

The Broadcast Engineers' Journal

FAY GEHRES WGBF-WEOA
2232 E POWELL AVE
EVANSVILLE IND S145

Sec. 562, P. L. and R.
U. S. POSTAGE
PAID
New York, N. Y.
Permit No. 2961

116-03 91st Ave., Richmond Hill 18, N. Y.

If addressee has moved, notify sender on
Form 3547, postage for which is guaranteed

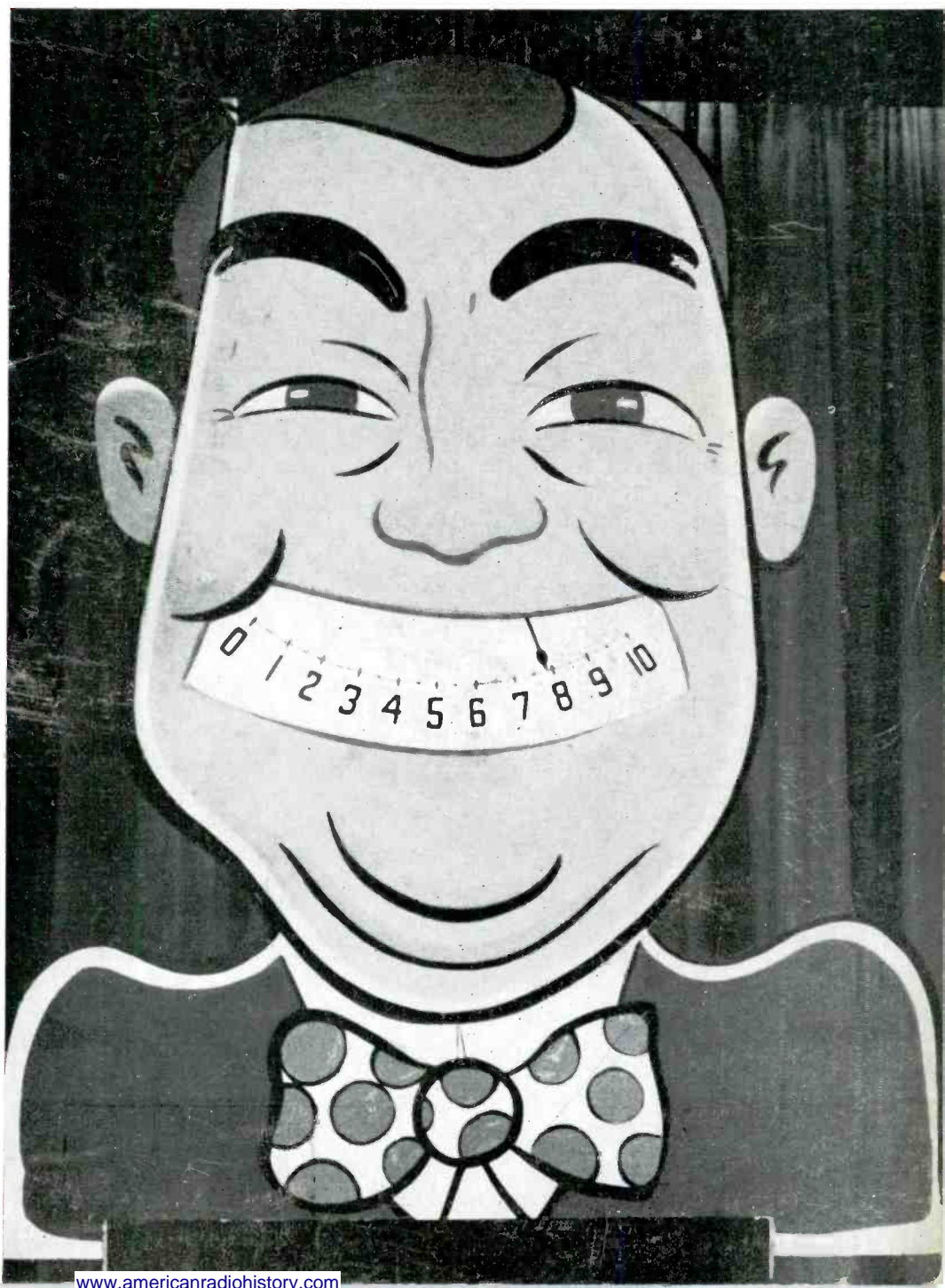
Since 1934... Of, By, and For The Broadcast Engineer

Volume 10 • Number 9

**COLGATE'S
Dental Cream
Laugh Meter**

— photo by Sergei de Somov

**September
• 1943 •**



—LIKE A HOT TODDY
ON A FREEZING DAY!



—LIKE A NEW CLIENT
WITH A FISTFUL
OF FOLDING MONEY!



—LIKE A WELL-AIMED
TORPEDO AT A
JAP BATTLESHIP!



“Black Seal” GLASS BASE

Instantaneous
RECORDING BLANKS

*have given a new
“LIFT” to the world of
broadcast recordings*

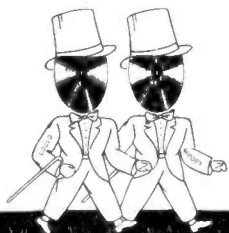
From East and West, North and South, the good word goes down the line “no finer recording blank was ever made.” Wrapped up in this amazing package is unequalled frequency range, complete elimination of background surface noises, smooth as honey playback qualities. Made entirely of glass, “Black Seal” Blanks come to you in two weights, both with two or four holes —nothing to wow, rumble or grumble.

TRY THEM AT OUR EXPENSE!

Try them out under your most exacting conditions. If they don't come up to expectations, send them back and we'll stand the entire tariff.

Old Aluminum Discs Recoated With “Black Seal” Formula in 24 Fast Hours!

No waiting! No delay! Orders filled immediately! Styli and shipping cartons supplied at actual cost!



Another Gould-Moody “Scoop”! PacKARTON Shipping Container. Lightweight corrugated box which protects delicate glass records via air, railway or truck. Safe, efficient, reduces your shipping costs. Write for details.

“LET'S ALL TOP THAT 10% WAR BOND PURCHASE PLAN”

the GOULD-MOODY company RECORDING BLANK DIVISION
395 BROADWAY, NEW YORK, N. Y.

THE BROADCAST ENGINEERS' JOURNAL

Volume 10, No. 9



September, 1943

TABLE OF CONTENTS

	Page
They Read This Journal.....	3
Hollywood News.....	4
This is Mutual.....	5
Notes from the Nation's Station, WLW - WSAI - WLWO.....	8
Washington News—WRC - WMAL.....	9
New York News.....	11
As Ye Sow, So Shall Ye Reap.....	11
Technical Press Review.....	12
Gone With the Draught!.....	14
Los Angeles News.....	16
Hollywood 6, Chicago 2.....	18
From San Francisco.....	19
"Way Back When" in Broadcasting.....	21
Chicago.....	22
WOR-Mutual.....	23
Cleveland News.....	24

THE BROADCAST ENGINEERS' JOURNAL

E. Stolzenberger TRUSTEES H. E. Hiller
F. R. Rojas G. E. Stewart V. J. Duke

Managing Editor, ED. STOLZENBERGER
Virginia 9-5553

Coordinator..... F. R. ROJAS
Director of Sales and Promotion..... JAMES H. BROWN
Contributing Photographer..... SERGEI DE SOMOV
Treasurer..... C. W. PHELAN
Assistant Treasurer..... D. J. MOLONEY

ASSOCIATE EDITORS

Chicago..... A. W. HJORTH
Cleveland..... BERT PRUITT
Denver..... V. E. ANDREWS
Engineering Chapter..... E. WADE
Hollywood..... BOB BROOKE
KFI-KECA..... H. M. McDONALD
New York..... G. F. ANDERSON, JR.
San Francisco..... BOB SHOVER
Washington..... R. E. SHENTON
WLW-WSAI-WLWO..... BOB BROCKWAY
WOR—MUTUAL..... HERMAN G. BERGER
WPTF, Raleigh..... J. WILLARD DEAN

The Broadcast Engineers' Journal is a privately printed monthly publication, issued by A.T.E. Publications, Inc., a corporation of the State of New Jersey. Address all communications to Editor's office: E. Stolzenberger, 116-03 91st Avenue, Richmond Hill 18, L. I., N. Y. Telephone Virginia 9-5553. **THE BROADCAST ENGINEERS' JOURNAL IS THE OFFICIAL PUBLICATION OF THE N.A.B.E.T.**

Advertising rates and information supplied on request. Subscription, \$1.50 per year; \$3.00 for three years. Single copies, except Christmas Yearbook, 25c; Christmas Yearbook free to subscribers. All remittances in advance. Foreign: Add postage.

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

NATIONAL N.A.B.E.T. OFFICE
Suite 210, 1509 N. Vine St.
Hollywood 28, Calif.
James H. Brown, President



This War . . .

is daily emphasizing the importance of dependability and permanence in all of our equipment.

**This is especially true of
Radio Recording
Equipment**

The Test of Time has proven

**SCULLY
Master Recorders**

to be unsurpassable as precision,
superb recording machines

**BUY U. S. WAR BONDS NOW
and plan to install
SCULLY MASTER RECORDERS
After the Victory!**

**SCULLY
Machine Company**

62 Walter Street Bridgeport, Conn.
Telephone BRidgeport 4-5300



MICROPHONES—*Under Glass*

—We call it the room at the plant because that's where we make those very special microphones. But this we can say. New techniques in microphone manufacture involve such extreme care that workers operate in dustproof glass enclosed areas which are air conditioned and humidity controlled. Precision made—they are designed to stand up and perform under extremely difficult combat conditions.



Shure Brothers, 225 W. Huron St., Chicago
Designers and Manufacturers of Microphones and Acoustic Devices

"THEY" Read this Journal

**THEY . . . the Engineers and Technical Staffs
are the Backbone of the combined
Broadcast, Recording, and Television Industry**

Returns from a recent circulation poll supplies the substantiating data below, that

*An Average of 5.8 Additional Engineers and Technicians see
EACH Chief Engineer's copy of this Journal EVERY MONTH*

Chief Engineer	Radio Station	Additional Engineers that see his copy of this Journal
W. T. Golson	WJBO-W45BR, Baton Rouge, La.	5
Geo. Krivitsky	WKBZ, Muskegon, Mich.	3
H. J. Kratzort	WJTN, Jamestown, N. Y.	4
Harold Gander	KORE, Eugene, Oregon	4
Ray C. Spence	WAJR, Morgantown, W. Va.	3
James E. Lowe	WCOL, Columbus, Ohio	7
E. E. Trepagnier	WNOE, New Orleans, La.	5
T. O. Jorgenson	WEAU, Eau Clair, Wisc.	4
Harry E. Adams	WIBC, Indianapolis, Ind.	7
David F. Foote	WOLF, Syracuse, N. Y.	7
A. W. Kramer	WAOV, Vincennes, Ind.	5
G. E. Mead	WCOA, Pensacola, Fla.	4
Paul G. Lindsay	WHEB, Portsmouth, N. H.	3
Cliff Todd	WNAX, Yankton, S. D.	9
A. Friedenthal	WJR, Detroit, Mich.	17
Charles Sakoski	WBRE, Wilkes-Barre, Pa.	6
Carl E. Lee	WKZO, Kalamazoo, Mich.	10
Sunbury Broad. Corp. Acting Chief Eng.	WKOK, Sunbury, Pa.	3
Transmitter Sup'v	WCBM, Baltimore, Md.	7
R. H. Musselman	KQW, San Jose, Calif.	4
	WCBA-WSAN, Allentown, Pa.	5

*An Average of 5.8 Additional Engineers and Technicians see
EACH Chief Engineer's copy of this Journal EVERY MONTH*

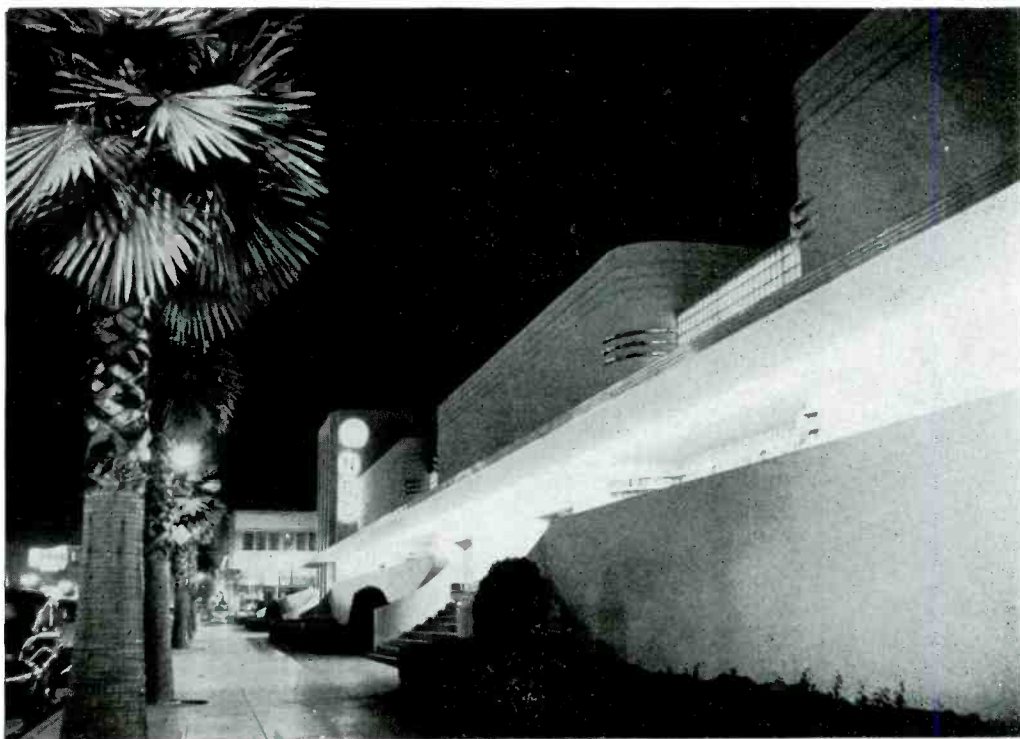


580% Circulation Bonus



H O L L Y W O O D N E W S

By Bob Brooke



RCA Prexy Sarnoff Visits Hollywood . . . Big Shows Start . . . Again We Report Hollywood's Biggest Year . . . SUN . . . WOMEN . . . Service News . . . Gossip . . .

RCA . . . President **Sarnoff** has been in town for our first glimpse of him since Hollywood opened . . . Pres. Sarnoff was stopped at the front information desk by one of Hollywood NBC's efficient uniformed guards and was told that he would have to have a pass to enter the sacred gates . . . Thereupon he cooled his heels until help arrived in the form of Hollywood's Vice President **Strotz** . . . Needless to say, the following day sufficient information on company executives was passed out to our guards to make them execs more quickly recognized in the future . . . I am sure that Mr. Sarnoff will agree that the building is well guarded . . . (We on the staff certainly know it) . . . Next time out the Hollywood Engineering group would really like to meet our ex brass-pounder chief. A man who is not only our boss but is also a symbol and an idol close to the hearts of all radio-men everywhere . . . We sincerely hope Mr. Sarnoff enjoyed his stay and found our Radio City as much to his liking as it is to ours . . .

SUN . . . Vacations in September and October are for the lucky men who have found out about the intricacies of our California Sun . . . The fine weather of these months finds many late vacationers headed for beach and mountains in quest of fish or deer or "Dears" . . . **Fishing** this season has been good in both ocean and streams . . . **Deer** must be hunted in inland places because of Coast defense zones . . . "Dears" are more plentiful this year than ever before . . . The later are particularly in evidence around our single men of 2A classification or better . . . The "Dears" need not be hunted as they now roam in packs and are not even particular about the single part of the classification . . . Single men at NBC are forming a mutual protective league, with a few rabid bachelors joining the armed forces to frustrate the females . . . **Jim Thornbury** is ducking right and left and it looks like he'll be a goner soon . . . **Pickett** looks scared and **Brooke** is joining the Navy . . . The good looking married men, whole staff of course, but especially those with bow ties and mustaches like **John Morris's**, are becom-

ing natural prey for the Hollywood glamour girls . . . Ah, wonderful days . . .

MISC . . . Chief **Saxton** built a five foot concrete retaining wall along one side of his house during his vacation . . . **Onofrio** reports his vacation on a dude ranch brought swimming, wind, sand, sleet, and snow, all in one afternoon . . . (Of course that's out on the desert . . . **ROB**) . . . **DeGrazzio** has inherited Pickett's chickens and egg business . . . Also has rabbits for sale . . . **Charley Norman** was hurt when a piano lid dropped on him recently . . . Spent more than a week in bed with broken ribs . . . Haven't heard from **Ferguson** lately . . . **Amos 'n Andy** are back and tickled about it too . . . **Al Korb** has been swimming in his pool a lot and is thinking of stocking it with trout . . . Sez he went out to the "catch 'em yourself" place on Ventura Boulevard and caught two dollars worth of rainbow trout at thirty cents per fish . . . sez it's much cheaper than a mountain trip these days . . . Altho he got some big ones at the ole fishing hole at Big Bear during his vacation . . . **Lt. Joe Conn** in to see **Bob Jensen** the other day . . . Looked very sharp in his summer white . . . **Max Burnam** of New York reports Hollywood at least twice as expensive to live in as New York . . . **Don DeWolf** has a new messenger system between his house and the Victory Garden a block away . . . Wife sends one dog with a note, waits five minutes, and repeats with two more dogs until pop DeWolf shows up for dinner . . . **Pete Narkon**, of the New York Blue, has joined our Blue group . . . Welcome Pete we hear great tales about you . . . RCA program got away to a good start with **Norman Dewes** mixing the opus . . . San Diego has never had both Blue and NBC stations as a certain amount of coverage came from 50 KW stations in Los Angeles . . . Because of war population increases **KFSD** in San Diego has joined the NBC network and a new 250 watt station **KFMB** becomes the Blue San Diego Outlet . . . Double stations and much program interchange has Hollywood master control really on their toes . . . 73

This Is Mutual

By Herman G. Berger

Part I. The History of the Mutual Broadcasting System

THE Mutual Broadcasting System was formed on September 15, 1934 by WOR, Newark, WGN, Chicago, WLW, Cincinnati, and WXYZ, Detroit.

Officially recognized as Mutual's third national network when first programs were transmitted October 2, 1934.

Interchange of programs with the Canadian Broadcasting Corporation effected June 1, 1935.

First transatlantic program carried over Mutual September 15, 1935, from London.

CKLW, 5000-watt Detroit-Windsor station joined Mutual on September 29, 1935, replacing original member station WXYZ.

Mutual grossed \$1,000,000 in billings for 1934-5 fiscal year. For the year 1936, Mutual billings exceeded \$2,000,000.

In 1935 the World Series was covered for the first time by three networks. Red Barber and Bob Elson were Mutual's sportscasters. In 1939 Mutual gained exclusive broadcasting privileges of this event.

At an early executive meeting in 1935, Mutual's advertising policy was explained: "Mutual was formed with the view of covering the major population centers of the nation with a few high-powered stations of superior coverage . . . The network was to be cooperative, the stations operating the network service rather than the chain running the station . . . The individual stations themselves chose to remain independent so that each might do the job in its community as it saw best."

On October 1, 1935, Mutual's Radio Playhouse in New York, and WGN's \$600,000 studios in Chicago were opened. The playhouse, judged acoustically perfect, was perched atop the New Amsterdam theatre.

June, 1936, found listeners able to get Presidential conventions on three major networks for the first time. Mutual stayed on the air longer than any other chain.

Important Mutual converts in 1935 were stations WCAE, Pittsburgh, WFIL, Philadelphia, WBAL, Baltimore.

On June 27, 1936, President W. E. Macfarlane announced that his network would go coast-to-coast, affiliating

there with the Don Lee network, thus completing the swiftest rise of a radio network in broadcast history. Credit for the expansion went to General Manager Fred Weber.

The Colonial network of New England, with Boston's WAAB as basic member station, joined Mutual July 1, 1936.

On July 6, 1936, another statement on policy was announced: "The Mutual network, now less than two years old, has done well on the foundation that the system was built for advertising and sales coverage at the lowest cost and minimum of waste. It has appealed to members and affiliates by giving them the majority of the gross from time sales."

Other outlets announced their affiliation with Mutual: KFEL, Denver; KOIL, Omaha; KFOR, Lincoln; KSO, Des Moines; WMT, Cedar Rapids; KWK, St. Louis; WHB, Kansas City, all joined during 1936.

The transcontinental expansion occurred on December 29, 1936. Gala dedicatory programs flashed the event.

Broadcasting Corporation, previously accorded other U. S. chains, became effective September 29.

In 1938 Mutual increased its special features, talks and sports broadcasts by 40 per cent over the previous year.

Listeners in 76 cities could tune to Mutual stations by February 2, 1937. Advertisers increased their expenditures on Mutual, and 43 per cent of all new network advertisers used Mutual.

Still a network operated by the stations, Mutual announced in 1937 that 34.5 per cent of all Mutual programs originated outside of New York and Chicago . . . Mutual also revealed that 25.2 per cent of all programs heard on the network were devoted to cultural themes.

Scoops were attributed to Mutual on its ceaseless coverage of the Howard Hughes' round-the-world flight. Exclusive broadcasts from the plane's cabin as it crossed the Atlantic, as it reached Moscow, as it landed in Alaska, and when the plane first touched U. S. soil in Minneapolis, were heard from July 9-14, 1938.



Office of Miller McClintock, President of Mutual

The year 1937 found Mutual affiliates in the U. S. and Hawaii (KGMB). The total was 38.

Mutual's California affiliate, Don Lee, became the first on the Pacific slope to conduct daily television demonstrations. To date they have projected 11,000,000 feet of film, 5,000 hours of entertainment.

Over 20 stations joined Mutual during April of 1937.

Equal recognition by the British

Total billings for 1938 were \$2,920,323, largest in history.

On the lighter side, Mutual hit a new high when, during February, 1939, thirty top dance bands were heard in one week of transmission.

Mutual's Facsimile Network began operations on March 11, 1939.

Fulton Lewis, jr., Mutual's Washington newscaster, gained a victory for the radio industry on April 20, 1939, when his one-man campaign for radio

recognition in the Congress was unanimously approved. This changed the antiquated 80-year-old Senate rule.

1939 was a year of special features, starting with the appalling "Squalus" sub disaster in May, the New York and San Francisco fairs, and culminating in the European war. Newscasters on Mutual like Raymond Gram Swing, John Steele, Sigrid Schultz, Waverly Root, Patrick Maitland, Fulton Lewis, jr., Leland Bickford, Victor Lusinchi, Arthur Mann distinguished themselves.

The Lone Ranger, lustiest of all children's programs, celebrated its 1000th consecutive broadcast on Mutual June 23, 1939. The program was one of Mutual's first.

Expansion of the network shifted to the southeast. On June 18, 1939, WSOC, Charlotte; WRAL, Raleigh; WAIR, Winston-Salem, and WSTP, Salisbury, all in North Carolina, joined Mutual.

Mutual gained exclusive broadcasting rights to the 1939 World Series August 17, 1939, and the Gillette Safety Razor Co. sponsored the Big Show on over 150 stations in the U. S., Canada and Hawaii. The series was also short waved. Red Barber and Bob Elson were the broadcasters.

From August 20 to September 4, 1939, Mutual transmitted 196 individual programs from 11 points, devoted 65 hours,

Mutual celebrated its fifth birthday September 15, 1939. WKRC, Cincinnati, joined the network as the basic outlet in Cincinnati.

The newly-formed Southern network, comprising stations WLAP, Lexington; WSIX, Nashville; WGRC, Louisville, and WCMI, Ashland, with WKRC, Cincinnati as key outlet, also joined Mutual September 24.

Mutual started its fourth year of coast-to-coast operations with the year 1940 and moved forward with an expanded plan of operation covering the next five years.

Seven independent broadcasting organizations, including 57 of Mutual's total affiliates in the U. S., Canada and Hawaii, pledged themselves to underwrite the financial operations of the network.

All these key member stations renewed their contracts with Mutual for five years, effective February 1, 1940. Capital stock of the network was distributed among the contributing member stations.

Mutual member stations entering into this new arrangement were: WGN, Chicago; WOR, Newark; Don Lee Broadcasting System with 33 stations in California, the Pacific Northwest and Hawaii; WAAB, Boston, and 17 other Colonial Network stations of New England; CKLW, Detroit-Wind-

as to include representation of the additional stockholders, whose financial participation was announced by W. E. Macfarlane, President of the Board. Those elected to the new board were: E. M. Antrim, Willett Brown, H. K. Carpenter, W. E. Macfarlane, Alfred J. McCosker, John Shepard III, Theodore C. Streibert, Lewis Allen Weiss, and Fred Weber.

All the officers were re-appointed, and Lewis Allen Weiss of the Don Lee network was named vice-president for the west coast, a new post. Officers for the ensuing year of 1940 were: Alfred J. McCosker, chairman of the board; W. E. Macfarlane, president; Theodore C. Streibert, vice-president; Lewis Allen Weiss, vice-president; E. M. Antrim, treasurer and executive secretary.

An operating committee was formed, to meet at regular intervals with General Manager Fred Weber to pass on operating problems and policies.

Under this plan, each and every station united with Mutual has an active voice in the network's general operation and policies.

Mutual's total billings for the 12 months of 1939 were the highest year's figures in the history of the network, representing an increase of 14 per cent over a similar period in 1938. 1939's total billings were \$3,329,782. The 1938 figure was \$2,920,324.

Two of the most popular radio script shows, "Little Orphan Annie" and "Carters of Elm Street" started on Mutual January 22, 1940, and used the largest network hookup ever purchased for daytime script shows. 84 stations carried both shows five times weekly. Both were sponsored by the Wander Company.

WSAY, Rochester; WTJS, Jackson; WMPS, Memphis, and WATL, Atlanta, became Mutual network affiliates in January and February.

As of February 1, 1940, there were 118 radio stations in the U. S. and Hawaii affiliated with the Mutual network.

Mutual Special Features called on all its ingenuity and enterprise in covering the tumultuous events of the fast-moving world of 1940.

A comprehensive war coverage schedule, with regular broadcasts from permanent foreign representatives of Mutual abroad, was supplemented by the news analyses of Raymond Gram Swing, Wythe Williams, Fulton Lewis, jr., Arthur Hale and Gabriel Heatter in this country.

Complete recognition of Mutual by



Mutual Reception Desk, 1440 Broadway

51 minutes to coverage of the European war. 107 of these programs came from Europe.

Mutual's foreign staff was enlarged under the direction of John Steele, became the first network with representatives at the front (Victor Lusinchi with the French Army; Arthur Mann with the B. E. F.).

sor; the United Broadcasting Corporation, comprising radio stations WHK and WCLE, Cleveland, and WHKC, Columbus, and the Times-Star station WKRC, in Cincinnati.

At the annual meeting of the shareholders of Mutual, held January 11, 1940 in Chicago, the Board of Directors was enlarged from 7 to 9 members, so

foreign governments made possible a blanket coverage of international developments.

Altogether Mutual broadcast 1,041 programs from abroad during the war's first year. Typical of the number of times major political figures were brought to the microphone are the following figures: Hitler 6; Chamberlain 8; King George 2; Churchill 7; Reynaud 9; and Pope Pius 2.

Mutual coverage of the Republican and Democratic conventions took radio listeners to Philadelphia and Chicago for a total of 65 hours during the two sessions and introduced them to 250 congressmen and personalities. Later in the political season, Mutual carried the Willkie acceptance speech and the Wallace acceptance speech.

A steady stream of new programs appeared on the Mutual schedule during 1940.

Raymond Gram Swing, formerly heard on a limited network, began broadcasting his scholarly news summaries over a coast-to-coast hookup with the program of March 25. Then, as the tempo of events in Europe began to increase, the sponsor added more stations to bring the total of Swing outlets to 63.

On July 22, 1940, Judge Landis announced award of the exclusive broadcasting rights of the 1940 World Series to Mutual for the second consecutive year. The programs were heard in the United States via Mutual, Canada via the CBC, and Central and South America and Europe via short wave.

On September 10, 1940, Wythe Williams, who had garnered a large audience with his amazing series of scoops in eight months on the air, was signed for a 93-station hookup over Mutual in a twice-weekly broadcast. Williams thus gained the largest commercial network ever afforded a radio newscaster. The new Wythe Williams program represented the largest contract signed by Mutual to date.

Mutual held the first meeting of the operating board, set up earlier in the year on April 18-19, 1940.

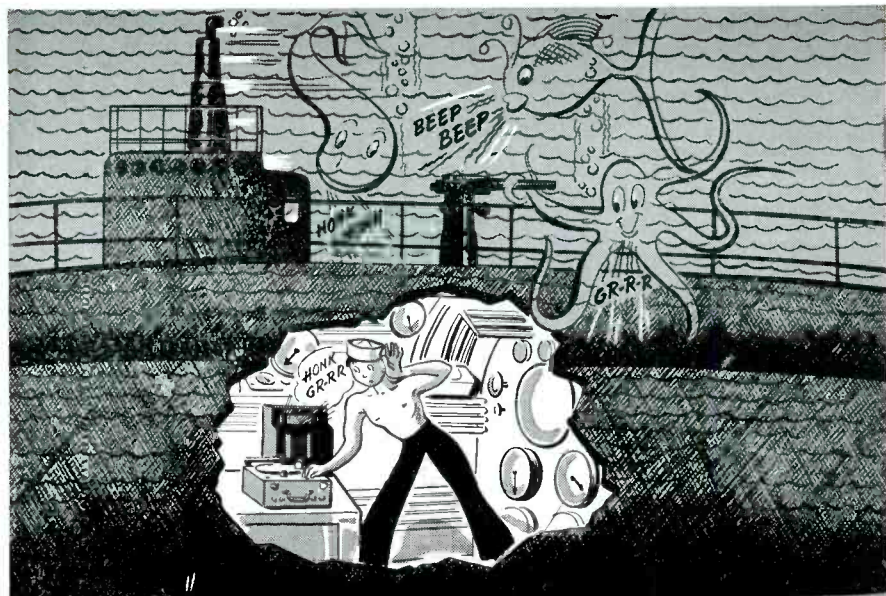
At meetings of the Board of Directors and Operating Boards in Chicago on September 18-19, 1940, Mutual:

1) Laid plans for a centralized music copyright clearance division in New York.

2) Announced appointment of John Dickson, foreign affairs expert, as Berlin representative of Mutual.

3) Revealed that in answer to a ques-

(Continued on Page Twenty-four)



To a Submarine, a Fish's Grunt Sounds Like Enemy Propellers

WASHINGTON, Aug. 19 — United States submarines turning corners at ten fathoms or so have pulled up in surprise and wonderment at hearing such raucous sounds as "Honk, honk!—beep, beep!—G-r-r-r!"

The men with the earphones who listen to what goes on while their craft is alighting through the briny deep often confuse these noises with the hum of enemy propellers, and signal for a quick stop. But the eerie underwater traffic noises often are caused by fish.

The Fish and Wildlife Service of the Interior Department has reported to its chief, Harold L. Ickes, that fish are noisy.

"Fish," said the Fish and Wildlife service in a formal report, "actually grunt, purr, drum, grind their teeth and make a medley of other sounds that create strong underwater vibrations even when inaudible on the surface."

The service, aided by the Navy, has made a series of recordings

of fish noises which are being drummed into the ears of submarine "listeners" so that they will know the difference between an ichthyological burp and a Japanese propeller.

"The Navy experts," said the report to Mr. Ickes, "obtained their most surprising results from the toadfish, a common species of the Atlantic Coast known for its ugliness and its bad temper. Although advised by Fish and Wildlife Service biologists that the toadfish is an important sound producer, the investigators were unprepared for the volume of its voice, which they said compared in intensity with a steamboat whistle.

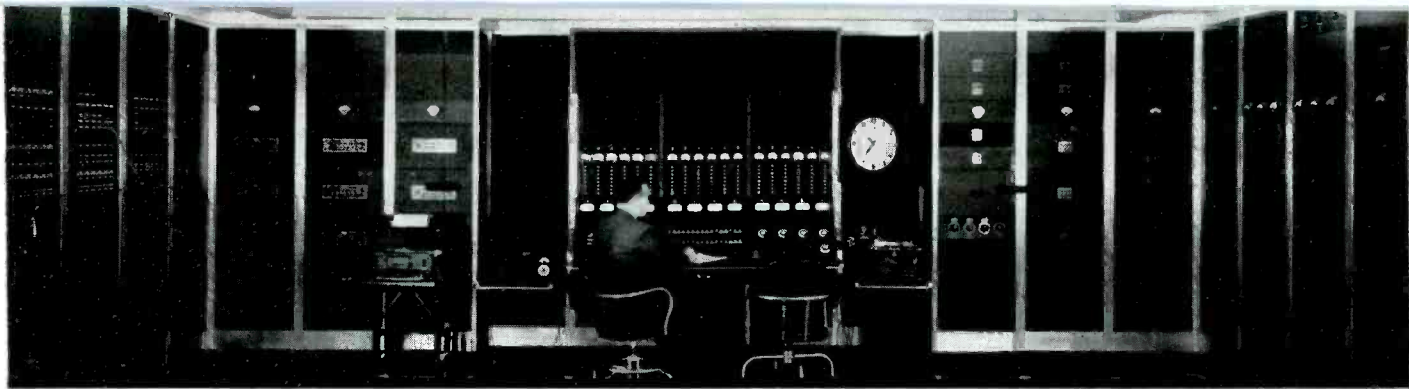
"Fishes capable," the report went on, "of making drumming, grating or grunting noises are found both in fresh and salt water in all parts of the world. Whether fish use their voices to attract the opposite sex, as a feeding call, or to express general contentment like a cat's purr is not known."

Over land and under sea, Presto Recorders have their ears glued to Sounds . . . pick them up and play them back so Sailors, Soldiers and Aviators may know who's there—friend or foe! • As in peace, so in war . . . if it's a noise Presto will get it—faithfully and realistically.

Presto Recording Corporation

NEW YORK 19, N. Y., U. S. A.

World's Largest Manufacturers of Instantaneous Sound Recording Equipment and Discs



Notes from the Nation's Station WLW - WSAI - WLWO

By Bob Brockway

WE WISH to express our thanks to **Homer Ray, Jr.**, for this column's cartoons which made their first appearance with the last Journal. Ray is a transmitter man at the Mason static-mill, and we feel fortunate to have him utilize his talent for these pages as he's had his cartoons printed in many other magazines with national circulation. As this is being written, Homer is on vacation and we hope he finds time to bat out some pictures for this article.

After frantically trying to get the WSAI transmitter for a story, a yarn practically dropped in our lap which concerns **Bill Schwesinger's** Victory Garden. Bill has been talking about "raising his tomatoes" ever since the first of January. The other morning, Bill found them really raised—as all of his prized tomato plants were being supported into the stratosphere by toy-balloons. The culprit who thus arranged the love-apples was **Jack Grey** of the dog-watch.

FATHER BECOMES MUDDER. The hero of this piece is **Walt Rogers**, who, with **Dave Conlon**, handles the weekly recording session from the Service Club at Patterson Field. The other week, Walt parked the young Greyhound bus (Mobile Unit No. 2) near the Service Club and proceeded by foot, not via the walks as provided for pedestrian traffic, but across that part of the post that was intended for lawn, but which had not yet been turfed. It's no military secret that the previous day it had rained and the "lawn" was the consistency of Louisiana gumbo. In short, the terra was not so firma. Our Mr. R. is not what

you would term "obese" although he is quite a hunk of man, tipping the beam at around 200 lbs. Walt made his objective and return without incident, but the next trip when Walt stepped out of the Buick into the quagmire supporting the additional weigh of a recording table (portable?) and a line amplifier is still another story. At the first step Walter oozed down into the goo so far that each succeeding step caused small bubbles to emit from the Rogers shoe-tops. In the best tradition of the radio serial, we'll leave Rogers there a veritable "stick-in-the-mud". What will happen? Will Rogers use the walk the next time? Will he strap the equipment on the back of an alligator and call it "Mobile Unit No. 3"? Let's turn our thoughts to the following note about . . .

THE CROSLY SQUARE FALL FESTIVAL, or WHO BROUGHT THE CORN INTO THE STUDIO. A couple of Saturdays ago, as a part of the popular **Everybody's Farm Hour**, the Victory Gardners of the Crosley Square staff held a Fall Festival. I guess the title of this piece practically told you all that, but at any rate, exhibited on tables in Studio B on this occasion, were produce from the gardens of our own plain dirt gardeners. There were tomahtoes, tomatoes, potatoes, carrots, beans, corn, etc., ad nauseum. During the program, the various city-farmers were interviewed and the prizes (War Stamps) were awarded. The Engineering Dept. is proud of **Earl "Shumway" Herzog** who knocked off some prizes for his vegetables. **Jim Leonard**, who was to be our "dark-horse" in the competition didn't enter in the Festival as he was occupied elsewhere (see below). It was a gala occasion, but it's the first time we ever heard of corn coming in to a radio station!

The same day that the Victory Gardeners were displaying the stuff they found among the weeds, the engineers of Cincinnati were cavorting among the weeds of Mt. Airy Forest. The event was the annual picnic of Local 1224 IBEW. It too, was a gala occasion. Too much praise cannot be tendered **Jim Leonard** who was chairman of the committee for arrangements. During the twelve-hour period that the picnic was in progress, most of the boys and their families attended. The committee furnished free beer, soft drinks, pretzels, and potato chips. The engineers furnished the places to put the above items. One hardier soul, **Warner Hartman**, brought limburger cheese and the entire assemblage retired to the lee side of the Hartman picnic basket. The only casualties recorded were the boys whose greatest exercise 364 days of the year is turning down a fader, and on this the 365th day, chose to indulge in the more manly sports of horseshoe pitching, badminton, and soft-ball. The old softies pulled many a "charley-horse". This may sound provincial, but we believe there is no better way to dust away the cobwebs of a year of indoor work than to throw a picnic, and readers, we can really toss 'em.

You won't want to miss coming issues of

THE BROADCAST ENGINEERS' JOURNAL

SINCE 1934 — Of, By, and For the Broadcast Engineer

Name (Please Print)	Date
Street Address	City and P. O. Zone
Radio Station	State
Title	

Enclosed, check for 1 year \$1.50, or 3 years \$3.00
Foreign, Please Add Postage

Make checks payable to "The Broadcast Engineers' Journal" and mail to
116-03 91ST AVENUE, RICHMOND HILL 18, N. Y.

P.O. Money Orders should be made out to
"BROADCAST ENGINEERS' JOURNAL, NEW YORK, N. Y."

Washington News

WRC—WMAL

By R. E. Shenton

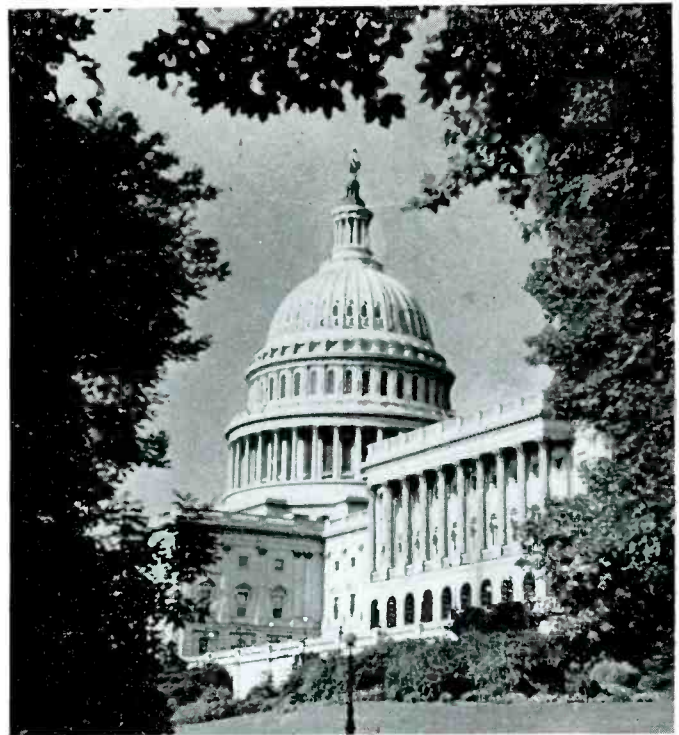
AS an opening, here's an observation made in the Washington Master Control, after watching the comings and goings of the engineers over an eight hour watch. It is easy to tell which of the boys have had their vacations; tanned complexions, a sprightly step, and a general appearance of happiness and benevolence toward their fellow men mark this group well. On the other hand, those with vacations yet to come are afflicted with a listless attitude, a coating of "night club tan", and a tendency to sulk in the corners, muttering to themselves. The fortunate part about this situation is that as time goes by, the first category increases, the latter approaches extinction. Long live vacations!

Three familiar faces made their way into the inner regions of the studios during the past few weeks, two of which were merely passing through, the third back for a more permanent stay. Dorson A. Ullman, former Senior Control Supervisor, now at the New York Studios, dropped in while here in town on one of those all-too infrequent long weekends to pay his respects to the gang with which he worked for so many years. From all reports, Dorson is well satisfied with his work in the big city, and seems to be thriving on it. Second "passer thru" was Lieutenant Sam Newman, now with the U. S. Army Signal Corps, formerly Studio Engineer and Chairman of the Washington chapter of NABET. Sam returned home for a brief leave while progressing to another base to continue his Army training. Terrible and interesting were the tales Sam told that he'd heard from new associates returned from action in various theaters.

The third, and most permanent visitor is "Speed" Clark, no newcomer to NBC—Washington. Actually a ten-year man, Speed came to work in Washington in 1933, a retired Chief Radioman in the U. S. Navy. In April, 1942, he returned to active duty with the Navy, only to return to his Studio Engineering duties effective September 1 of this year. As may be well imagined, the ever dwindling number of old timers hereabouts was very glad to see an engineer of Speed's experience and ability return to the folds.

We also wish to welcome Urban Lynch, who came in with September, leaving his post as Chief Engineer of Station WWDC, a rival D. C. organization, to take up the duties of a Studio Engineer. Other changes include Paul Meyers' return to the WRC transmitter, Mel Ward's reappearance at the studios, and Walter Ward's later temporary transfer to the WRC transmitter to fill the gap left by Wolfe's departure.

In last month's column, we reported on progress at the WMAL victory garden center, and, not wishing to play favorites, herewith present news of agricultural activities out WRC way. Harold Yates and Paul Meyers are the part-time plowers out on Ager Road, and though their diligence is entirely unquestioned, the conscientious work of the drought and incessant sunshine finally sounded the death note of a promising crop. Technically, Brother Yates informs us, the soil out that way is sandy loam, which has a



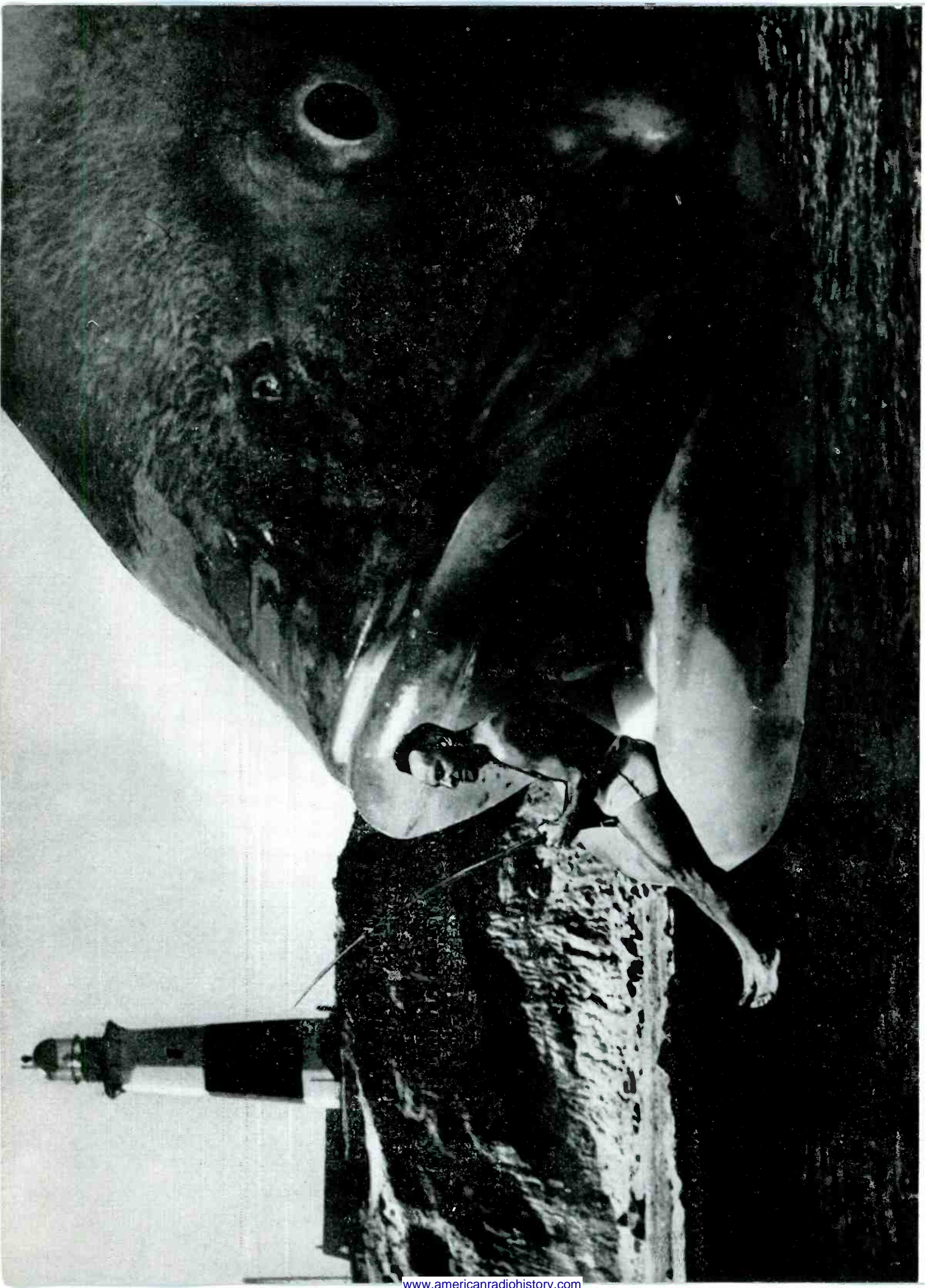
R. E. Shenton

tendency to drain off what moisture it receives rather than retaining it and allow the plants to benefit by its presence.

Hope was held out for a seemingly-abundant potato crop, but even the subterranean produce was subdued by the sun's rays, and the boys dug up baked potatoes! Suggesting in our most optimistic way that perhaps a true marvel of science had inadvertently been stumbled upon, we were told that the spuds were fully baked only about a quarter of an inch under the jacket, leaving a rather unfortunate raw interior. And so ends the sorrowful saga of the electronic farmlands at the WRC transmitter.

WMAL transmitter engineer Nagy came up with a suggestion which we would like to pass along to readers of the **Journal**, hoping that comment pro and/or con may result. He proposes that a swap column be set up in the magazine thru which broadcasting equipment, so scarce and difficult to acquire these days, might be exchanged, enabling stations that need specific items to trade surplus material on hand for these wanted articles. The large number of hams might also trade personal equipment through the same medium. If the idea meets with some appreciable approval, perhaps Editor Stolzenberger will oblige. How about some letters telling us what you think of it?

Well, dreamer McGinley, of the I-kick-my-wife-out-of-bed McGinley's, has turned somnambulist. It seems that Mac's apartment is located near a busy railroad line, over which the hourly New York express noises its way. After a short adjustment period, one becomes accustomed to the racket, and sleeps blissfully, oblivious to the puffing and whistling. One morning, however, Mac woke up feeling as though he hadn't slept a proverbial wink. Complaining of feeling tired, his patient wife explained that he had worn himself out during the night by running to the window every hour to watch the express go by. Of course, we have only Mrs. Mac's word for this, as the boss remembers not one trip of the pedestrian night. We feel certain that the Pennsylvania Railroad tacitly appreciates Mac's interest in their operations, and we have also referred the matter to a neighboring dream analyzer. A report, if any, together with more local happenings will bring us to your attention again next month.



Trolling Around Montauk Point — 1943 Style!

New York News

By George F. Anderson, Jr.

AUGUST 18th saw Peter Narkon leave for the West Coast. He has transferred to the Hollywood division of the Blue Network. Pete has made many friends among all the personal here in New York and we know that he will duplicate that in Hollywood. So good luck Pete and come back soon.

Another was Herbert Wood, SE NBC, who has transferred to Radio Recording Department to take up producing and writing. Best Wishes Herbie and may all your shows be on the nose.

August also saw some new arrivals and the return of a traveler. Muriel Kennedy, who has spent three years at WBZ doing both studio and recording work, joined the recording dept on August 9th. Raymond Durken, who was with RCA at Camden from 1915 to 1932 and then at their 24th street, N. Y. C., recording plant till 1942 and back to Camden again for a year, now is a studio engineer for NBC.

Jerry Sellar is back in MCD after an important civilian assignment with the U. S. Gov't. Jerry is well known as a former NY Chapter Chairman.

Paul Herrold, senior supervisor MCD, has purchased a slightly used motor scooter and he is spending all his spare time and cash reconditioning same. He has already received an offer for said scooter for twice the purchase price but has refused to sell it. He hopes to be riding the scooter before snow falls this winter.

1st Lt. Victor Tervola (RE NBC) in a 'V' letter to Jack Holmes RE, tells that he is construction and operations supervisor for the United Nations Radio in a North African city. He has a group of fourteen men under him who do all the work. Capt. Walter Brown drops in now and then to see how things are going along.

Lt. Fernando Montilla Jg USNR (SE NBC) dropped in for a brief visit a short while ago. He has been in Puerto Rico for about a year and then had a spell of sea duty; upon completion of that assignment, he was sent to the States for some Radar Training and now is back in active duty and expects to go abroad.

Lt. Jack Stoodly AUS (SE BLUE) reports to us from Presque Isle Air Base in Maine. Jack expects to leave for parts unknown shortly.

Victor Bary will soon become Ensign Victor Bary, USNR. He received his commission August 28th, reports for active duty two weeks from that date. He will not have to go thru the rigors of indoctrination as he is being assigned to active duty immediately. Vic is well known around here for the many conversations he held with Sergei deSomov SE NBC, in Russian. Smooth Sailing Vic.

Another pair of visitors to our habitation here in N. Y. were Allen Powley and Nicholas Close both of Washington Chapter. Allen is Chapter Chairman and also Liaison between NABET and the government agencies. Nick is known here in NY for the years he spent in recording and has carried his reputation as a good recorder to Washington, where he is now a recording supervisor.

Lou Palley and John Morrissey RE have transferred to Studio and are practicing that delicate touch necessary to proper gain riding. The recording group made a transcription of Lou Palley's maiden effort on the air. However, they

played with the level and dropped it 20 db in various spots. They played it back to Lou and swore on a stack of scrapped blanks that that was the way he rode gain. Then he was handed a perfect copy (not known to him though) and told him to explain the low level the best he could.

Since the additions of the three lady recording engineers, the guest tours on Sunday have begun calling the recording room "Frutcheys Harem," as he presides in regal glory. We wonder if Sil Garrinchini and Howard Cooley will be buying tickets to New York.

Peter Prinz, WEAf, dropped in for a brief visit and reports that the WEAf group have many excellent Victory Gardens and that they are producing in vast quantities all the vegetables necessary for a balanced diet.

As Ye Sow, So Shall Ye Reap Dedicated to Bob Brooke

(An answer to Bob Brooke's references to the relative merits of fishing on the East and West Coasts. This should end an old feud, we hope.)

WAY back in '27 a baby striped bass swimming near the shores of Point Lookout was caught by the Master on a block tin squid. The former being a true sportsman immediately released the little creature, adding a few words of admonition which went something like this: "Go, swim in the Great Atlantic, grow large and clever, and, if by any chance thou finds thyself in the Pacific—avoid the kerosene waters of Lower California; also, please tell of to-day's occurrence to your parents and relations." The baby striper answered: "I won't forget, oh Master, maybe some day we'll be of help to you." And with a flip of his tail he disappeared in the clear waters of Long Beach.

Well, my dear good people, many a wave broke since on the beaches, many an inlet was cut through the sand dunes following great storms; life continued . . .

1943 found the Master with a fishing cruiser but, alas, without both gasoline and cruising permit. The war was on . . .

Adieu Montauk, Jones' Reef, Shagwong, North Bar . . .

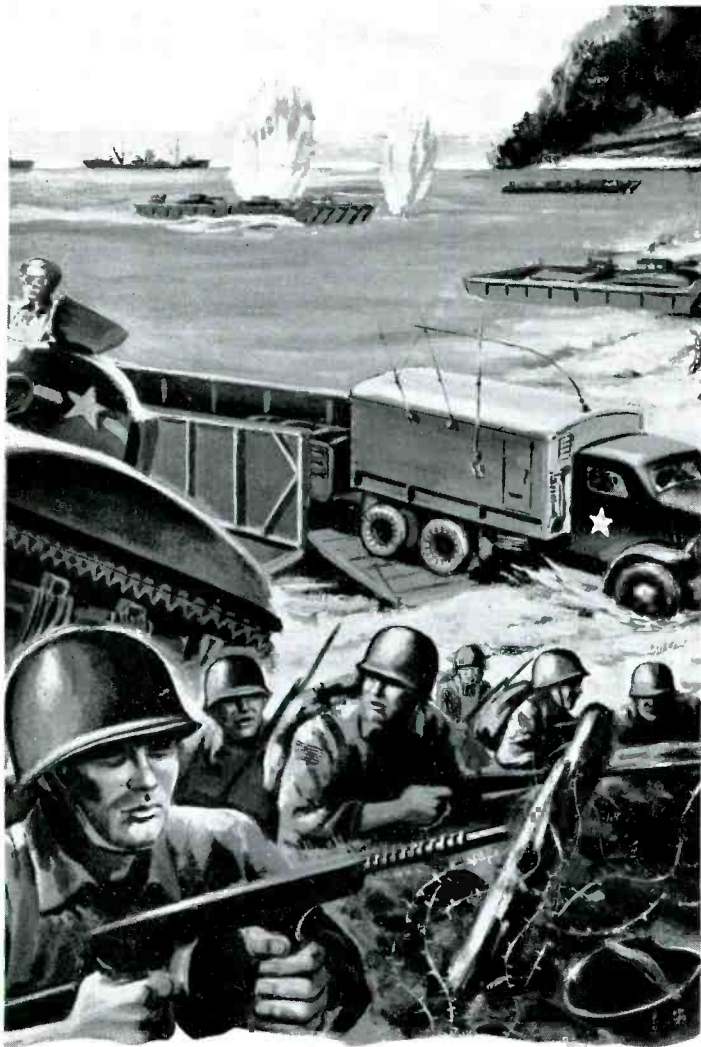
And so on one September foggy morn while visiting Don Abbott—the "Squire of Amagansett," the Master and the Squire went on the beach close-by to see what's cookin'.

There wasn't much—the same old coast-guard tower and the place where on a June night in the year of '42 some German saboteurs were caught by Johnny Cullen. Quite unobtrusively behind a white combed breaker a greenish-silver mass appeared, the mass took form little by little, to become a giant striper! Through the dense fog he reached the beach and said, "Salaam, oh mighty Master, my family has sent me here to help you out in the black hour of distress; just step into my mouth and I'll take you out to troll for "blues" around the Point."

I agreed.

As ye sow, so shall ye reap.

—Sergei de Somov.



SCR-299 VANGUARD OF INVASION!

THE SCR-299 Mobile Radio Communications unit played a great part in the invasion of Africa and Sicily . . . these units were used as mobile radio stations, transmitting voice commands to fast moving armored units while in action, or as permanent radio stations . . . even under the most difficult operating conditions.

A leading military authority said, "My observations in the theatres of war make it possible to say that the SCR-299 hit the jack pot in the mobile radio field as has the jeep in transportation."



BUY MORE BONDS

the hallicrafters co.
CHICAGO, U. S. A.

THE WORLD'S LARGEST EXCLUSIVE MANUFACTURER OF
SHORT WAVE RADIO COMMUNICATIONS EQUIPMENT

TECHNICAL F

By Ed.

Proceedings of the I.R.E. - August, 1943 Electric Communications, the Past and Present Illuminate the Future

By L. Espenschied

This paper is intended to stimulate thought. The art of conveying intelligence to a distance is looked at broadly in the terms of the underlying physical dimensions of energy, time, and space. These dimensions connect each individual with the outside world. The original information, which is to be transmitted, itself partakes of them as does the system over which the information is to be projected.

Direct-Reading Wattmeters for Use at Radio Frequencies

By G. H. Brown, J. Epstein, and D. W. Peterson

Two instruments are described. The first is useful in the range of frequencies from 500 to 2000 kc. This instrument contains circuits which permit operation at any frequency in this band with no tuning or other change in the instrument. The second instrument operates in the region near 50 mc. It is inherently a single-frequency device constructed from sections of transmission lines.

A Wide-Band Oscilloscope

By E. D. Cook

This paper deals with the development of a wide-band oscilloscope intended for use as a precision-measurement tool. The means by which the performance specifications were determined are outlined, and a discussion is given of the methods by which these objectives were obtained. The various technical problems, such as compensations for both low and high frequencies, the design of attenuator and inverting networks, and test methods, as well as the theory of operation of certain of the components are discussed.

Use of Subcarrier Frequency Modulation in Communication Systems

By W. H. Bliss

When subcarrier frequency modulation having a frequency range of 1600 to 2000 cycles was used for transoceanic facsimile transmission, pictures were obtained with finer detail and better half-tone quality than those transmitted by previous systems; the speed of transmission could also be increased. An extension of the system to a two-way multiple channel radio relay circuit providing teletype service between New York and Philadelphia gave improved stability of operation when variations in signal strength occurred.

Some Aspects of Radio Reception at Ultra-High Frequencies PART I: THE ANTENNA AND THE RECEIVER INPUT CIRCUITS

By E. W. Herold and L. Malter

This is the first of five parts and includes material prepared by the authors for a lecture course given during 1941-2. This is a very comprehensive and lengthy paper, almost impossible of abridgment in this space.

Tubes Employing Velocity Modulation

By R. I. Sarbacher and W. A. Edson

This paper is an extract from the forthcoming book "Hyper and Ultra-High Frequency Engineering" by the authors, and published by Wiley. Recommended reading.

PRESS REVIEW

Stolzenberger

Radionics - - - - - August, 1943

Phase Modulated Exciter

By W. P. Bollinger

A crystal controlled phase modulated exciter unit for narrow band operation in emergency communication circuits for voice frequencies, including circuit diagrams.

UHF Airport Receiver

By McM. Silver

Latest design of an UHF receiver for 115 to 160 mc Compact, fixed-tuned, including circuit diagrams.

Electronic Industries - - August, 1943

UHF Coil Design

Data and charts are presented which permit calculating dimensions of inductances for the highest frequency ranges at which the ordinary triode is effective.

Reactance Calculator for Transmission Lines

By W. Moulic

A nomograph, including explanatory information, for determining inductive and capacitive reactances of open and shorted transmission line sections.

Bell Laboratories Record - August, 1943

Noise Measurements in Vacuum Tubes

By J. J. DeBuske

A block diagram of a noise measuring set is shown. The tube under test is placed in the first stage of the first amplifier. An attenuator, filter, second amplifier, and a calibrated thermocouple complete the equipment. The tube noise-power is the difference between the thermal noise-power and the total noise-power. The tube noise-power is then expressed in ohms equivalent resistance that is required in the grid circuit of the equipment to generate thermal noise which is equivalent to the noise voltage developed by the tube.

Communications - - - - August, 1943

The Design of Antenna Arrays by Fourier Analysis

By N. Marchand

A discussion of practical methods of calculating antenna arrays when the desired radiation pattern is known.

A Rectangular Wave-Guide Nomogram

By F. C. Everett

Compensating Audio Amplifier

By W. L. Widlar

Discussion, with schematic diagram, of an electronic equalizer for compensating loss in high or low frequencies.

F-M and U-H-F

By R. F. Guy

A revealing study of its early history, present uses, and future applications.

Synthetic Reverberation

By J. K. Hilliard

This system has long been used in conjunction with electronic organs, etc. A mechanical system of springs is driven by a voice coil. The mechanically-delayed sound is picked up with a direct contact microphone or playback reproducer, and combined with the original sound.



Why Not

Look to Sun Radio

for your

RADIO PARTS, TUBES & ELECTRONIC EQUIPMENT

★

We Offer

QUICK DELIVERY FROM STOCK!

All Standard Advertised Brands

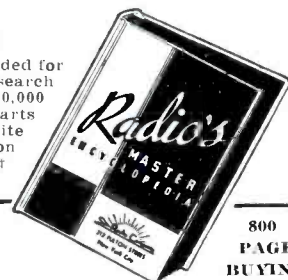
CONDENSERS • RESISTORS • TUBES
TRANSFORMERS • RELAYS • PLUGS
SWITCHES • SOCKETS • CONNECTORS
WIRE • TEST EQUIPMENT, etc., etc.

PURCHASING AGENTS! ENGINEERS!

Send for this

FREE BOOK!

Includes almost everything needed for station maintenance, repair, research and development — over 50,000 standard and "hard-to-get" parts in one handy, bound volume. Write for it today on your station letterhead. It will be sent gratis. Address Dept. B-9.



Let Us Help With Your Station Problems!

PRIORITY REQUIREMENTS RECEIVE INSTANT ATTENTION!

New York's Oldest Radio Supply House

SUN RADIO CO.

212 FULTON STREET • NEW YORK (7), N. Y.

★ Telephone BARclay - 7-1840 ★

800 PAGE BUYING GUIDE

Gone With the Draught, or— Killfidget Twirls His Last Dial—Almost

By Tom McKaye

AUTHOR'S NOTE: Amos Q. Killfidget (better known as DOCTOR Killfidget), ace radio mechanic and hot toddy connoisseur, is no stranger to these pages. In the past, he and his friend, Tom Gootee, cavorted through radio history causing annual confusion every Christmas-time. Early in 1942 the junior member of this team became LIEUTENANT Tom Gootee, was shipped overseas, and subsequently retired to an obscurity he prefers. Although little was heard of Doctor Killfidget after that time (that was printable), it has since been learned that after Killfidget joined the army (by draft persuasion) his various adventures and sundry troubles caused a cataclysmic new high in army disorganization. All of which has given rise to this series of reportings on the antics of Amos Q. Killfidget in the Army of the United States.

LIKE Gremlins in the Air Force, like rumors on a troop ship, like soldiers in Times Square on Saturday night, like sailors in San Francisco on any night, basic private Amos Q. Killfidget seemed to be everywhere in the U. S. Army. In his own blundering fashion he managed to kill time in practically every arm and service of the army, and his progress was as checkered as a radio producer's fancy vest. But Doctor Killfidget looks upon his negative army life with detached indifference as he meanders through army rules and regulations. Despite its nightmarish memories, he has almost forgotten those early days of his inductance . . .

"The war'll be over in thirty days!"

Word went tearing around town like wildfire. It was spring of 1942, and the news was wafted by wheezy gusts of air, dust, and a flock of moth-eaten sparrows.

"The war'll be over in thirty days!"

Over at Joe's Place the news filtered through the broken-down air-conditioning system, got into the ice-box by mistake, spoiled two quarts of elderberry wine, and finally wound up at the bar!

"Yes, sir! The war'll be over in thirty days," laughed one of the customers, leaning against the bar to steady himself. Joe polished the beer-soaked wood with a vague circular motion.

"Why?" It was obvious Joe wasn't happy.

"Ain'tcha hoid?" asked another customer, a radio announcer.

Joe shook his head.

"It's all over town," spoke up another customer. "In thirty days the war's gonna stop."

"Yeah," put in the radio announcer, grinning from ear to ear.

Joe stopped long enough to sniff the vague aroma of burnt spaghetti emanating from the kitchen.

"Why?" he asked again.

"Cause tomorrow they're gonna induct old Doc. Killfidget in the army! That's why!"

Joe didn't get it.

"That guy never held a job in his life longer'n thirty days!"

Then everybody laughed, and the radio announcer bought a round of beers.



Pvt. Killfidget, U.S.A.

"Come to think of it," said Joe, sliding the steins down the bar, "I'd better stir up a batch of hot toddy for the old man."

"Say!" spoke up a customer, "is it true about all the hot toddy that guy puts away?"

Joe just grinned and waddled on down to the other end of the bar.

"Sure t'ing," volunteered the radio announcer. "Dat old buzzard drinks 'at stuff like water, he does. Betcha Joe makes up a gallon o' dat stuff ever' day. An' nobuddy but old Killfidget drinks it! Nobuddy wants to!"

After tasting his beer one of the customers said:

"I've seen the old duck around here a lot, but I never paid much attention to him. Kinda quiet, ain't he?"

"Yeah," said the radio announcer, "dat's him".

"But is he really nuts? I mean, is he okay upstairs?"

"He's smart enough when it comes to radio," spoke up the customer at the end of the bar. "Been in the racket for twenty years, maybe more."

"Yeah," said the radio announcer, "but he can't hold no job longer'n a month. Dat's a truth!"

Somebody started laughing. "Too much hot toddy, huh?"

"No," said the customer at the end of the bar, "he just gets himself into the craziest predicaments, the darndest situations. Sometimes he acts like he was a fifteen-year-old kid."

"Oh, you know him then?"

"I ought to. I've hired and fired Killfidget a hundred times since I've been running a station here."

"Oh."

"But I'll be down here tonight," said the man at the end of the bar, "wishing him all the best — while he's in the service. He's a great old guy."

Joe came back polishing a couple of glasses.

"I don't know," said Joe. "The way that screwball gets into trouble, the army's gonna wish some day they'd left him right here with us."

Everybody laughed, and the radio announcer bought another round of beers.

But the weary, veteran Doctor Killfidget wasn't laughing the next day, when he stirred from a deep and restful slumber. He was surrounded on all sides by a very noisy hangover. A thousand little men with white-hot soldering-irons were tinkering with the nerve circuits in his head. Maybe he had imbibed just a little *too* freely the night before. But after all, it wasn't *every*

night that the house kept buying him free mugs of hot toddy.

"Maybe Joe wanted to get rid of it," mused the Doctor, as he struggled through the process of becoming himself in fitting fashion, with his freshly-pressed-last-winter suit.

Four hours and thirty-seven Bromseltzers later, the Doctor wearily climbed the long flight of stairs to the office of the draft board. He had regained some of his misplaced composure, but his features were as gaunt and strained as a radio producer trying to squeeze a 60-second commercial into thirty seconds.

The draft board didn't appreciate his lack of punctuality. He was seven hours late, a mere flash of nothingness in Doctor Killfidget's advanced life.

"The army'll take that out of you," thundered a member of the board, a retired ham-and-egg salesman named Platz. The ham-and-egg salesman reminded the Doctor of an old washboard he used to take to dances back at the Kiwanis Club in Des Moines.

"Yes, sir!" exploded Killfidget, feeling very military. "Matter of fact, I was delayed en route by overwhelming numbers of the opposition who outflanked me on four or five sides, laid down a heavy barrage off the port side, caught me off my guard, and forced me to retreat all the way back here. Had to slash a path through the wilderness with only a small fingernail file, two copies of Good Housekeeping, a blonde named Minnie, and a large porcelain jug."

This sudden burst of confusion floored the blustery ham-and-egg salesman, named Platz.

"What—what—what—" he began.

"And the porcelain jug had a handle," added the Doctor.

"What," wheezed the ham-and-egg salesman through his lorgnette perched akimbo, "what the hell are you jabbering about?"

"Military talk," explained Killfidget, very matter-of-fact. "You wouldn't understand, fatty."

"I—I—I—" stuttered the ham-and-egg salesman, irate.

"Might add that the porcelain jug was filled with hot toddy and —"

"See here, Killfidget!" screamed the ham-and-egg salesman, becoming apoplectic. "What do you mean by coming in here and talking like an idiot, insulting me and —"

But at that moment the situation was eased somewhat by the appearance of a very attractive blonde stenographer.

In the further confusion that followed the ham-and-egg salesman was

forgotten, and the Doctor and the blonde were all the way downstairs and half way across the street before two muscular men in uniform intercepted the amorous Killfidget, picked him up bodily and threw him into a waiting police car.

The blonde started screaming, the ham-and-egg salesman named Platz was yelling and swearing out of an upstairs window, several fire-engines went tearing across a nearby intersection hurling cars and people helter skelter, a man named Conn was heating his wife and 12 children in a nearby alley, and several hundred cars and trucks were blaring and honking due to the traffic jam created by Killfidget's dramatic capture.

Such was the ear-splitting uproarious scene that marked the beginning of the Doctor's hectic military career. The deafening pandemonium was quite symbolic of "things to come", but the good Doctor was unaware of the symbolism.

"A fine way to join the army," mumbled Killfidget, as the squad car careened back and forth on its hurried way, the police radio up in front sputtering items about a riot in the vicinity of the Doctor's draft board.

"That radio should be aligned!" said

the Doctor, when the car had slowed down to a fast roar.

"Huh?" said one of the cops.

"Should be lined up!" said Killfidget. "The radio!"

"Oh, yeah?" said the other cop, with an overflow of sarcasm. "If ya ast me, you're the guy needs to be lined up!"

"Um," said the Doctor.

At last the car pulled up to a screeching halt before what looked like a medieval fort, and through the massive, dirty, stone portals of the armory passed one civilian: Amos Q. Killfidget. The policemen deposited their charge in front of a desk in front of a natty uniform in front of an officer, an army officer.

When the police had gone the officer looked over Killfidget as if he were judging the worthiness of a hog soon to be hung, drawn and quartered.

"So you're Killfidget?" said the man with a gold leaf on each shoulder.

"That's right, lieutenant," answered the Doctor, anxious to exhibit his knowledge of army rank.

"First of all, Killfidget," said the officer, "we'll give you a medical —"

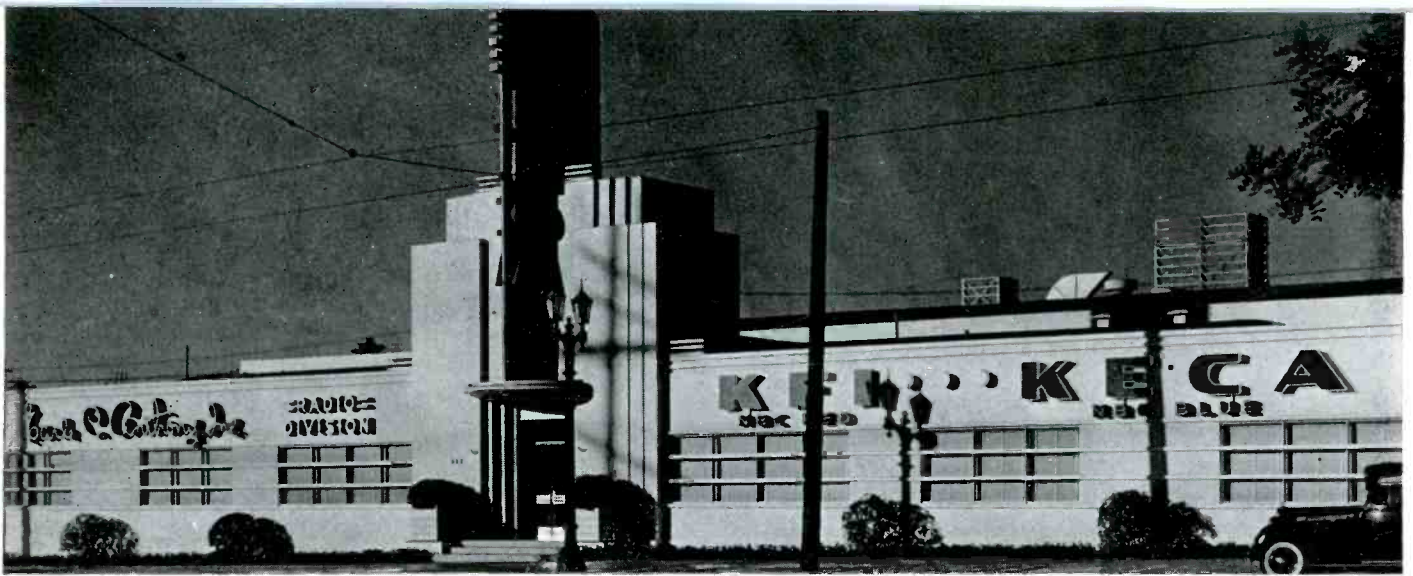
(Continued on Page Twenty)

Built-in Precision

MC5
BY Bliley
27380 VC.
MADE IN U.S.A. ERIE PENNA.

... Accuracy and dependability are built into every Bliley Crystal Unit. Specify BLILEY for assured performance.

BLILEY ELECTRIC COMPANY
UNION STATION BUILDING. ERIE, PA.



Los Angeles News By H. M. McDonald

ROBERT O. COOK, the newly-elected Chairman of the KFI-KECA Section of the Hollywood Chapter of NABET, was a native of Manitowoc, Wisconsin. We say "was" because he came to Los Angeles in 1927 and 15 years' residence in California automatically makes him a "Native Son".

Cook became interested in radio shortly after the last war, when he met Sam Slyfield, then an operator of a car ferry and now head of the Sound Dept. at Walt Disney Studios, and Carl Sturdy, also a Great Lakes operator and now a Transmitter Engineer at KFI. Their tales convinced him that that was the life, so he took a course at the Dodge radio school and before the ink was dry on his license he was sailing Lake Michigan on the S.S. Manitowoc.



Robert O. Cook

After three years on car ferries and passenger ships he went to work at WFK, the coastal station at Frankfort, where Slyfield was then Chief, and next to another coastal station, WMW, in his home town, Manitowoc.

While there he obtained a Commercial First Class license, and built and operated broadcast station WOMT, and recalls the Department of Commerce suggesting they use a wave length of "about 220 meters"!

His first jobs in Los Angeles were at broadcast stations KMTR and KPLA, the latter now KECA. In 1929, when the movies added sound, he went to Tec Art Studios, and later to Walt Disney Studios, where he held forth for 12 years. During all the time he was at movie studios he kept his radio licenses valid by taking the tri-ennial examinations. A year and a half ago Bob thought he could contribute more to the war effort in the broadcast field and came to KFI-KECA, where he is now assigned to studio shows, maintenance, field, and recording, all of which, because of his broad experience, he does equally well.

His hobbies are his home work-shop, photography, and,

pre-war, his well-known ham station W6WV. In sports, horseback riding and bicycling hold his interest at present. He is married and has a daughter 12 and a son 9. His wife often speaks at schools and various societies on social conditions in China and Latin America, subjects on which she is well versed.

ENGINEERS visiting KFI-KECA recently included: Milton V. Horn, 13 years with WBEN Buffalo, where he was Control Supervisor. (Horn heard there was a housing problem and brought a house-trailer out from Buffalo but the brakedrums hadn't cooled before an escrow Indian sold him a nice new stucco out Glendale way); Edwin J. Lark, ex WTAD Quincy, Ill. and WIS Columbia, S. C., and now an inspector with Consolidated Vultee Aircraft at San Diego; Otis C. Wright, ex Florida stations WMFJ, WJNO, WTAL, KTMS Santa Barbara and KOH Reno; G. O. (Ollie) Porter of WCFL Chicago.

Lloyd Fritzinger, ex KFI-KECA SE, and now a 1st Lieut. U.S.N., dropped in at the Studios a few days ago, after hitch-hiking all the way across the country on Army planes (got the know-how from his experience with hitch-hikes on the networks). Lloyd, on a short furlough, says his work, with the Radar Section, Bureau of Ships, is "mostly paper" at a desk in the Navy Building in Washington, broken by occasional short trips to sea.

James G. Wright, also ex KFI-KECA SE, now a Technical Sergeant in the Signal Corps at Sherman, Texas, visited us a few weeks ago. Jim is in charge of a five-man crew of a mobile unit, much like KFI-KECA's truck-and-trailer 100 watt unit, except their's is larger and AIR-CONDITIONED.

Charles L. Priestersbach, ex KDB Santa Barbara, is working part-time at KPAS while attending Pasadena J. C. He was recently discharged from the Navy where he served as an electrician and participated in many of the major actions in the South Pacific. He was awarded The Purple Heart for his meritorious conduct and outstanding performance of duty.

"Due to circumstances beyond our control" vacation trips of KFI-KECA men were more or less curtailed this year. Clarence Seamans divided his between Coronado and Santa Barbara and golf and tennis. Bob Cook sunned himself at Laguna Beach. Lyman Packard spent much time in his diving outfit at beaches near Laguna and Balboa, capturing abalone and the like. Charley Young stayed home and made a 3000-brick patio in his back yard. Carl Sturdy

took on additional tan at Santa Monica. "Pete" Dilts spent the first two weeks in bed with the flu, and the third recuperating. Ernie Sams divided his fishing between Lake Gregory and deep sea boats off Santa Monica. Charley Lampkin took his family to the beach at Santa Barbara and Ernie Wilmshurst took his to Carpenteria beach.

Some of the boys saved up their coupons and took longer trips. Wilbur Alexander made his yearly to Oregon and Floyd Everett his annual to Lake Mary, in the Mammoth Lakes region on the east side of the Sierras. Ray Moore and Richard Bull also went to that side of the mountains this year, Ray to Glacier Lodge, elevation 8000, near Big Pine, and Dick packed-in up to Cottonwood Lakes, even higher. Fewer people and better fishing up that way this year.

George Tokar, KFI TE, surprised us again with the announcement there is a new boss on his ranch, another boy, and all doing well.

Saw Mort Smith, ex New York and Hollywood NBC Engineer, in a Vine Street restaurant recently, getting greyer and more corpulent, but "doing fine". Also saw Al Lucey, back here on a vacation from Chungking where he was with O.S.S. Al, robust as ever, has seen about as much radio as anyone in the business, operator on Dollar boats, point-to-point for Mackay at San Fran, Press Wireless in the Orient, and scads of other jobs including Donovan Committee assignments, and other "missions". He was also in the thickest of it in France during the last war.

Hear that men are being drafted from two separate radio intelligence organizations here. Both outfits are doing exceptionally fine work gathering invaluable information and their personnel includes some of the best radio men in the country.

C. W. Mason, co-C.E. of KFI-KECA, is a member of San Marino's War Emergency Radio Service. The group started with six units and was the first WERS organization to be licensed and on the air in this District.

Bill Zalaskus, Del Nestor, and Lynn Hull are doing the switching and patching at Radio Central these days. Nestor worked "graveyard" at KGFJ Los Angeles for about ten years before going to Radio Central.

Paul O'Harra, at KNX Los Angeles continuously since 1927 ten years before its acquisition by CBS, has transferred from Master Control to the Studio Dept. O'Harra was in the Navy during and following the last war and is hankering for another hitch.

Dinner meetings of the Los Angeles-Hollywood Chapter of the Veteran Wireless Operators Ass'n are still being attended by 45 to 50 members and guests each time, despite gas rationing and many living 20 to 35 miles away. Usually more than a dozen branches of radio are represented: broadcast engineers; executives of radio manufacturing companies; trans-Pacific engineers and operators; FCC inspectors, monitors, intelligence men; marine inspectors and installers; police and sheriff's radio engineers; motion picture companies; aircraft; theory and code instructors; visitors from the Army, Navy, Coast Guard, and Merchant Marine.

John Palmquist, who made some vacation reliefs at KFI-KECA studios about three years ago, is reported to be Asst. Chief at KHJ Los Angeles. Robert E. Bullock, ex KHJ, is now a Lieut. (jg), doing radar work at the destroyer base in San Diego. Bob, a U. of Cal. and Occidental man, was a well-known ham before the war.

Ronald Oakley, long at KGER Long Beach, has been made Chief there. Carl Dillman is also there now, after putting in more than ten years at KFOX in the same city.

TERMINAL'S ROTATING STOCK

system keeps large quantities of important parts and equipment on hand at all times.

TERMINAL'S EXPERIENCED STAFF

of able "civilian procurement men" keeps on satisfactorily meeting urgent broadcast needs.

TERMINAL'S LARGE, COMPLETE

stocks and intelligent service make this a good rule: "Keep on calling on Terminal for all radio and electronic parts and equipment."

★

TERMINAL RADIO CORPORATION

85 Cortlandt St.

New York 7, N. Y.

Phone: WO rth 2 - 4415

Hollywood Six, Chicago Two

— By —

R. R. Jensen

THIS is a story of two Scully Master Recording machines. In normal times platter cutters have a very uneventful life, revolving day after day at 33 1/3 rpm. but this is War, and anything can happen and did. A month ago the score was tied even, Chicago had 4 Scullys and Hollywood 4; but today there is an empty space in the Chicago Recording room. Two of these hard working buddies have been drafted and shipped to Hollywood for war duty!

It was a sad day when the moving van hauled these two old friends to the express depot. In order that their identity would not be mistaken upon arrival in Hollywood the Chicago boys fixed up a very cleverly worded identification card and attached it with rubber cement (the kind that holds the labels on the ET's) to the base of the machines. It read thus:

Notice of Classification

July 1943.

Name—Chick Scully

Order Number No. 2191

Has been classified in 1A. (Classification 1A means for active service, and not that it has been idle in the Chicago office.)

Local Bored (and how!)

Signed, I. AM. Too.

Member of Local Bored.

Form No. 33 1/3 x 78 RPM.

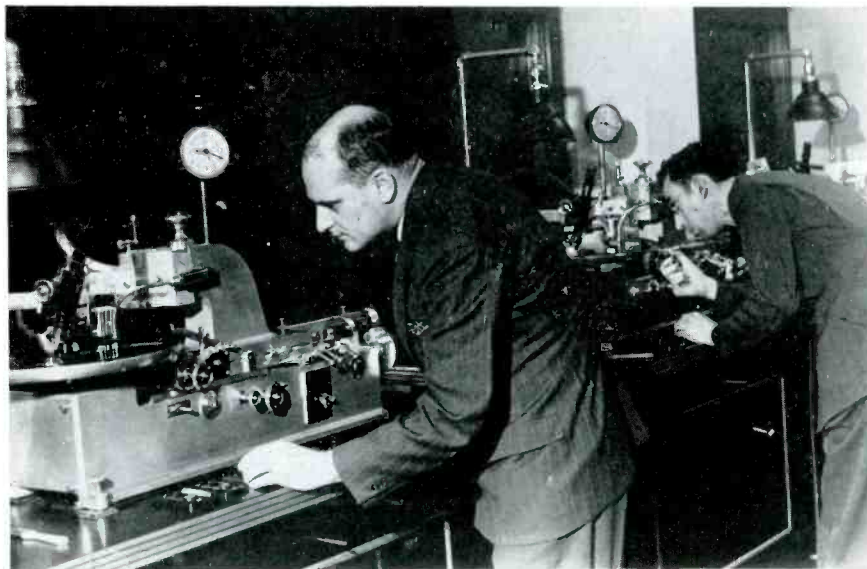
Another message of confidence was attached to the base of the other machine which proved that these gadgets are not

as simple as they look—or do they? It read: "To Hollywood: If you can reassemble these tables you are a better man than I am.

Signed, Ralph Brooks.

The last time Ralph took one apart he had enough parts left over to build an RCA Recorder and a coffee grinder, but alas he had no coffee so now you know why he always drinks something much

a couple of photographs. It will be a relief to Chicago to know that the machines are still in Chicago hands. In the photograph Johnny Morris can be seen making a few delicate adjustments on the cutting head while Jim Thornbury is standing by just a little bit burned up at the time it is taking Morris to complete the adjustment. Ken Hicks, who is vacationing in Chicago as this is written also helped in a big way in the installation of these machines. Another former Chicagoan assisted in fitting the pieces together but his name is no longer men-



Scully Master Recorders in Chicago. Ralph Davis (left) and Bob Whitnah watch the chips fly. Photo by R. R. Jensen

stronger. Signed, The Recording Room Gang, RSD, HPJ, MJW, AS, RHK." (The boys were kidding because Brooks is one of the best machinists in the business.)

In order that the Chicago Gang can see how these two buddies look in their new surroundings we are sending along

tioned around the recording room so we won't mention it here. Ralph Clements put in many long hours with Hicks but he doesn't count because he is from N. Y. and this is strictly a Hollywood-Chicago deal.

In case the Hollywood recorders wonder from whence came these two new members, we are running a photo of these same machines as they appeared in Chicago where they were the pride of the Fish Bowl. Ralph Davis and Bob Whitnah are watching the chips fall where they may.

Seriously though, these machines are really going to have a workout. According to Les Culley, recording supervisor, the monthly platter consumption has jumped from 2,000 blanks per month in 1942 to well over 4,000 per month at present. That means in anybody's language that Hollywood is really "in the groove".

Johnny Morris and Jim Thornbury making final adjustments on Scully machines just received from Chicago. Photo by R. R. Jensen



From San Francisco

By Bob Shover

ON AUGUST 3, 1943, the NBC KPO 10-year employee banquet was held in the Italian Room of the St. Francis Hotel. Niles Trammell NBC President, and Sidney Strotz Western Division Mgr. were the principal speakers. Oscar Berg leads the list with 16 years' service! Members of the NBC-KPO Engineering staff who received their 10-year gold pins presented by Mr. Strotz were as follows—George Greaves, George McElwain, Frank Barron, Thomas Watson, Geo. Dewing, Charlie Kilgore, Jim Summers, Ed. Parkhurst, Joe Baker, Art Dingle, Ed. Manning, Curtis Peck and Ed. Callahan via remote control.

Mr. Fell, T. E. from Denver, joins the PO Transmitter staff down at the Belmont mud flats. Harry Puccetti now back in the studio group from the transmitter. Thomas (Senator) Watson on vacation up in the mountain country. Sam Melnicoe still twiddling dials on the Mirth & Madness Show. Geo Dewing is keeping "Dr. Kate" on the air in good order as he has the past 3 or 4 years. W. Andresen has his third deferment while Hal Ashby and Rus Butler are still keeping their fingers crossed. BARRON BUMBLES OVER BABY'S BROUGHAM—BUMPS BEHIND. (?—Ed. S.)

Ed. Parkhurst had an embarrassing situation the other day when he called L. A. on the teletype—The operator asked him to repeat the number which was 585 and Parkey forgot to throw the figure key in position.

The other day one of our feminine members of the NBC

Staff was being shown our Master Control Room by one of our congenial supervisors (How she got in the Holy Sanctum is another question). After he made the lights dance around for a few minutes she gasped and said, "Isn't it wonderful, and just think, nobody knows how it works!"

EE Jefferson purchased a half acre of Eucalyptus grove next to his estate and has an able crew of lumberjacks consisting of Dewing, Melnicoe, O'Neil, Sanders and Kolm, sawing down the trees for him.

FROM THE TRANSMITTERS

Jim Blanchet is getting in a lot of swimming these days and also keeps his model railroad in good shape in case the S P wants to take over the franchise. K G O Transmitter Bldg. has a new roof. Looks like the boys won't have to use the mop buckets for rain pans this winter. Kramer taking time out from his A A A Victory garden to do a little House Painting. Ken Martin overhauled his car a few weeks ago and when he got it back together, he had 3 bolts left. After spending an hour looking for a place for them to go, he discovered that they did not belong to the car, so he won't go down the road now wondering if the pan will fall off. Jim Ball quite busy making the annual house repairs and we hear he has his mother-in-law doing the garden work. You can't tell, she may make a gardener out of Jim too. Al Eldridge is having Gopher trouble; Al, if you want some expert advice, call "Skeets" Casidy, as he is an expert on gophers, rabbits, chickens, etc.

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.

PROMPT DELIVERY direct from the manufacturer to any part of the United States, Canada, South America and to some foreign countries. ALSO AVAILABLE recoating service for your old aluminum discs. Delivery in one week. Details on request.

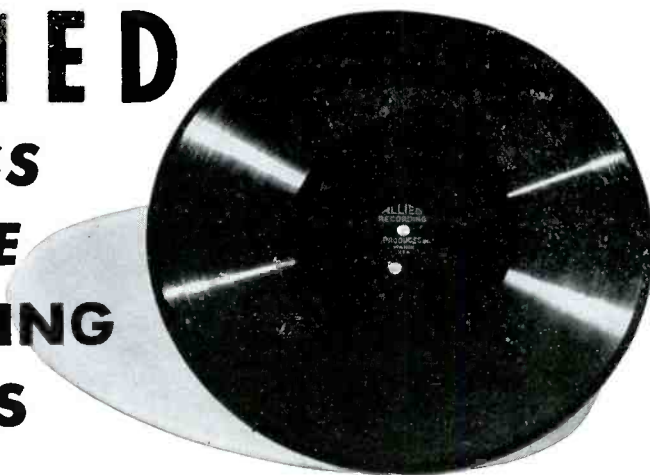
ALLIED RECORDING PRODUCTS CO.

21-09 43rd Avenue

Phone Stillwell 4-2318
Cable: Allrecord New York

Long Island City, N. Y.

ALLIED GLASS BASE RECORDING DISCS



Killfidget

(Continued from Page Fifteen)

"Whatever you say, chief," chimed in the Doctor.

"— and then you'll be sworn in. Our psychiatrist will examine you, and then you'll be classified according to the type of work you're best —"

"Look," interrupted the Doctor. "I want to get into the Signal Corps. The only thing I know is radio — and broadcasting. They told me at the draft board to ask to —"

"That'll be enough out of you, Killfidget," boomed the officer with the gold leaves. He cleared the gravel from his throat, and then said: "After you've been scientifically classified by our psychiatrist, you'll be fully processed."

"Yes, lieutenant," spoke up the Doc promptly.

"And we might as well start your education now!"

"Sure, sure." Killfidget was agreeable.

"When you address an officer, say *sir!*" barked the man behind the desk. "And these gold leaves, Killfidget —"

"Um?"

"These leaves are *not* lieutenant's bars!"

The Doctor was puzzled, but not greatly concerned.

"Aren't they?" he asked, innocently.

"No!" bellowed the major. "No, no, no, no! And call me *sir!*"

"All right, all right! Don't get excited, chief."

"Shut up!" roared the major. His face was fiery red. "Get the hell out of my sight!"

"Sure thing, chief," smiled the Doctor, and started for the door. But two soldiers with guns and "M.P." on their sleeves didn't see it the Doctor's way.

"Back up, bud. You ain't leavin' here."

"But the chief said I could go," protested the Doctor.

"Yeah, but not this way, rookie," said the other soldier, fingering an enormous .45 pistol with pearl handles.

The Doctor was concerned about this.

"Say," he said, "Have you got a license to carry that gun?" Always on the side of law and order, that was Doc Killfidget. Well, almost always.

The two M.P.'s showed the Doctor the right way "out", which was via the office of the medico.

"I'm a sort of Doctor myself," volunteered Killfidget, while the medico tapped around on his sunken chest.

"That so?" said the medico, with little interest.

"Only I doctor up radio sets!"

"Um-m-m." The medico wasn't interested.

Several times the medico stood off at a distance, looked the old man over, and then nodded his head from side to side with great solemnity. Killfidget was curious.

"What's up, sawbones?"

"It just doesn't seem possible," mumbled the medico under his sterilized breath, checking off items on a chart.

"Anything wrong, maybe?" asked Killfidget. "I'd hate to be rejected on account of—well, on account of anything."

"Don't worry," said the medico. "You just have to be able to do three things to pass me."

"Only three?"

"You have to be able to smell smoke, see lightning and hear thunder." The medico had a note of finality in his voice.

"Oh," said Killfidget, weakly.

"How old are you, anyway," asked the medico, peering at his medical dope-sheet. "Says here you're twenty-one!"

"Oh, that's how old I *feel!*" spoke up the Doctor proudly.

"Um-m-m," said the medico, making notations on his chart.

"I'm actually fifty-two," said the Doctor, quietly. But the medico was busy adding and subtracting figures and didn't hear this gaffe and revealing admission.

"You're remarkably well preserved for twenty-one," said the medico, stamping the chart: *PASSED OK.*

Killfidget brought himself up to his full six feet of sway-backed verticality. "That's entirely due to regular consumption of hot toddy."

"Consumption is right," mumbled the medico. "I guess *that* accounts for it."

"Accounts for what?" asked Killfidget, putting on his civilian clothes for the last time.

But the good Doctor never found out.

He was hustled out to the man-with-a-gold-leaf-on-each-shoulder and formally sworn in as a member of the armed forces. Ten minutes later he was being examined by the psychiatrist, a wiry little man who really *was* a lieutenant.

"And you say they call you a Doctor?"

"Well, yes," answered Killfidget.

"But you're not *really* a doctor?"

This confused the old man, because he never had thought of it in that way. "Well, yes and no. I'm a sort of *radio* doctor; the boys always have called me Doc. You see I—"

"Very interesting," interrupted the lieutenant. "Um-m-m. Now tell me

about some of the different kinds of work you've done in civilian life."

"Well, like I just said," began the Doctor. "I've spent most of my life in radio broadcasting. Been in it since 1920. I wanted to get in the Signal Corps, if I could, on account of my experience and—"

"Never mind that, Killfidget." The psychiatrist was annoyed. "What *other* kinds of work have you done. The army needs men for all kinds of work."

The Doctors brain revolved slowly, with much stress and strain. "I don't remember of ever doing any other kind of work but radio."

"Oh," said the lieutenant. "And when you weren't working at this—this radio broadcasting, I suppose you were loafing?"

The Doctor reflected a minute.

"Well, that's possible, mister lieutenant," admitted Killfidget. "But I figured I could get in the Signal Corps with—"

"That's enough," snapped the officer. "Now let me see—I think we can find a place for you—somewhere." He ran his long, pointed finger up and down a long list of trades and professions, while the Doc shifted nervously from one foot to the other.

"I wanted to get in the Signal Corps," ventured Killfidget.

"Have to place men where they are best qualified."

"But they told me," began the Doctor, "I could—"

"Here we are!" The psychiatrist turned to Killfidget. "Know anything about motors, automobile engines?"

"No, sir."

"Ever *drive* a car?"

"Well, not recently. That is—"

"How long ago?"

The Doctor reckoned the last car he drove was a 1920 Buick. A mere 22 years had elapsed since the good Doctor had detached himself from things mechanically automotive.

"Good!" exclaimed the lieutenant. "You're just the man for the Tank Corps! Driving tanks, trucks, tractors, half-tracks. You're ideally suited!" He was almost carried away by his own enthusiasm.

"No Signal Corps, sir?" Killfidget was flabbergasted.

"Wasting *your* talents in the Signal Corps?" The psychiatrist was emphatic. "Not a bit of it! Why, Killfidget you're ideally suited for the Armored Force. We can use some old stock to mix in with the youngsters. Why, you'll be able to—"

But old Doc Killfidget never heard

(Continued on Page Twenty-four)

*"Way Back When"
in Radio Broadcasting*

WBAY ~ 1922

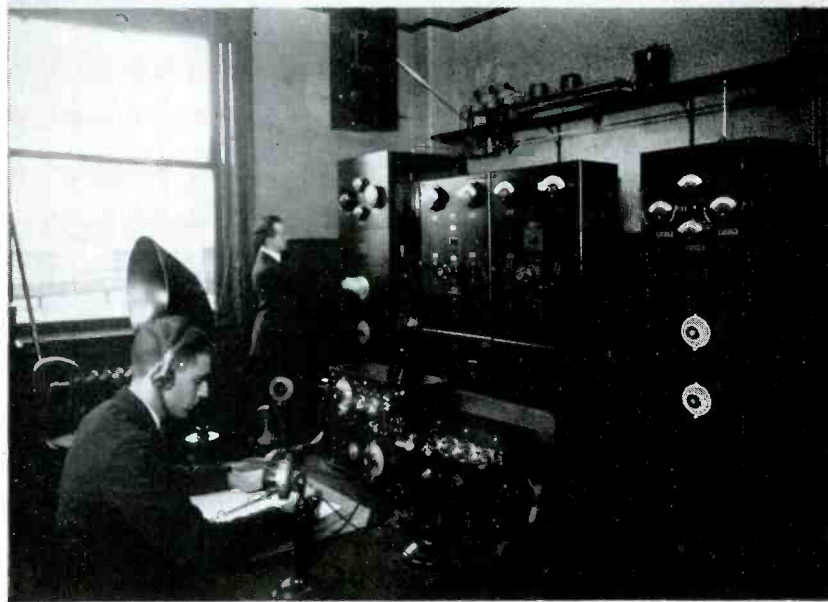
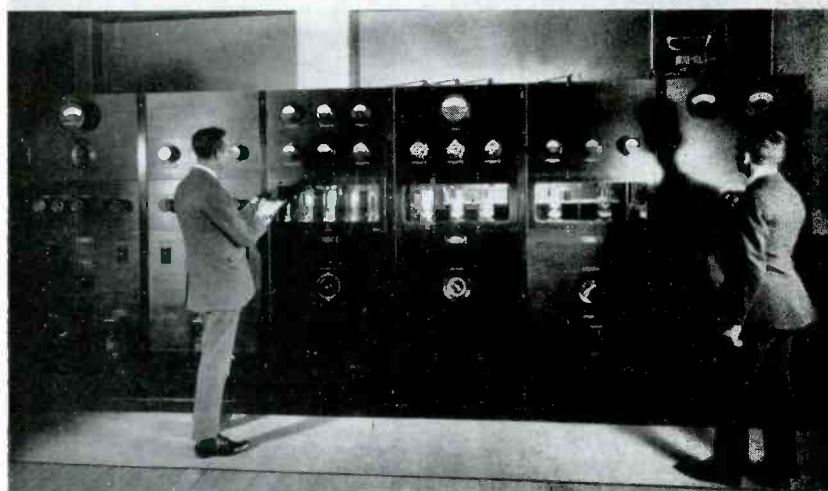
Now — WCAF



West Street, New York, 1922. Chief Operator R. S. Fenmore, A. T. & T. Co., at rack. Anderson at Control Desk with 600 meter receiver.

— and today — in a mere 21 years, radio and electronic devices are winning our war!

Buy More Bonds



Top — West Street, New York. WBAY - WCAF Antenna

Center — WCAF's first 5 kw. transmitter. O. B. Hanson and J. S. Ward of W. E. Co.

Bottom — WBAY - WCAF 1/4 kw. transmitters, West Street, New York, 1922. Anderson at the Control Desk with 600 meter receiver. J. S. Ward at transmitters. Both of W. E. Co.

CHICAGO

By A. W. Hjorth

F C. "FRANK" SCHNEPPER and wife Virginia with children Ronnie and Bonnie (future radio team???) spent a portion of their vacation at Fish Lake, Ind. Frank claims lake misnamed since 'nary a fish could be caught or even seen.

R. C. "Ray" Bierman, BLUE studio and stalwart defender of Jack Armstrong, traveled via train with Portio and their daughters Mary Anne and Barbara visiting Portio's parents at Lafayette, Ind. Balance of Ray's vacation was spent in his subterranean workshop manufacturing specialized electronic equipment for Chicago radio industries. Contrary to persistent rumor Ray emphatically denies that he is mayor of Clarendon Hills.

E. A. "Mac" MacCornack, Coca Cola's BLUE transient engineer spent his vacation in a Chicago hospital with a painful jaw infection. Happy to report that Mac is now at home and may attend the BLUE outing.

A. J. "Al" Schroder, "Q" transmitter, won the NBCAA Golf Tournament Trophy cup at the recent outing shooting 88. Previous holders of this cup have been distinguished golfers Ed. Davis and Dave Garraway.

Division Engineer Luttgen's secretary, Loretta Cooney, claimed the \$25 War Bond given as first door prize at the NBCAA outing while B. F. "Bev" Fredendall, Professor of

Control Room Technique, acquired second door award of \$15 in War Stamps.

R. C. "Jerry" Bodholdt, NBC Field, better known as a Yachtsman, Scoutmaster, First Aid Instructor, Photographer and marathon pedal pusher, spent his vacation at Maniste, Mich. Traveled this 175 miles from Chicago with bike and a forty pound pack, but . . . from to Chicago to Milwaukee via train, Milwaukee to Luddington by boat and the remaining forty-five miles actually pedaled his trusty bike. While there, also found time to skipper the SEAHAWK.

M. J. "Minor" Wilson has been appointed Secretary-Treasurer of the Chicago Chapter of Nabet by Chairman Schnepfer.

Faint memories of wedding bells will tinkle during October for: R. S. Davis and Catherine, M. H. Eichorst and Dorothy, R. E. Fitzpatrick and Gertrude, W. C. La'iman and Dorothy, W. C. Prather and Irma, E. G. Squires and Margaret, and G. E. Webster and Maxine. Remember when you said, "I do," boys and girls?

R. D. "Dick" Wehrheim, Chicago Maintainece, and wife, Estell, spent two weeks of their vacation at Watersmeet, Mich. Not much fishing, so they picked and canned a million blueberries.

R. E. "Ralph" Brooks, vacationed by working aboard his newly acquired thirty-nine foot yawl. H. T. White, also Chicago Maintainece, ably assisted Ralph in scrubbing the scow's bottom.

A. J. "Andy" Forgach, WENR-WLS transmitter, with friend, Baxter, fished for ten days at Phillips, Wisc. During one week-end they had as tent guests, Chicago radio celebrities, Ed. Horstman, Blue Division Engineer, George Cooke, manager WLS, Chief WLS Engineer Tom Rowe and Transmitter Chief Homer (Pull the big switch Homer) Courchene. Such an imposing array of anglers should produce the Chicago fish story of '43.

High Diver "Don" Fitch and Low Diver Carl Cabasin were demonstrating triple somersaults, double jack-knives and one and a half flip-flops for the awe stricken crowd at the NBCAA outing. In demonstrating a high speed zephyr special, Don Fitch moved thru the air faster than his borrowed oversize trunks. Underwater Don found these pantaloons around his ankles and to save embarrassment of the beautiful damsels admiring Don's and Carl's superlative forms, Don held his breath for a full ten minutes while struggling back into his erstwhile bloomers. Quick thinking Don Fitch had saved another show!

W. W. "Wee Will" Blair, NBC studio, proclaims a romance budding. Mary Kirkbride, Operations Engineer T. E. Schreyer's secretary is being pursued!

Al Otto, Chicago Graveyard Supervisor, and W. C. "Bud" Prather, of Chicago Maintainece with a Smile, were first to arrive at the NBCAA outing held at Olympia Fields, Ill. Attempts to slumber after working (??) all night were disrupted by a stroke of lightning that splintered the flagstaff atop the building and splattered tile at their feet. Were they scared?

Frank Golder not caring for beer, rain or golf at the NBCAA outing spent all day in the pool.

CAPPS*

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

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

Imitated but not equalled

FRANK L. CAPPS & CO.

244 W. 49th STREET NEW YORK CITY

Telephone Circle 6-5285

* Reg. U. S. Pat. Off.

WOR – MUTUAL

By Herman G. Berger

MEET "Papa" Campbell, boss of the WOR Transcription Department. Yes sirree!!! the old boy is the proud "Papa" of a baby girl 7¼ lbs. Baby and "Mama" are doing fine.



"Papa" Gifford Campbell himself, President of the WOR-NABET Chapter.

We offer "Papa" Campbell a good suggestion — that he get in touch with the Sound Effects Department and ask them for a record of a baby crying so that he can play it every night and get in shape for what's to come when baby gets home. It is our guess that he will do a lot of midnight floor walking in the near future. And, by the way, not to cast any reflections or throw any hints — but, we three, Donniez, Cook and Berger, did not get our cigars.

John M. Keane of the Sound Effects Department is a proud "Papa" too. August 5, 1943, at St. Clares Hospital, a baby girl, 6 lbs. 3 oz., and is "Momma" Keane happy as her first child was a boy and she did so want a girl to complete the happy family. Poor John, you have our sympathy — sound effects all day and now all night too. Cheer up, John, and may all your troubles be little ones.

NEWCOMMER — Before **Robert G. Feaster** of Northumberland, Pennsylvania, came to WOR he was employed by United Radio Television Institute in Newark, New Jersey, as an instructor. He taught electricity, physics and radio lab and theory to United States Army Enlisted Signal Corps and Air Corps men and WAC. His hobbies are collecting and reading technical books on radio and television. Back in Pennsylvania his hobbies were hunting and fishing. Bob Feaster holds a first class commercial radio telephone license.

Our Cover

Two 77-B microphones placed at an non-discriminating acceptance angle on the studio ramp pick up the laughter of the studio audience. The output of these two mikes is fed through the usual amplifier and fader to the "laughter meter" (galvanometer) which registers the intensity of laughter on a translucent scale built in the mouth of the laughing face and graduated in numbers from 100 to 1,000. This registration on an enlarged scale is achieved by placing the needle of the galvanometer in the negative carrier of a projector. The size of the meter can be judged by the adjacent photo showing Maintenance Engineers Barber and Lewis, who obligingly posed for this purpose.

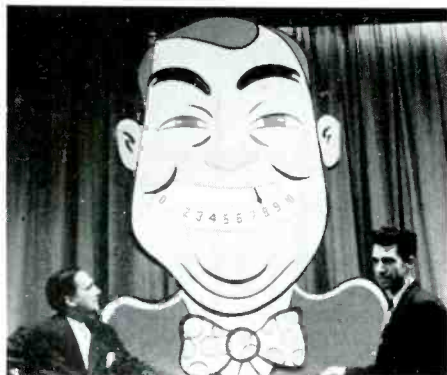


Photo by Sergei de Somov

Lt. Frank Connolly, formerly NYME, now with the Signal Corps, and located in Washington, D.C. Dave Moloney of Journal Staff, back from a brief vacation in Canada; while in Montreal he visited the CBC Studios, and was entertained by Jerry Hudon, Master Control Supervisor.



Lt. Frank Connolly

Courmettes & Gaul OPTICIANS

55 West 49th Street
R. C. A. Building, New York
Main Floor

EYE EXAMINATIONS

Prescriptions Filled . . . Prompt Repair Work

Aaron Lippman & Co.

246 Central Avenue Newark, N. J.

Radio and Electronic Equipment

We Expedite — Ask Anyone

If you require information on

INSURANCE

of any kind, call

HERBERT LEROY RICE AGENCY

10th Floor, RCA Building
Suite 1017

Telephone
NBC Extension 140

This Is Mutual

(Continued from Page Seven)

tionnaire on FM sent by Mutual to 90 stations, a large number of affiliates replied they had applied for licenses. This development pointed to a possible frequency modulation hookup in the near future.

In a report to these meetings, Fred Weber, Mutual's General Manager, pointed out that:

Mutual programs were furnished to 145 affiliates within the year and would have 175 outlets by 1941.

Mutual grossed approximately four million dollars in 1940!

Interviewed in September 1940 in Montreal while making arrangements with the CBC in connection with the World Series, Weber emphasized the fact that Mutual carried more Canadian programs than any other outlet in the United States.

The number of Mutual affiliates jumped from 118 to 154 in the period from February 1 to October 1, 1940.

The Mutual network gross billings for the month of June 1943 totalled \$1,100,481, an increase of 65.4% over June 1942, when the figure of \$665,372 was reported.

The 1942 gross billing was nine million dollars.

The eight months cumulative billings for 1943 was eight million dollars, expected to reach fifteen million for Mutual's 211 stations for 1943.

Mutual continues to boast with pride and distinction of being the world's largest network with 211 stations from coast to coast!

On January 1, 1943, Mr. Miller McClintock was elected the first President of the Mutual Broadcasting System; his biography will appear in a future issue of this Journal.

Part II of this paper, relating to the engineering and technical progress of Mutual, will be presented as soon as this data can be assembled.

Killfidget

(Continued from Page Twenty)

the rest of the analysis. His mind had wandered back to Joe's Place, and he was thinking about hot toddy. And he was thinking about the gang up in the Engineers Room at the radio station, wondering what they were beefing about, what new actress they were discussing, what studio show someone was missing because he was asleep on the couch.

Cleveland News

By
Bert Pruitt

THANKS to Fred Everett for his fine job of pinch-hitting in August.

Fred loaded his fountain pen, stepped to the plate of creative ability, swung and socked pitcher Deadline's screwball over the fence for an interesting bit of Cleveland news.

That gives us an idea: Why not have at least six Cleveland editors? Each editor would have only two columns yearly. This would give him six months to heat the deadline!

We Conduct a Poll—After having written the Cleveland news for eighteen months, we decided to conduct a poll and see if the Cleveland members of NABET were satisfied with the publicity they are getting. "Oh," replied Harry Caskey (CS) to our question as to how he liked the Journal, "the New York, Hollywood and Los Angeles fellows are doing a swell job." "Yes," said Alvin McMahon (CS), "I read the WOR, Chicago and San Francisco News . . . Those fellows really have something!" Charley Ames (CS) said he enjoys the technical articles and the fellows at the transmitter go for Stolzenberger's Book Review. After having conducted the poll this far we decided that polls are often misleading.

Station Managers vs. Engineers

We have several good theories we would like to discuss in our column, and we would if it weren't for a statement on page one of this Journal. The statement reads as follows: "Nothing appearing in the Broadcast Engineers' Journal shall be construed to be an expression of the Broadcast Engineers' Journal or the National Association of Broadcast Engineers and Technicians, but must be construed as an individual expression of the author or authors." If it weren't for that statement we could discuss the importance of station managers vs. engineers. Who is the

most important to the broadcasting industry? We believe you would be safe in saying there wouldn't be any station managers if it weren't for the engineers. There's one glaring flaw to this point of view, however. We have yet to hear of a station manager being fired by an engineer.

Note to Jovial NABET Prez

Jim Brown

How about making another trip to Cleveland? We haven't seen a steak since you were here in May . . . Note to Harold Brandt: If he does, you will have to find—and pay—for the steak!

Vacations—We intentionally steered clear of vacation gossipology this year. With airplanes flying across the Atlantic and Pacific like pigeons crossing your public square, we were somewhat inclined to think we wouldn't cause much of a literary upheaval by telling you Joe Flashpudget drove way out to Loraine, Ohio.

Around the Clock—WTAM continues to operate continuously with the exception of a four-hour maintenance period once each week. Jesse Francis (CS), Glenn Morr (SE) and Wayne Byers (Announcer) have taken advantage of the Owl-Watch. They put on a program with the alluring title of "Hearts of Flowers". One tragic scene takes place above the Arctic Circle when a herd of snales go galloping across the frozen surface of an unnamed lake. And these boys explain the true meaning of the kindergarten game of "leapfrog" by giving the sound effects of a frog leaping from a step ladder into a pan of pancake dough! We wouldn't be at all surprised if they enlarge a mosquito 7,000,000,000 times and prove, with sound effects, that the marshland near Sandusky, Ohio, produced the first Flying Fortress!

Excuse us while we put on an alert . . . See you in October.

"There seem to be parts of this army life I don't like," mumbled the old man, after he had been properly misfitted with his first GI uniform.

Later, after a bitter experience with a meal properly called a "mess", he bedded down for the night in the musty confines of the armory.

Basic private Amos Q. Killfidget suddenly realized that this was the first night in years he had retired quite sober

—and at such an early hour. It was just nine o'clock by his Ingersoll. A new life had begun for the eccentric old troublemaker trouble-shooter. And trouble was destined to not only follow private Killfidget, but to overtake him, trip him, and send him sprawling in a labyrinth of perpetual confusion.

"I wonder what is going to happen to me," puzzled private Killfidget, "between now and the time I win this war."

Little, ah little, did he know.

When The Lyre Rang True



VAIN PAN, player of the pipes and god of the field, challenged Apollo, god of the lyre, to a trial of skill. Tmolus was chosen umpire.

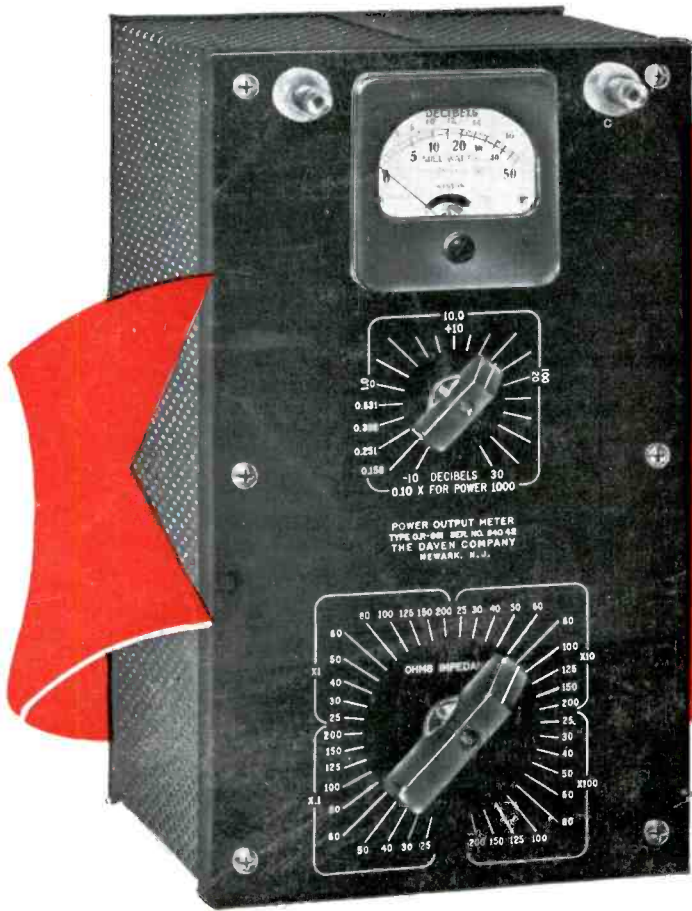
There was no comparison between the reedy tones of the one, and the dulcet harmony of the other. Apollo was called the winner by all but Midas, a Pan man. Tmolus, who was also mountain god, was so disturbed by this lone dissenter that he changed the ears of Midas to long, hairy, ass' ears.

While there are still varied opinions today about different types of music, there is only one concerning recording blanks. Discerning engineers are unanimous in their choice of **ADVANCE GLASS BASE RECORDING BLANKS** for fidelity of reproduction, longevity of playback life, and most value for the money.

*BACK THE ATTACK . . .
Support The Third War Loan Drive!*

36-12 34th STREET • STILLWELL 4-7837 • LONG ISLAND CITY, N. Y.

Advance
Recording Products
Company



FOR ACCURATE MEASUREMENT
OF POWER AND IMPEDANCE

Specify...

DAVEN OUTPUT POWER METERS

The DAVEN Company has long been a dependable source of supply for engineers seeking precise equipment for laboratory and production tests. Experience has taught these men that the DAVEN laboratory produces instruments whose degree of accuracy and reliability have successfully and consistently met every rigid requirement.

OP-961: A rugged, handy Output Meter for accurate measurements of audio signal systems having a maximum power output up to 50 watts.

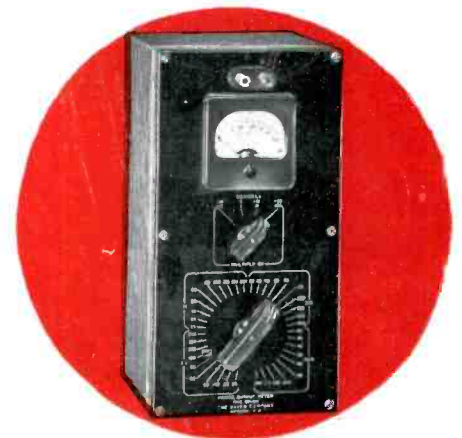
Reliable readings of power at impedances from 2.5 to 20,000 ohms are guaranteed by a meter multiplier network of constant impedance, in combination with a carefully designed impedance changing network that remains essentially resistive throughout virtually the entire audio range.

Power ranges cover from 0.1 mw. to 50 watts in steps of 0.1 mw. indicating meter is calibrated from 0 to 50 mw., and from 0 to 17 db., with a 1 mw., zero level. A 20 step multiplier extends the meter power reading from 0.1x to 1,000x scale value, and the db. reading in steps of 2 db., from -10 to +30 db., with full scale at 47 db. Accurate within 2% at midscale.

OP-182: Convenient meter reading is provided in this compact, space-saving OP-182 Output Power Meter. It is admirably suited for many power and impedance measurements, such as determining actual power delivered by an audio system to a given load, characteristic impedance or load variation effect on an A.C. source.

Terminal impedance remains essentially resistive over the audio frequency range of 30 to 10,000 cps. Impedances from 2.5 to 20,000 ohms in 40 convenient steps are available.

The indicating meter is calibrated from 0 to 50 mw., and from 0 to 17 db. Zero level at 1 mw. Four ranges of full scale readings from 5 mw. to 5 watts, and from -10 to +37 db. are provided by the meter multiplier. Accuracy within 5% at midscale.



THE DAVEN COMPANY

191 CENTRAL AVENUE

NEWARK 4, NEW JERSEY