" moved out before Red and Andresen were sent out together, eh gang?

IN-THE-ARMY-OUT-AGAIN Russ Butler finally got his status cleared up, to the tune of a deferment. Hope it sticks, fella.

WELL, it seems as tho the fumes from the new paint job at KPO not only gave the TEs writers' cramps, but asphyxiated their carrier pigeon.

C U next month.

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OWI'S Place in American Broadcasting

(Concluded from Last Issue)

The Office of War Information is providing program material in the form of recordings of the American domestic commercial broadcasts, with the commercial advertising deleted, for use of the medium broadcast stations in Hawaii, Alaska and Puerto Rico, where it is effective in providing American troops and local citizens with morale

foreign points by communication companies, by representatives of United Nations governments, and by Office of War Information field representatives and disseminated to the local press. Transmissions of this type have been found necessary in order to provide accurate and timely news in many areas where the regular news services have

the installation of special radiophoto equipment developed at the direction of the Office of War Information and installed in many cases with the assistance of its engineers at certain foreign points. Installation of this radiophoto equipment has opened the door to a brighter day for communications in China.

Transmission of a telegram in China requires its translation from the Chinese into some other language for which there is a telegraph code before it can be transmitted over the wires in this code. After reception it has to be retranslated into Chinese, making the operation not only slow but subject to many errors. Radiophoto offers the advantage of immediate transmission of the Chinese characters in their original form. It is said that when Generalissimo Chiang Kai-shek first saw a radiophoto transmission of the Chinese characters he immediately requested the purchase of a sufficient number of units to enable him to establish such telegraph transmission to his principal field officers.

In the transmission of scripts and other material used in broadcasting studios and in the preparation of news releases for overseas transmission, OWI uses private line teletypewriter circuits between its principal offices in Washington, New York and San Francisco. There are five teletypewriter circuits between Washington and New York carrying an average daily load of over one quarter million words, and there is one such circuit between Washington and San Francisco carrying an average daily load of over 100,000 words.

With the opening of the North African front, the Office of War Information and the American press were faced with a new problem, that of obtaining adequate and timely news from that front. During the early days of this campaign, when the only facilities available were the commercial channels operated by Cable and Wireless, Ltd., terminating at Tangier, traffic delays of as much as three days were not at all uncommon. Several weeks ago, however, OWI through arrangements with the Army, established a channel from Washington to Algiers, which channel is available to the American press at no cost. This channel is now carrying over 11,000 words daily, and it is planned to continue its operation until



RIGHT IN DER FUEHRER'S FACE!

Genial Al Protzman, well-known in broadcast, sound movie, and television engineering circles, poses for the record.

building entertainment. In addition to short and medium wave broadcasting, OWI uses other means of disseminating news throughout the world. Through the usual channels provided by the commercial communication companies it transmits daily more than 30,000 words of press. These are received at

broken down or have been discontinued because of the war.

Supplementing this service and operating in conjunction with it, radiophoto transmission has been established to a number of points where such transmission was unavailable prior to the war. This has been accomplished through

such time as commercial facilities have been established which are capable of handling the press file without delay.

As the war progresses, OWI hopes that it may continue to meet its responsibility for keeping the American public promptly informed of developments on any additional fronts which may be opened.

Radio people often ask about the effectiveness of American propaganda. That is a hard question to answer. Recently the monitoring stations of the Foreign Broadcast Intelligence Service and the British Broadcasting Corporation have reported that all programs from any country which cover developments on the Russian front are being jammed in Germany. If there was no likelihood of these programs being received, no effort would be made to jam them.

Another report provided by the monitoring station of the Foreign Broadcast Intelligence Service on the west coast, covering a broadcast to the domestic audience in Japan, is interesting because it indicated the degree to which the Japanese are informed of the activities

of the Office of War Information and the steps they are taking to overcome its effectiveness. This report states in part:

"Accompanying the new developments of the world war situation, the enemy nations, America, Britain and others have recently been recovering repeatedly from the great blows suffered in various battles and — looking forward to a recovery of the situation in the Solomon Islands, the Aleutians area, or in North Africa — have been planning military counter attacks. Hand in hand with this, even in the war of thought, they have begun an extremely active offense, and these propaganda schemes bear attention.

"In particular, recently there have been special correspondents dispatched from the Office of War Information to Soviet Russia, Turkey, Iran and other areas throughout the world. At London and at Dublin in Ireland, branch offices have been established and efforts are being made to collect informa-

tion. Altogether there are 44 branch offices in principal cities in America, and these offices are devoted to collection of domestic information and in spreading propaganda."

Of the OWI's activities overseas and at home, Director Elmer Davis has said that OWI is a war agency, established to serve as one of the instruments by which the war will be won.

"We in OWI," he said, "do not overestimate the contribution we can make to victory, but we do not underestimate it either. We know the war is going to be won primarily by fighting, but we can point to plenty of proof in history, both recent and remote, that victory of the fighting forces can be made easier by what is called psychological or political warfare, the prosecution of which has been entrusted primarily to this office.

"We are in a sense an auxiliary to the armed forces — an organization whose operations can pave the way for their operations and make their successes easier. We may be a minor auxil-

(Continued on Page Twenty)



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OWI's Place

(Continued from Page Nineteen)

ary, but if what we do succeeds in shortening the war by one single day it will save the United States Government as much money as this office is likely to cost in several years."

Mr. Davis pointed out that many millions of people today are completely dependent for any truthful account of what is going on, on what the United States and our allies tell them; and merely to know the truth is going to inspire them to a more stubborn en-

durance and resistance to the endeavors of the enemy to make them accept their defeat as final.

The Voice of America, creation of the high technical abilities of scores of American radio engineers, is doing that job increasingly well day by day.

"Sunday"

By C. A. Younger

Time and again we hear fellows saying, "Gee! Wouldn't it be great to have a Sunday off every now and then." Well,

most of them have two Sundays off each week and they don't realize it. It's simply because they do not have the right point of view. For while Sunday is observed on Sunday by the Christians, it's observed on Monday by the Greeks; Tuesday by the Persians; Wednesday by the Assyrians; Thursday by the Egyptians; Friday by the Mohammedans; Saturday by the Jews and Seventh-Day Adventists.

We just know that choice morsel of information will make you feel lots better.

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Cleveland News

Bob Dailey, WTAM's publicity expert and News Editor, is rallying a fountain pen brigade to come to the aid of WTAM's employees who are in the services. Bob says he hopes to go to press in the near future.

And while we are on that subject, let's publish a list of WTAM'ers wearing the uniform of Uncle Sam . . .

Captain Cecil S. Bidlack . . . Army Signal Corps . . . Engineer.

Private Seth Cary . . . Army Band . . . Musician.

First Lieutenant John Cheeks . . . Army Signal Corps . . . Engineer.

Captain Thomas C. Cox . . . Army Signal Corps . . . Engineer.

Second Lieutenant Jack Fern . . . Army Signal Corps . . . News Editor.

Private Thomas Field . . . Quartermaster Division, U. S. Army . . . Announcer.

Second Lieutenant John F. Hicks . . . U. S. Marine Air Force . . . Announcer.

Private John Kraus . . . U. S. Army Air Force . . . Air Conditioning.

Captain Ellis Vanderpyl . . . U. S. Army Air Force . . . Announcer.

SeeBee George Sholle . . . Navy Construction Expert . . . Musician.

Private Harold Winters . . . U. S. Army Air Force . . . Office.

* * *

Hugh Walker (TE) . . . (Pardon me) . . . Colonel Hugh Walker, plantation owner, is suffering headaches that aren't caused by arc-backs or flare-ups in our 50-KW stratospheric pea shooter. The Colonel wonders how he is going to harvest his next crop of pecans with the labor shortage what it is. We haven't time to solve the Colonel's problem . . . We have headaches of our own. We're eyeing March the 15th with a look of skepticism like the one that spread over old Dobbin's face when the first horseless carriage putt-putted into Four Corners, Indiana. Old Dobbin was quite a horse. I wonder if he's still living? He would be nearly thirty years old by now. He's lucky he lived in an era when beef was plentiful . . . Say! I wonder? That steak we had tonight was darned tough!

* * *

Have you heard **Spike Jones** and his City Slickers do "Der Feuhrer's Face"? I'll bet Der Feuhrer has a new respect for American raspberries if he has listened to them do that one.



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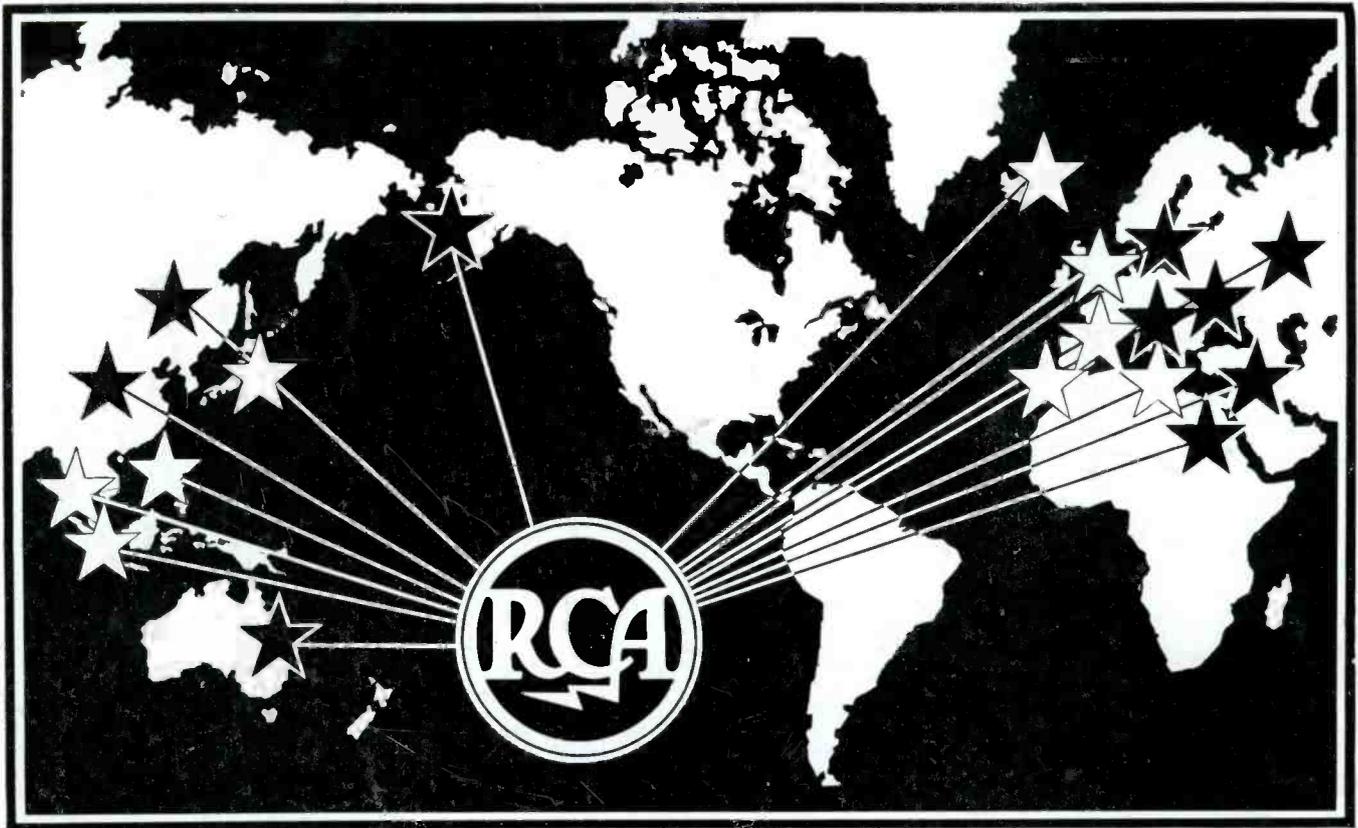
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