

The Broadcast Engineers' Journal
30 Rockefeller Plaza
New York, N. Y.

Prof. Gahr
47 JENKINS
RADIO STATION WGSF-WECA
4FD 3
EMMAUSVILLE IND 5145



**Buy U. S. War Bonds NOW—and We'll ALL
Have Another Merry Christmas in 1943**

THE BROADCAST ENGINEERS' JOURNAL

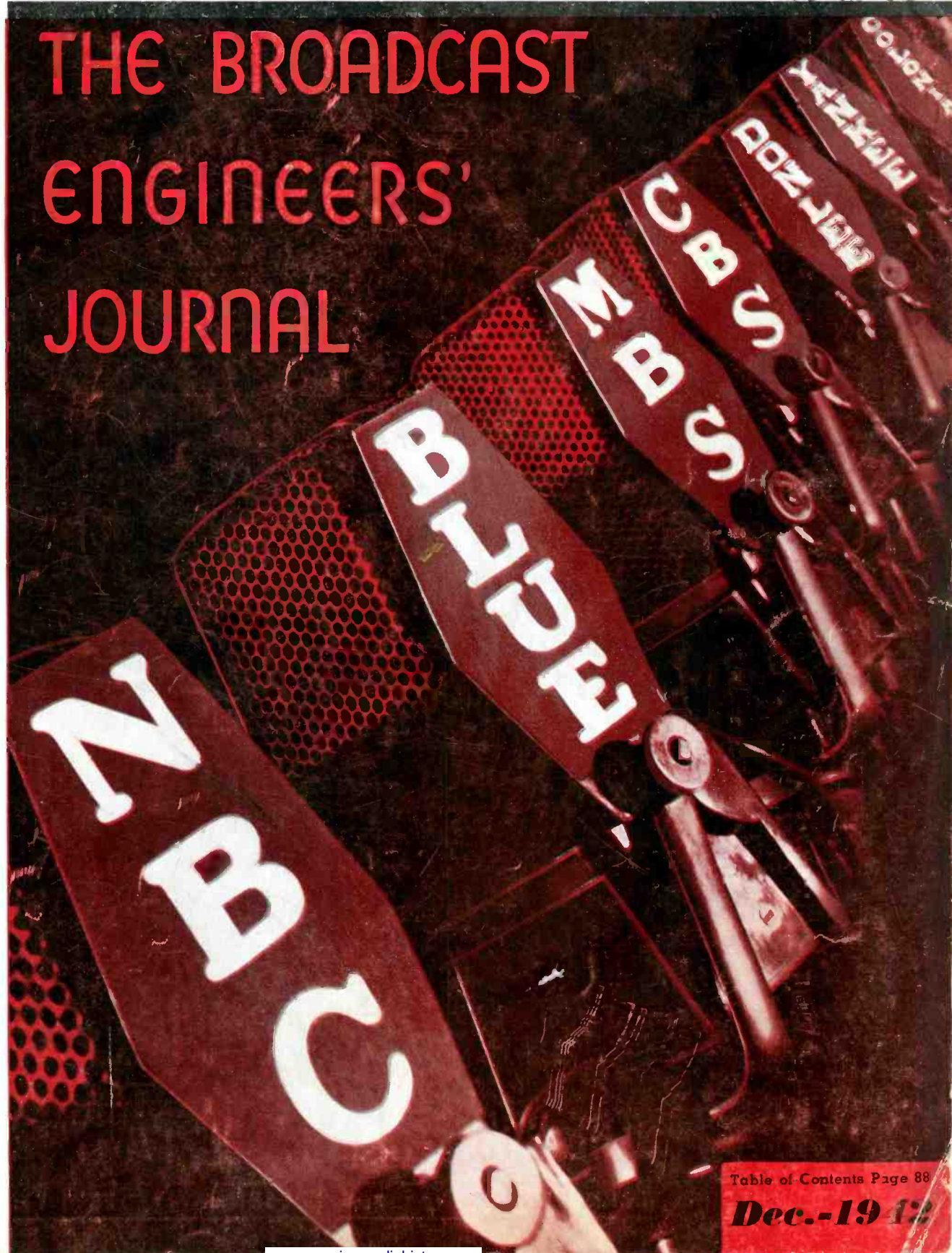
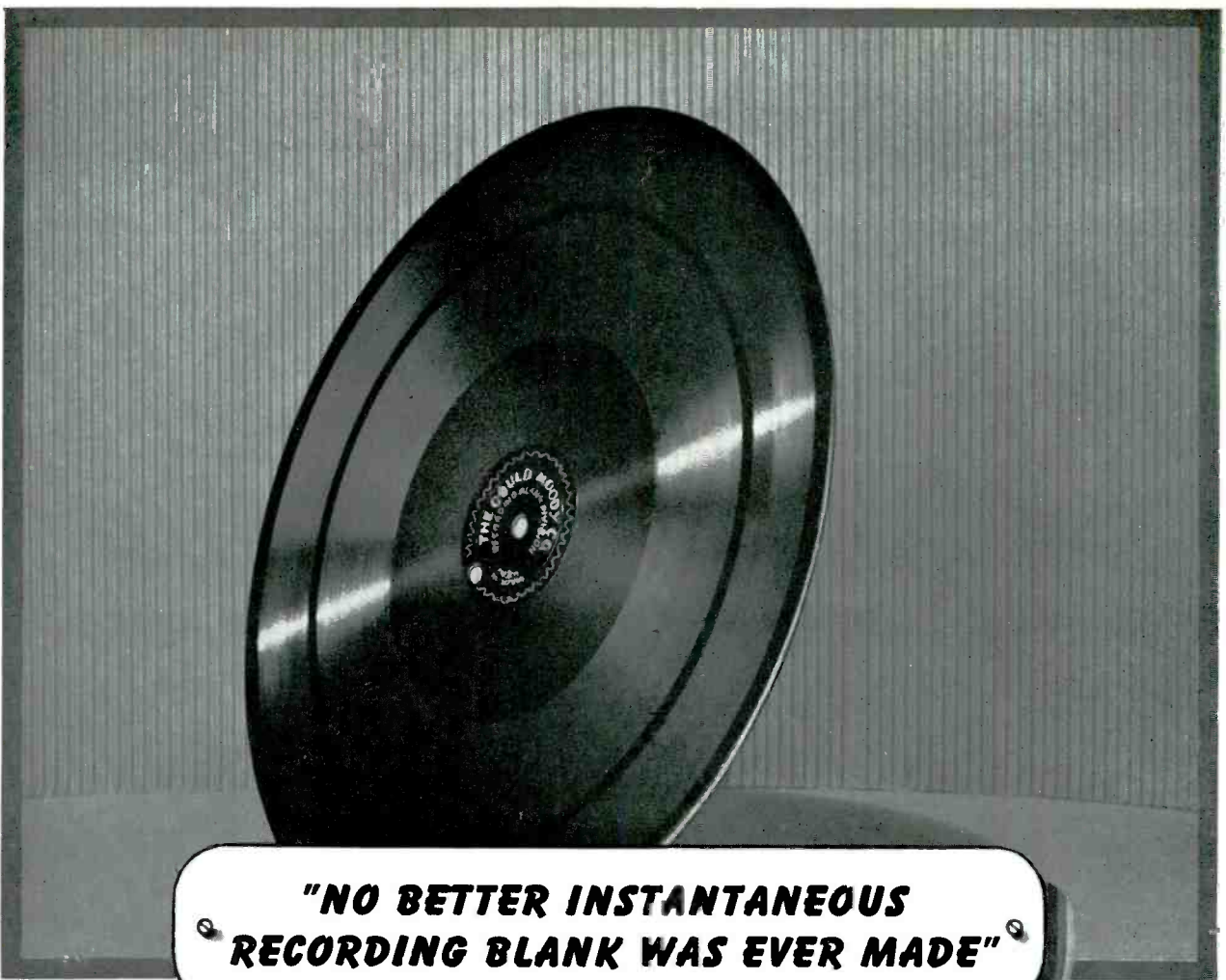


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Dec.-19 43



"NO BETTER INSTANTANEOUS RECORDING BLANK WAS EVER MADE"

...this is the consensus of opinion from impartial tests conducted by major station engineers from coast to coast!

THE ONLY GUARANTEE OF ITS KIND IN THE ENTIRE INDUSTRY!

Gould-Moody "Black Seal" Glass Base Instantaneous Recording Blanks

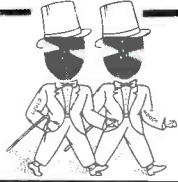
TRY THEM AT OUR EXPENSE!

There are no ands, ifs or buts about our offer !
YOU'VE GOT NOTHING TO LOSE ! Ask for a trial order of Gould-Moody "Black Seal" Glass Base Instantaneous Recording Blanks. If, after trying a few, you do not find them entirely satisfactory, return the unused blanks, and keep the used ones with our compliments !



REMEMBER!
Broadcast engineers from coast-to-coast have said that "no better instantaneous recording blank was ever made". We back them up with our unqualified guarantee that "Black Seal" are as good as, if not superior to, any other blanks that you have ever used.

THE GOULD-MOODY COMPANY



RECORDING BLANK DIVISION • 395 BROADWAY • NEW YORK, N. Y.



James H. Brown

PRESIDENT

National Association of Broadcast Engineers
and Technicians

Until a year ago our profession was in the main concerned with entertainment and matters somewhat removed from life and death. During the past year we have demonstrated what a vital contribution we as engineers and technicians can also make toward the winning of a war against the forces of oppression and tyranny. The broadcast engineering personnel has reason to feel proud of their part in the conflict in which our country is engaged, for to members of this group may be credited many of the developments that will speed its winning. Tribute should also be paid to those who have responded to our country's need for trained operating personnel in the armed forces. It is, therefore, with a feeling of pride in this record that I extend to all members of our profession and everyone in the radio broadcasting industry best wishes for a happy Christmas season and a successful new year.

James H. Brown

For Your Co-operation

We Thank You



THE BIOW COMPANY

9 Rockefeller Plaza

New York City



N.A.B.E.T.
Vice-President

F. C. SCHNEPPER



F. C. SCHNEPPER
Vice-President, N.A.B.E.T.

It is a real pleasure to extend season's greetings to the members of NABET and to our many associates in radio. To those of you who are serving with our armed forces I wish to express my best wishes for your health and happiness.

May the new year bring "peace on earth, good will toward men".

F. C. SCHNEPPER.





MUSIC CORPORATION
OF AMERICA

thanks the

N.A.B.E.T.
ENGINEERS

for their fine help and co-operation
during the past year



David Sarnoff's

Christmas Message



DAVID SARNOFF
President, Radio Corporation of America

Radio, as a lifeline of communications to and from the widely scattered battlefronts and war zones of the world, has a major part in opening the way to victory. No year in the history of radio has been so crowded with activity in every branch of the service ashore, afloat and aloft, as has 1942. American radio follows the flag.

The news indicates that the war situation as it pertains to the United Nations at this year-end is brighter than a year ago. Our troops and sailors have gone into battle with the finest equipment in the world, which together with their great courage, is beginning to produce victorious results. To fortify them, America's greatest resources of science, engineering and production are geared day and night to the all-out effort.

American workers on the production lines; operators and engineers at radio stations, both radiotelegraphic and broadcasting; scientists in the research laboratories and radio men on ships and planes are to be highly commended for the splendid service they are rendering to the country. Many of their attainments in 1942 are military secrets. When peace comes their achievements will be news to the world. Then the results of wartime service and research can be usefully applied to reconstruction of a better civilization. Until the day of victory there must be no slackening of effort, no overconfidence, but only that driving force continually gaining momentum to reach the goal of triumph.

For the New Year, I wish you every success in your all-out efforts. May good health and happiness in the joy of work well done bring you all within view of the sunrise of victory in 1943.

A handwritten signature in cursive script that reads "David Sarnoff". The ink is dark and the signature is fluid and somewhat stylized.

A Great Big Hand to . . .



TOM ROWE, at the controls of the Alka-Seltzer National Barn Dance since its beginning eight years ago.



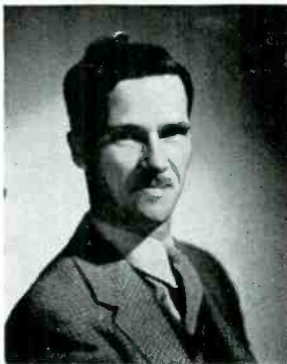
HUNTER REYNOLDS, who knows all the answers on the Quiz Kids program . . . when it comes to engineering.



JAKE O'KELLY, Los Angeles. Three times a day he's on the job for Lum and Abner broadcasts.



DON CALLAHAN "rides the gain" on the Morris B. Sachs Service Men's Show on WGN every Wednesday night.



HERB WYERS, in the control room every Saturday night for the Murphy Jamboree from WLS, Chicago.



BILL PERRY, New York



BOB WHITNAH, Chicago



"BY" SPEIRS, whose work does something for the Morris B. Sachs Amateur Hour every Sunday from WENR, Chicago.

Intricate switching by these two gives us the Alka-Seltzer News of the World

. . . We're glad they're on the controls when we go on the air.

WADE ADVERTISING AGENCY
Chicago, Illinois

A War-Time

Christmas Greeting

from Niles Trammell

In this, the most solemn Christmas in the history of our country, the greetings of men of good will, each to the other, take on a deeper significance.

For it is men of good will, working as brothers in arms, brothers in mind and spirit, who must destroy the forces that make this Christmas black and sombre.

Destiny has given to you, the radio engineers, one of the most important jobs in a world at war. And in greeting you on this Christmas, I am greeting you not only as one man of good will to other men of good will, but as one who understands and appreciates the consummate skill and energy you are giving to achieving the victory which we pray the new year, just over the horizon, will bring to a tormented world.

Radio is the key to our modern warfare. The radio engineer in the laboratories, at the control panels in radio stations around the world, in the theatres of battle on land, on the sea, under the waters and in the air, holds in his hands the lightning of swift destruction of our enemies.

Just as, in time of peace, and even now, to assuage grief, to sustain morale, the radio engineer works at his allotted task to put programs of news, music and entertainment on the air, so does the radio engineer in the field of battle, hasten the day of victory.

More than that, he is preparing, through continuous study, research and experimentation, to make the world after the war a place where free men can live better lives than they ever have before.

We in radio know how vital is our industry in this modern world whose far flung boundaries it has shrunk to a mere nothing in space and time. We in radio who are on the executive, the business and the entertainment side, know how much we owe to the engineers. They are the scientific doers who make possible to the world at large what is conceived in the minds of a few men in the narrow confines of single rooms.

To you technical men of radio, the men to whom the mysteries of the ether are familiar formulae, I send heartfelt greetings on this significant Christmas day in 1942. We in radio have the privilege, the opportunity and the will to make this day one of promise that next Christmas, God willing, in a world set free we shall greet each other once more in the traditional spirit of Christmas — "On earth peace—and good will toward men."



NILES TRAMMELL
President, National Broadcasting Co.

Merry Christmas



Bob Hope

Greetings from O. B. Hanson



O. B. HANSON
NBC Vice-President and Chief Engineer

To the National Association of Broadcast Engineers and Technicians:

The entry of the United States of America into the war has imposed a tremendous task on American industries, and particularly upon American engineers and scientists. Highly technical warfare and the speed with which it moves makes rapid and reliable communications vital to its success.

Tremendous demands have been made upon the radio industry, not only for highly specialized equipment but for trained radio engineers, installation and operating technicians by the armed forces, thus placing heavy demands upon the trained radio personnel of private industries. In this respect the broadcasting industry has contributed heavily of its trained man-power and many of the engineers of NBC have responded to the call. In fact 24% of our trained technical personnel are now serving with the armed forces or with other government agencies. While we are all proud of the boys who have responded to the call, their departure has placed a heavy strain upon our trained man-power.

Radio broadcasting plays a leading role in psychological warfare throughout the world and on the home front, and it has assumed an importance to the nation transcending its peacetime service. Some of us are destined to carry on this vital service with the full realization that we, too, are serving where we best can serve the interests of the nation.

Again I have been extended the courtesy of the Broadcast Engineers' Journal to express my cordial greetings to all of you and to wish you and the members of your families a very Merry Christmas and Happiness in the New Year, and I join all of you in extending our greetings to NBC engineers serving in the armed forces.

Sincerely,

A handwritten signature in cursive script that reads "O. B. Hanson". The signature is written in dark ink and is positioned below the typed name "Sincerely,".



Season's Greetings

JACK BENNY

and

MARY LIVINGSTONE





Holiday Greetings

from

William S. Paley



WILLIAM S. PALEY
President, Columbia Broadcasting System

I greatly appreciate the opportunity you give me through The Broadcast Engineers' Journal to again express my Christmas Greetings to the engineers and technicians of radio. All of us in radio are finishing a trying year. Just before this year was born, new and vital services were suddenly demanded of American broadcasting. You who have been responsible for the technical operations of our stations and networks, can be proud of the part you have played in making it possible for radio not only to meet these new demands, but also to rise to the new opportunities for public service which were placed before it.

As we go into the new year, we are better prepared than ever to serve the wartime needs of our country. Our activities during the past year have brought us valuable experience and a greater realization of the importance of our service to the American people. I am confident that as radio pursues its present course, or explores new opportunities for service, the technical men of radio will hold up their end, no matter how difficult the challenges.

My good wishes for the new year to each of you.

Sincerely yours,

WILLIAM S. PALEY.





MARIAN
JORDAN
"Molly McGee"



JIM
JORDAN
"Fibber McGee"

Greetings and Sincere Appreciation to the Engineers



Billy Mills



The King's Men



Season's Greetings and Best Wishes



E. K. COHAN
CBS Director of Engineering

from the CBS Engineering Department to
our associates and friends who are engaged
in maintaining the channels of radio com-
munication throughout the United Nations.
We salute you for your excellent cooperation!

E. K. COHAN

Director of Engineering
CBS — USA



Season's Greetings



KAY KYSER

and All the Gang





A Holiday Greeting from
Mark Woods



MARK WOODS
 President, Blue Network Company

Christmas this year is a time for all of us, and particularly for those of us associated with the Blue Network, to pause and give serious thought to the many things for which we have to be sincerely grateful. Not the least of these is the fine spirit of cooperation evidenced by one and all on the Blue Network staff.

Our company began with the Christmas season of 1941, and is completing its first year as an independent company with the holiday seasons of 1942. Our entire career has been lived in a period when our country is in an all-out war for survival. This has presented many seemingly insurmountable obstacles. These obstacles have been largely overcome and no problem has failed of solution. This was true because of the men and women making up our staff.

Engineering, because of war time requirements on man power and on equipment, has had more than its share of problems but, at the same time, more than its share of the spirit of cooperation that has typified our company.

I would like to meet each of you personally to extend my wishes for a Merry Christmas and a Happy New Year but I know that is impossible. Therefore, I am delighted to avail myself of the offer of the "Broadcast Engineer's Journal" to express sincere thanks for your cooperation, and my greetings to you and your family.

Mark Woods

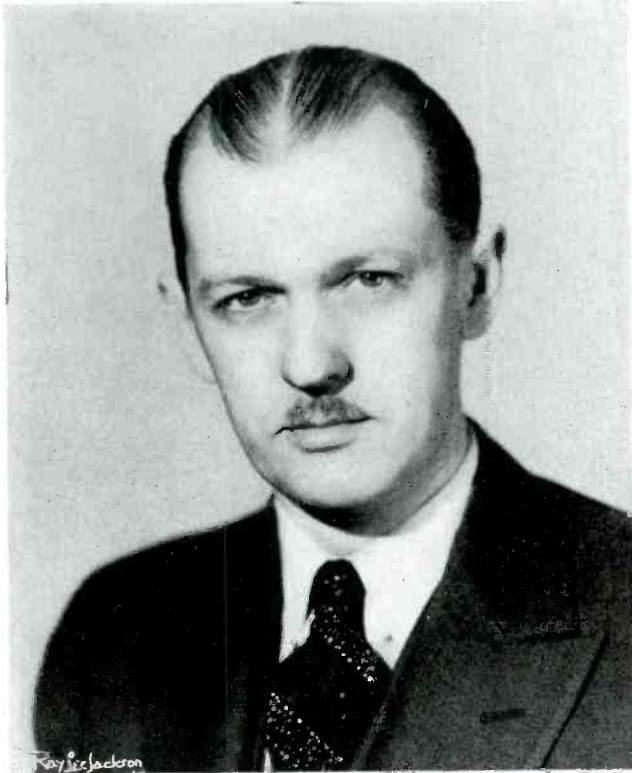


To the ENGINEERS . . . from LOWELL THOMAS



*A salute to my scientific colleagues
who do all the hard work in
putting me on the air*

Lowell Thomas



G. O. MILNE
Chief Engineer, Blue Network Co.

G. O. MILNE,
Chief Engineer of the

Blue Network
Company

I am happy to extend, through the Broadcast Engineers' Journal, season's greetings and my sincere best wishes to the members of NABET and particularly to the technical staff of the Blue Network. This is the second holiday season observed by our country during an all-out war and the first observed by the Blue Network in its short but eventful life. Perhaps more than any of our personnel, you engineers have had to meet not only the problems incidental to the organization of a new network, but also the mounting difficulties directly resulting from our nation's war effort.

I would also like to extend my felicitations to the members of our staff and to the members of NABET who have entered the various branches of military service. I hope that this holiday season, when as a people and a company, we yet have so much for which to be thankful, is only the forerunner of more enjoyable things to come after the final Victory.

Greetings



BILL MEEDER





*A Message from
WOR's President*

**Alfred J.
McCosker**

Wishing you a Merry Christmas and a Happy New Year, this year, implies more than it ever did before. With the season's greetings also go my deep and sincere thanks for the splendid work you have done in 1942. War, and the many problems of shortages and priorities that it causes, has made your task that much more difficult, yet our high standards and quality of service, our maintenance of equipment and transmitting facilities, have not been impaired because you have not been found wanting at your job.

More than ever, radio will be called upon to play an increasingly important role in the hard year of war that lies ahead. You engineers have a vital part to play in helping radio fulfill its wartime destiny. I know you will not fail.

Alfred J. McCosker,
Pres. WOR

Merry Christmas



GARRY MOORE
Sustaining-Type M. C.



MARIE GREEN
Soprana-Type Singer



HOWARD PETRIC
Pear-Shaped-Type Announcer



BRAD REYNOLDS
Silver-Tenor-Type Singer



MERRY-MEN
Male-Type Quartette



IRVING MILLER
Paid-Up-Type Orchestra Leader



“E
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Producer: BOB LABOUR

Engineer: BERT WOOD

LEIGHTON BLOOD — Publicity

*A Message from
WOR's Chief Engineer*

J. R. POPPELE

The President of the United States has suggested that New Year's Day should be a day of prayer. To this prayer for speedy victory I add a prayer of thanks that we of radio were ready for the trial of war.

Even now many of our boys are serving on battle fronts all over the world, filling difficult jobs with no loss of valuable time or effort. And those who had to



remain at home continue radio's vital service to the public even though fewer of us carry twice the former load.

That should be our reason for celebration—and that is why I wish all of you, here and abroad, a Merry Christmas and a Happy New Year, not only because it is the customary thing to do, but because you have earned it.

J. R. Poppele
Chief Engineer WOR



Season's Greetings and Best Wishes

FROM

FRANK MUNN



Gale, Inc.



C. W. PHELAN
Treasurer



F. R. ROJAS
Co-ordinator



H. C. HILLER
Trustee



JAMES H. BROWN
Director Sales and Promotion



DAVE MOLONEY
Ass't Treasurer



ED. STOLZENBERGER
Managing Editor



V. J. DUKE
Trustee



JOE CONN
Staff Photographer

Holiday Greetings

from the Staff of

The Broadcast Engineers' Journal



G. E. STEWART
Trustee

TED KRUSE
Circulation Manager



TOM GOOTE
Staff Writer — on leave



ED. MacCORNACK
Cartoonist



BERT PRUITT
Staff Writer





Season's Greetings

Bing

Merry Christmas

JOHN SCOTT TROTTER

*Kraft
Music
Hall*





Greetings from

VICTOR BORGE

"Thanks for Moving the Mikes!"

NBC Hollywood Press Dept.

HAL BOCK, Mgr.

CAROL DAVIS

JOE ALVIN

HOMER CANFIELD

BERTIE NICHOLS

LESLIE RADDATZ



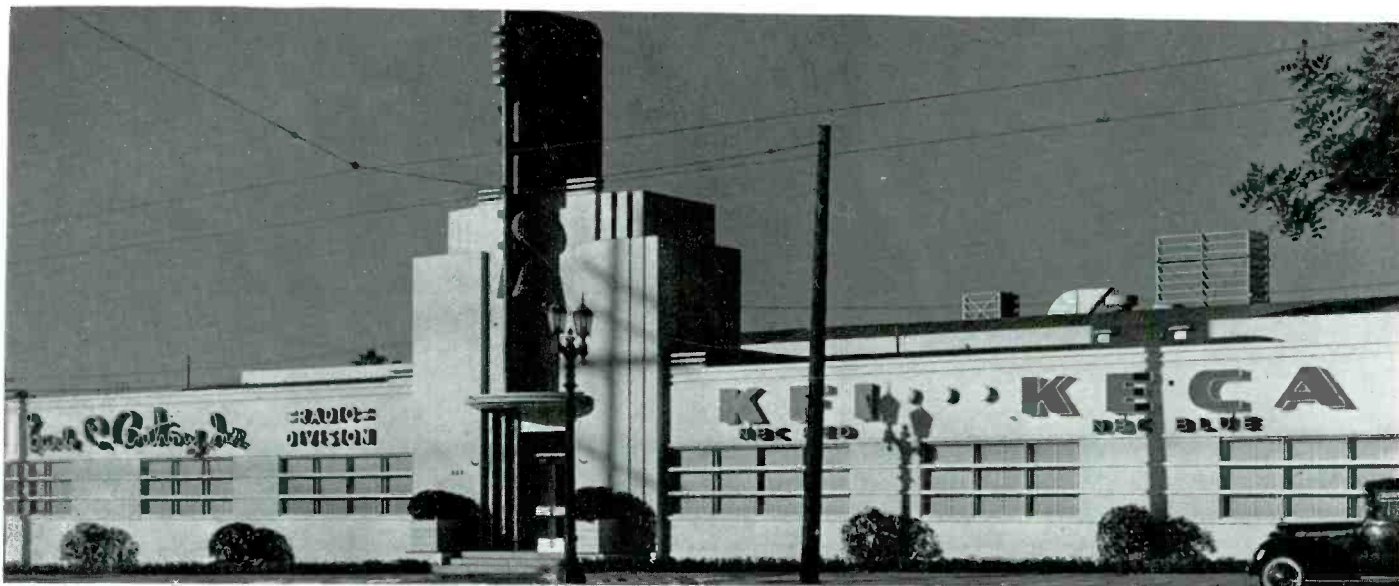
Microphonically Yours

RUDY VALLEE

Season's Greetings



TRUMAN BRADLEY



Los Angeles News

By H. M. McDonald

HONOR ROLL

KFI-KECA Engineers now serving in the Armed Forces:

- Lieut. Commander R. B. Walling, U. S. A.
- Major B. T. Cole, U. S. A.
- Lieut. Glen Litten, U. S. N.
- Pvt. A. E. Laurent, U. S. A.
- Lieut. (jg) L. E. Fritzinger, U. S. N.
- Pvt. J. G. Wright, U. S. A.

NEWs of the sinking of five of our transports while landing troops in North Africa brought a flood of reminiscences to former ship operators lately with NBC. The two largest vessels were 12,500 ton liners, the former President Pierce and President Cleveland. Dave Kennedy of KFI-KECA recalls when they were constructed by the U. S. Shipping Board shortly after the last war, merchant ships so designed that they could be quickly converted into transports. They were christened the Hawkeye State and Golden State. Kennedy was chief radio officer on both ships in the early '20s, sailing from New York to California, Hawaii, the Orient, Philippines, West Indies-Caribbean cruises, etc. Ernie Wilmshurst of KFI-KECA, Mort Smith and Ray Ferguson of NBC, were on the Pres. Pierce in the '20s. Ray Farrell, Al Lucey, Al Hooy, and many other outstanding ship and coast-station operators sailed on those 535s at one time or another.

Carl Estep, former KFI-KECA Engineer, is now instructing Signal Corps classes at Pasadena Junior College. The number of students is so great that it is necessary to use the laboratory around the clock and Carl teaches from 10:30 p.m. to 6:00 a.m. It's a civilian job and pays considerably more than the average salary of broadcast engineers. He whipped the transportation problem by moving to Pasadena.

Jim Wright finished the Signal Corps Reserve special courses at San Mateo and Sacramento and has reported to the regular army at Monterey for active duty.

John R. Schick resigned his position at KFI transmitter to accept one with the F. C. C. here. Altho no more lucra-

tive the new job offers better opportunities and more post-war security. He was with RCA Communications for twelve years before coming to KFI a few months ago and has patented many radio devices. He recently declined offers of positions in Eastern labs preferring to stay close to his home in Santa Ana. We wish him lots of good luck.

E. E. Griffin has joined the KFI transmitter staff. He has been in radio since 1915, served two hitches in the Navy, five years with Federal Telegraph, mostly at Palo Alto (remember Kolster compasses and receivers?), operated broadcast stations KFWC at Pomona and KFXM at San Bernardino, designed and manufactured microphones (Universal) and recording equipment for ten years, and most recently was a laboratory engineer for a copper company.

Ray Moore and "Pop" Everett exchanged presents with the Signal Corps today and each got just what he wanted, the Army a miscellaneous lot of meters and other ham parts, Ray and Pop real folding money. Each party thinks the other's Santa Claus and all very happy.

Gaylord E. Durham and Claud F. Hunt, Engineers from San Diego's most popular, and all-NABET, station KFSD, dropped in on us recently while on short pre-rationing trips. They report that everything is booming down there and the housing situation extremely acute.

Another recent visitor was Ernie Roberts, well-known former Los Angeles Engineer and manufacturers representative, now radio superintendent for the RAF with headquarters in Eastern Canada. He is the only American holding an executive position in the radio division of the RAF and has about 100 men under him. Previously he flew both Trans-Pacific and Trans-Atlantic for many months but now makes only periodic survey trips across the Atlantic.

Looks like a banking house when the War Savings Bonds are distributed fortnightly at KFI-KECA. In addition to their regular 10%ers many get an extra bond every other time. Hollywood Chapter of NABET has a substantial portion of their surplus funds in the Series F bonds.



Merry Christmas

from

RED SKELTON



Merry Xmas

from

OZZIE NELSON

and

HARRIET HILLIARD

A Special Word of Appreciation to ART BREARLEY



Merry Christmas

To the Backbone of the Radio Industry

THE ENGINEERS

CLIFF ARQUETTE

PAUL CARSON

Organ

One Man's Family — NBC

Irene Rich Show — CBS

Bridge to Dreamland — Blue

DONNA and the DON JUANS

GLORIA, CHANDLER, DONNA WOOD

and

CHARLIE GOODMAN

Wish You

A Merry Christmas

Featured With Horace Heidt



Merry Christmas

To the Swell Guys Who Make Me
Sound Funnier Than I am

BILL THOMPSON

Season's Greetings

GINNY SIMS

Johnny Presents

Phillip Morris

Season's Greetings

to the

Broadcast Engineers

from

RADIO TELEVISION SUPPLY CO., INC.

1701 South Grand Street

Los Angeles

Merry Christmas

Radio Specialties Company

Phoenix Los Angeles Hollywood

Season's Greetings

FROM

"THE GREAT GILDERSLEEVE"



"GILDERSLEEVE"

Hal Peary

"JUDGE HOOKER"

Earl Ross

"LEROY"

Walter Tetley

"MARJORY"

Lurene Tuttle

"BIRDIE"

Lillian Randolph

"LEILA"

Shirley Mitchell

"PEAVY"

Dick LeGrand

"THE ONE MAN CROWD"

Mel Blanc

WRITERS

John Whedon and Sam Moore

Original Music Conducted and Composed
by BILLY MILLS

Produced by CECIL UNDERWOOD

Sound, FRANK PITTMAN

Engineer—R. J. REID



Season's Greetings

Hollywood Chapter

NABET

Section

KFI - KECA

Section

KFSD

Section

NBC - BLUE



Thanks to you all and
Christmas Greetings

from

FREDDY MARTIN

Christmas Greetings

from

STEVE MERRILL

FEATURED TENOR WITH HORACE HEIDT'S ORCHESTRA

EXTENDING

Season's Greetings
to NBC

AND ALL OUR FRIENDS IN THE ARMED FORCES

From Jack Scurlock's

Radio City Barber Shop
SUNSET AND VINE

Greetings
TO ENGINEERS



"Skitch" Henderson

CONDUCTOR - PIANIST — HOLLYWOOD



Merry Christmas

ENGINEERS

Thanks for the Swell Job

GORDON JENKINS

MUSICAL DIRECTOR

"DINAH SHORE" "MAYOR OF THE TOWN"
"EYES ALOFT" "TO THE PRESIDENT"



On the Level

Merry Xmas

Arch Oboler



Season's Greetings and Best Wishes

CHARLES DANT

Musical Director

NBC Hollywood



Season's Greetings

to the

Broadcast Engineers

from

Radio Products Sales Company

(Who Are Still Serving the Broadcasters)

238 West 15th Street, Los Angeles

PRospect 2488

Best o' Luck!



ART BAKER



"And a very, very, good morning"

SAM HAYES

speaking with

A Merry,

Merry Christmas

to

ENGINEERS

Under exclusive contract to
Sperry Flour Company
(General Mills Inc.)

Merry Christmas

from

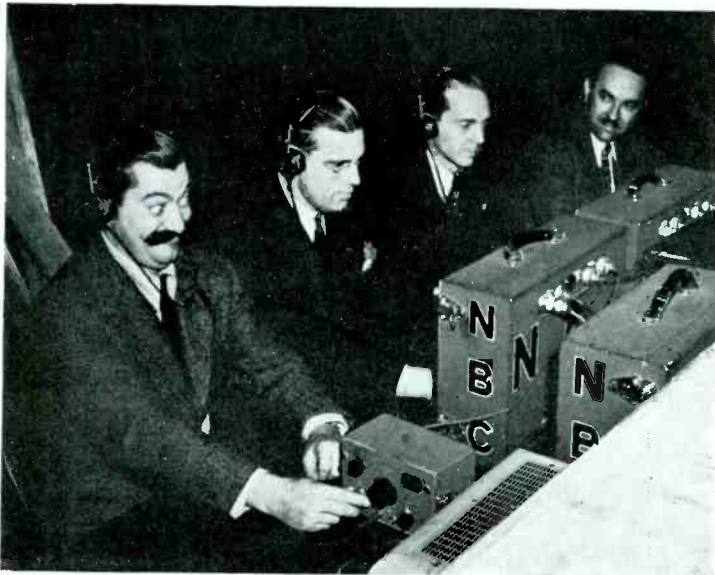


Cast and Author



ONE MAN'S FAMILY

I'll Show That
Orson Welles!



AAF Technical Training Command Photo

**Jerry
Colonna**

Season's Greetings



E. Broox Randall & Sons, Inc.

INSURANCE

For Every Purpose

5901 Sunset Boulevard
Hollywood, California

*Merry Christmas,
Fellows!*

WALLY MAHER

BEST ALWAYS

and Thanks!

HANK WEAVER

BLUE NETWORK

The Sport of Kings, or How to Get Out of the Barrel

With Mayor LaGuardia cracking down on illegal book-makers, and gamblers of all types, many people have evinced interest in the horse-race betting and the mechanics of making a fortune via the legal pari-mutual machines at the tracks.

This is done by a very simple process, called "progressive betting." You start off with a \$2.00 bet or larger if you wish to achieve results in a hurry, and as each horse loses you increase the bet either arithmetically or geometrically. The latter method is preferred by those that are in a real hurry. It is approved, and has been tested time and again. The selection of the winning horse in any race is unimportant when this "system" is used. You may follow a paid expert, commonly called handicapper or "taut" or you may decide to stick to any number assigned to the competing horses. The number "one" is preferred because this horse runs nearest the rail or inside of the track and if he runs straight will cover less ground than the outside horses. Thus he will not be as tired as the others. This appeals to the humane instincts in a true horse-lover.

Having selected number one, and having lost the first race, we bet \$4.00 on the number one horse in the second race. After this loss, we bet \$8.00 in the third race. It is of course obvious that eventually a number one horse will win. If the number of races in one day is seven, and you eventual-

ly get a winner in the third race of the third day after starting operations, you will be betting \$121,072. When it wins the feeling will be tremendous, and you will say like many another before you, "How long has this been going on?"

The above is so simple that many bettors lose interest after following a progression and turn to more complicated forms of betting. These are called *daily double*, *if bets*, *reverse back to backs*, and *parlays*, just to mention a few. These latter are more ingenious and tax the bettors ability to cope with various situations. These will be described in a later issue. *Note:* It is recommended that the above progressive system be tried out in theory first, in order to get the feel of it and also to ascertain whether you can stand losing a few days of reverses.

F. C. C. Report on A. T. & T. Long Lines Earnings

ON THE basis of the Company's own reported figures indicating that the Long Lines Department of the American Telephone and Telegraph Company is earning on net book investment at the rate of 24.37% annually before Federal income taxes, and at the rate of 14.92% after the new 1942 Federal normal taxes and surtaxes, the Federal Communications Commission ordered today that the Company show cause why its toll rates and other charges should not be substantially reduced.

Company figures as to net operating income of the Long Lines Department for the nine months ended September 30, 1942, on an annual basis, indicate excess earnings ranging from \$47,000,000 to \$62,000,000, depending on what rate of return and what Federal income tax rates are allowable. There is indication, it is pointed out in the order, that current earnings will increase, or in any event, remain high.

In commenting on the order Chairman James Lawrence Fly said: "These excess earnings bear heavily at this time both on the cost of the war and on the cost of living. The Government must make every effort to keep down its bill for the war and to help the consumer keep down his expenses. Every action that reduces either avenue of expense contributes to the prevention of inflation."

The American Telephone and Telegraph Company is required to answer the Commission's Order on or before December 1, 1942, and to appear at a hearing at the Offices of the Commission in Washington, D. C., on December 16, 1942. At this hearing the testimony will cover not only rates but all charges, classifications, practices and regulations in connection with the communication service rendered by the Long Lines Department . . .



Lt. Thomas E. Gootee, somewhere in England with the RAF, sends his regards to all our readers, and regrets that his customary Doctor Killfidget Christmas story must of necessity be passed for this year. We sincerely hope that Lt. Gootee will be back with us for our next Yearbook issue. — Ed. S.

Greetings...

SAN FRANCISCO CHAPTER

ANDRESEN

ASHBY

BALL

BARRON

BERG

BLANCHETT

BLANK

BREWER

BUTLER

CASSIDY

DEWING

DINGLE

DUNNIGAN

DUNTON

ELDREDGE

FRITCH

HALL

IRWIN

JEFFERSON

KELLOGG

KILGORE

KOLM

AND

WAUCHOPE

WATSON

SUMMERS

STUBBE

STEVENS

SHOVER

SANDERS

RYAN

ROTHERY

PUCCETTI

POAGE

PLATT

PARKHURST

OLIVER

O'NEIL

McELWAIN

McDONNELL

McAULAY

MITCHELL

MELNICO

MANNING

KRAMER

OUR

ABSENT

MEMBERS

BARNES

FULLAWAY, USN

MORRISON

CASE

FISHER

PARKS, USA

WILLIAMS

CALLAHAN, USN

JACOBS

SUGG., USN



KGO celebrates its first Christmas before it celebrates its first birthday. For **KGO** has operated under its own independent management only since February, 1942.

As we look back on these eleven months we see much for which we are thankful and appreciative. For the fine, aggressive morale of our staff . . . for the patronage of scores of new sponsors . . . for helpful cooperation throughout the radio industry.

Our whole staff extends its sincere wishes for the Christmas Season.

 **K G O** 

“CLANCY CALLING!”

And Wishing You All

Merry Christmas



PACIFIC COAST BLUE

Tuesday Through Friday

2:00 to 2:30 P. M. - P. W. T.



SONIA SHAW

CLANCY HAYES

PHIL BOVERO



Shenoravor Dzenount Yev Pari Gaghant
Which Means in Armenian

Merry Christmas and Happy New Year
TO ALL THE ENGINEERS

“GEORGE MARDIKIAN”

Of Omar Khayyam's



Season's Greetings

from

TOM GERUN

FRANK MARTINELLI

BAL TABARIN

(Columbus at Chestnut)

SAN FRANCISCO

"It's Easy To Do Business with the Blue"

THAT slogan, adopted when the Blue Network was set up less than a year ago, has been the motto governing every action taken by W. B. Ryan, Manager, and the entire staff of KGO, the Blue outlet for San Francisco and the Bay Area.

That attitude, combined with the aggressive young staff, has brought KGO to the front rank of San Francisco's stations. From being a subsidiary NBC station KGO has come to be the Bay Area's "most talked about station", presenting better sustaining and commercial programs, and with large and impressive increases in Hooper ratings. Today it is a strong third among the stations in San Francisco, and is rapidly overhauling the leaders.



W. B. RYAN
Manager, KGO

"Bond Night on the Blue"—While the Blue Network was selling approximately \$14,500,000 in War Bonds as a result of an entire Saturday night devoted to a concerted sales drive, KGO rang up sales of \$215,000 by itself.

"KGO Bond Wagon"—Setting up a truck with entertainment and orchestra, KGO has made nine district appearances, resulting in the sale of approximately \$560,000 in War Bonds and Stamps.

"KGO OPERA SERIES"—To help the San Francisco Opera Association sell tickets for its twentieth season, KGO staged a series of broadcasts of excerpts from operas. Audiences invited were too great for studio capacity, and the series first ran two shows nightly, then the season was extended. Over 10,000 people attended, many thousands more listened each week.

"VOC-A-NEWS — A Chronicle — KGO feature —" Together with the San Francisco CHRONICLE, KGO developed and now presents to San Franciscans regular "Voc-A-News" features, which combine the written, pictured, and spoken word to give listeners and readers a complete knowledge of news features. Included among the many features presented were an unusual broadcast of election night results, San Francisco's "Salute to Service Men" which was short waved around the world, a British Commando, and many others.

Department heads assisting W. B. "Bill" Ryan at KGO are Ray Rhodes, Sales Manager; Gilbert Paltridge, Promotion and Publicity Manager; T. B. Palmer, Engineer-In-Charge; Robert Dwan, Program Manager, and Bob Wesson, Publicity Director.

JOHN W. ELWOOD

Manager, KPO



KPO's Part in the War

By John W. Elwood, Manager KPO

IF THIS were peace-time this year's end might be an occasion for some not too quiet self-congratulation on the part of the KPO family.

We start 1943 in the brand-new studios into which we moved just six months ago. We're proud of their compact, functional beauty and operational perfection; proud of Radio City, the glass-bricked, ultra-modern building which already has become one of San Francisco's showplaces.

We're justifiably proud, too, of the increase in KPO's business during the last half year, when national, regional and spot advertising took a gratifying upward leap.

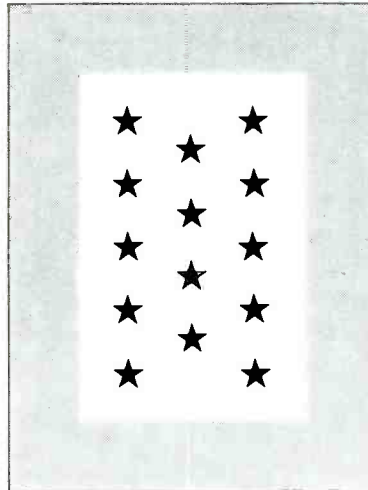
But there's a war going on. Our first job at KPO is to turn every energy toward winning that war, winning it as quickly as possible, whatever the cost in work and self-sacrifice. That is why we feel that KPO's real achievement in 1942 and its hope for 1943, is the speed with which a great radio station has been transformed almost overnight from a great peace-time enterprise into a well-gear'd war machine.

Ever since the night of December 7, 1941, KPO has maintained a 24 hour service on the air. Its technical and program facilities are at the call of the government and the armed forces at all hours of day and night; schedules have become flexible instruments of public service to meet any and all needs of the times.

The KPO bond campaign, inaugurated shortly after the removal to the new building has been so successful that it will be continued indefinitely. Ship-launchings, interviews with war heroes and war workers; War Chest drives and a myriad varied civic and community efforts for morale-building, pour out of the KPO transmitter along with the vital news our wires bring from all parts of the war-torn world.

Like every other business today, KPO sees a continuous stream of staff changes taking place as more and more men are called to the service. And now the WAVES and the WAACS are calling our feminine employees away, too. We're proud of all the KPO men and women who have entered the Army and the Navy, and we're proud of the way a constantly renewed and reorganized staff takes hold and keeps things moving.

Winning this war not in ten years or in five years but quickly, so that fewer American lives need be spent, so that more American boys may come back alive and unmaimed, should be every American's plan for 1943. It means longer, harder hours, more war-bonds, less time and money for ourselves. But I think I can speak for every member of the KPO family when I say that we are going to try to make 1943 the year in which this war will be won.



Unknown stars of KPO...

Richard Bertrandias

Curtis D. Peck

Robert J. Bishopp

James W. Pool

Edward C. Callahan

Proctor A. Sugg

Frank L. Fullaway

Arthur M. Holter

Joseph Gillespie

Dorothy M. McGaha

Robinson A. Gray

Juan J. Trasvina

King Harris

Beth M. Gardner

We pay our tribute to these members of the armed forces who were our associates and are our friends.

KPO

SAN FRANCISCO

NBC

"Yuletide Greetings"

"ALBERT WHITE"

KGO - S.F. Symphony

Young Artist Series

The Great Melody

Best Wishes

FROM

"GILBERT WALES"

NEWS COMMENTATOR

Sponsored on KPO by Vicks Chemical Co.



*Holiday
Greetings*

from

GLENN HURLBURT

KGO

Merry Christmas

TO THE ENGINEERS from

The S.F. NBC Announcing Staff

ARCHIE PRESBY
EDDY KING
FLOYD FARR
JOHN GROVER

DOUGLAS GOURLAY
HAL WOLF
BUDD HEYDE
BILL RODDY

*Thanks
A Million*

To the Boys
on the Dials

"Bill Baldwin"

SPECIAL EVENTS
DIRECTOR

KGO — BLUE
SAN FRANCISCO



Season's Best Kilocycles

"HAL BURDICK"

"Dr. Kate"

"Night Editor"

Season's Greetings BOYS

"LU TOBIN"

"Alias John Freedom"
"Charlie Harper"
"Hawthorne House"
"Whodunit"

Holiday Greetings to the Engineers

THE S. F. NBC PRODUCERS

Bob Seal
Leonard B. Gross
Sam Dickson

John Steadman
Don Thompson
Ray Buffam

Holiday Greetings

from

"JANE LEE"

"The Woman's Magazine of the Air"

NBC

Merry Christmas

TO THE ENGINEERS

"PAUL WALTI"

(Soloist)

"THE GREAT MELODY"

"LITTLE CONCERT"

"MINSTREL MELODIES"

Season's Greetings

from

"Charles M. Runyan"

(ORGANIST)

"DR. KATE—HAWTHORNE HOUSE"

Staff Organist

BLUE NETWORK COMPANY

Holiday Greetings

TO THE ENGINEERS

"RAY HARRINGTON"

"YOUR NUMBER PLEASE"

Coast to Coast

Merry Xmas, Boys

from

"JACK MOYLES"

"JOHN FREEDOM"

"HAWTHORNE HOUSE"

"WHODUNIT"

Best Wishes for 1943

"DEANE DICKASON"

War News Analyst

Blue Network

San Francisco

Hello, There — Gang

Merry Xmas and Happy New Year

TO A GREAT BUNCH OF GUYS

"ART LINKLETTER"

"Man - About - San Francisco - Radio"

FLASH!

Merry Xmas, Guys!

UNFLASH

From the San Francisco News Room

DON MARTIN

MARY SCRIBNER

LEE WOOD

HAYES HUNTER

Holiday Greetings

"Monte Mohn"

Now Writing and Producing for
The Blue Network

Also, First Class Acting on the Side

"DR. KATE"

"HAWTHORNE HOUSE"

"UNCLE WALTERS DOG HOUSE"

Season's Greetings

TO THE ENGINEERS

The S. F. Blue Network Producers

BOB DWAN

HELEN MORGAN

STUART HANNON

DICK TATE

LARRY ROBERTSON

WATSON HUMPHREY

Season's Greetings

To the Engineers

The S. F. Blue Network Announcers

Berton Bennett

Herb Haley

Hugh Turner

Fred Johnstone

Anthony Morse

Marvin Goodson Graham

**For Myself
and on Behalf of
My Sponsor**

(And I wish I could be half of my sponsor)

Merry Christmas

Jack Kirkwood



INSPECTOR CASE, OF "WHODUNIT"

San Francisco News By F. L. Barron

IN AS much as Mark W. Dunnigan has been telling this one on himself, I guess it is OK to pass along this chuckle. It seems that one of the boys who temporarily left the local office for special work with the Government had returned for a brief furlough and was amusing the boys in the control room showing them some unusual foreign coins. He even gave away a few to be used as pocket pieces. Mark picked out a nice big boiler plate of copper for himself and was much elated with his prize. Going home that night he suddenly decided that he needed a haircut and taking inventory of his available pocket change by merely feeling the coins, mentally gave a much inflated value to his actual total. The haircut completed, Mark nonchalantly reached for the payoff, and consternation reigned supreme as he dropped a large copper coin into the outstretched hand of the barber. Dunnigan admits that there was some tall explanations to be made and offered to leave his wrist watch as collateral, but an understanding barber made other arrangements, whereupon Mark departed feeling inches high. It can happen to anyone.

Clarence T. Stevens, SE, has been on a trek up through the Northwest for the past month, and still going. It seems that Stevie was totally unaware of the impending junket and was quite swept off his feet when George McElwain, Field Supvr., told him to run home and pack for an extended tour. The point behind this article is that we understand that Steve had never before been outside of the State of California and always wondered when he would ever get a chance to do some traveling. He writes us that

he certainly is enjoying it, and many of the excellent pick-ups we hear from him proves that he has his heart in his work.

Hugh Abfalter, of the NBC Chicago studio engineering force was a recent visitor at the S. F. Master Control. Mr. Abfalter has recently entered the service and stopped while enroute to the tropics. Many of the boys from the other offices stop and visit while passing through, and they are always welcome. We wish we could tell more, but the full story on the NBC and BLUE contributions to the ranks will have to wait until after the affair is over.

There are quite a few new faces around the Studios and MCR lately, as we welcome some new men. Robert M. Ryan, formerly of KGW Portland, Oregon, for six months and before that was with KWIL at Albany, Ore.—Also, Harry Puccetti has moved from vacation relief at the KPO transmitter to studio work in the city. Harry formerly came from KLX in Oakland.—Frank Oliver, formerly one year with the Signal Corps civilian branch is also a late arrival. We understand Oliver has a great yen for, and lots of hard luck with his numerous alarm clocks—Two extra faces around the place but not exactly new are those of Robert Wood and Philip Ryder serving as apprentices and come to us through the page boy department. The boys like the work and are hard workers and are setting out to make their mark in Engineering.—Just phoned KPO transmitter and they report "all quiet" down there on the salt marsh. Those boys sure keep things going extremely smooth.—The carrier pigeon from KGO has not arrived yet!

WASHINGTON CHAPTER, NABET

Greetings from the Nation's Capitol



WRC

C. A. ALLEN
R. W. CHAPMAN
W. H. CHEW
N. J. CLOSE
W. K. ENGLISH
F. J. FUGAZZI
R. L. HAMILL
G. I. HENRY
E. W. MCGINLEY
P. F. MEYERS
S. E. NEWMAN

R. C. PERKINS
A. T. POWLEY
J. G. ROGERS
F. C. SNYDER
B. E. STAHL
R. L. TERRELL
H. B. THOMASSON
D. A. ULLMAN
G. B. WERST
H. W. YATES

WMAL

R. E. DALTON
H. A. WADSWORTH
J. J. NAGY
C. S. FISHER

WPTF

J. G. BEARD
F. T. COLVERT
W. DEAN
W. L. METCALFE
H. W. ROOD
C. H. SUGG
A. P. TRIPP
N. V. PIELER
H. F. WILLIAMS

CALLED TO THE COLORS:

C. M. CLARK, CRM, USN
W. L. GODWIN, LT., USNR
J. H. HOGAN, LT. (jg), USNR
D. O. HUNTER, N. D. R. C.
A. E. JOHNSON, LT., USNR

L. A. McCLELLAND, LT.,
USAAF
W. L. SIMMONS, LT., USNR
J. F. STETSON, LT. (jg) USNR
E. W. BURG, WO, USNR

A. R. MCGONEGAL, LT.,
USNR
S. LILES, CRM, USNR
R. D. ROYAL, USA

HONORARY MEMBERS:

D. H. COOPER

K. B. WILLIAMS

V. (PATTY) BIRGFELD OUR GIRL FRIDAY
AND ALL THE REST OF THE WEEK TOO

To The Men At The Dials . . .



NO ONE appreciates the importance of radio engineers more than we who entrust our voices to them every night. May I express my personal appreciation to the engineers I have had the pleasure of working with, and offer best wishes to the entire fraternity of control room men.

EARL GODWIN

ON THE AIR FOR FORD MOTOR COMPANY—"WATCH THE WORLD GO BY"—BLUE NETWORK NIGHTLY



*Here's a little Yuletide wish,
We hope you boys will grab it—
"A Merry Christmas, a big New Year
To the membership of NABET."*

- KEN BANGHART
- STEVE DOUGLAS
- DON FISCHER
- JACK HENRY
- KEN LUDLAM
- BILL RIPPE
- HOLLY WRIGHT

NBC — WASHINGTON — WRC
ANNOUNCERS

To Our Engineers

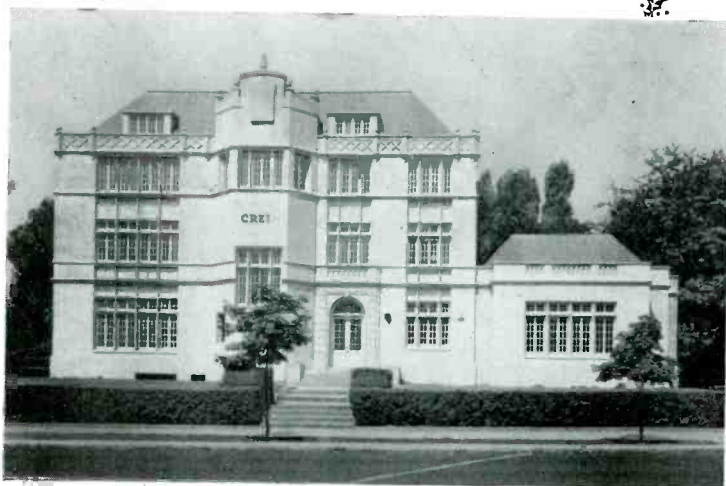
You can ration this nation on coffee and tires;
You can cut off our fuel, and bank all our fires.
We'll sit at the table and eat our "dislikes",
And warm cold fingers over "hot mikes"!

But there's one damn thing in the whole of creation
That the O.P.A. can't possibly ration;
And that's our thanks for the year we've gone through—
Christmas Greetings—and Victorious New Year to YOU!

Announcers, WMAL, Washington

RAYMOND MICHAEL	KEITH JAMESON	TOM DOLAN
LEE DAYTON	JAMES GIBBONS	BILL JENKINS

Once again...



Capitol Radio Engineering Institute

*Home Study Courses in Practical Radio
Engineering for Professional Self-Improvement*

3224 Sixteenth Street, N. W., Washington, D. C.

Christmas Greetings from all of us — to all of you

E. H. RIETZKE, President

MARK H. BISER, Vice-President

R. E. Altmare	O. D. Kihchel
W. S. Bell	J. F. Kozel
T. C. Blow	A. W. Langley
Ewart Bond	W. S. Latham
W. Chase	R. M. Maiden
S. Friedlander	E. S. Maloney
E. M. Gales	P. N. Partridge
R. C. Gipe	H. J. Peake
R. E. Grimm	R. B. Potter
E. H. Guilford	J. D. Rosenberg
E. N. Hauber	E. W. Thomas
R. T. Hemmes	W. H. Von Alven
E. Iannelli	J. L. Walcutt
J. F. Jensen	R. A. Williams
G. S. Kan	J. C. Yeager

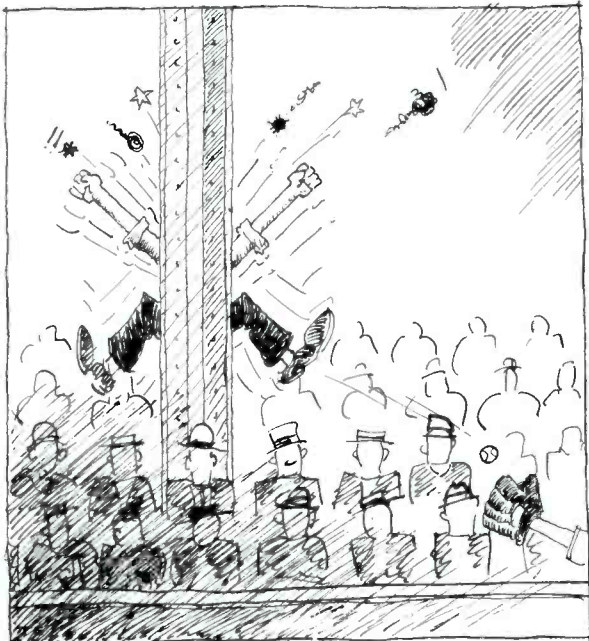
Raymond Gram Swing



In behalf of students and graduates of the National Radio Institute, and the N. R. I. Staff, I extend most cordial Season's Greetings to the N. A. B. E. T.

J. E. Smith
President

NATIONAL RADIO INSTITUTE, WASHINGTON, D. C.



WHO PLAYED?

If I should go to see a show,
Or hear a person speak;
I'd find myself behind a hat,
And have to stretch and peek.

If forty thousand heads were there,
And just a single hat;
I'd find myself behind that lid,
E're you could utter, "Scat!"

I've fought the fancy pheasant tails,
And cubicles of felt;
I've stood and sat and leaned and swayed,
And ducked and stretched and knelt.

But yesterday there was no hat
On any person's head;
I went to see a baseball game,
And saw a post instead!

— Bert Pruitt.

To the Engineers:

*"Thanks - very much!
from
Bankhage"*



THE CLEVELAND CHAPTER

WISHES THE READERS OF THE JOURNAL

ALL THE BEST

Cleveland News

By Bert Pruitt

THE Christmas spirit reigns again! Theory books have mysteriously disappeared. Discussions on frequency modulation give way to arguments regarding the merits of the spruce vs. pine. Office girls have hopes of getting caught under the mistletoe. . . . Santa Claus is coming to town!

Frank Whittam, SE (Chapter Sec. Treas.), coming to work with enough Christmas packages to supply an army. "Who says there isn't a Santa Claus?" Says Frank, gazing sadly into a badly depleted pocketbook.

Harry Caskey, SE, offering to mail some letters for his daughters. Letters addressed to that famous old fellow with the flowing white beard and pawing reindeers. "I'd better double check all my pockets before I go home," Harry says. "Want to make certain they don't find an unmailed letter in my pocket!"

Jimmy Hackett, SE, spending all of his spare time working in his basement. Jimmy has an elaborate wood cutting set, and it seems that he is working in cahoots with St. Nicholas this year. "I can't turn out a spruce tree, but I can make everything that goes on it," James says with a knowing wink.

S. E. Leonard, (Eng. in Chg.), planning a lot of fun for his two daughters.

John Dishrow, OS, Alvin McMahon, CS, John Hyatt, SE, all listening to their children proudly telling them what they are expecting on the Xmas tree.

I have heard a few statements myself. I'm pretty much on the spot though. My daughter has learned a thing or two besides elementary arithmetic and grammar since she started to school. At one time I could say. . . . "There, there dear. . . . Old Santa probably came down the Milky Way so fast your expensive present flew out the back end of the sleigh when Santa rounded a curve and hit a star! Or I might have explained that the Postmen were out on a strike in Santa Claus Land. But those tales are whoppers over the dam of Time. If she looks on the tree this year and finds something missing she is likely to look me in the eye and say, "Why Bert, you old tightwad. . . . I'm reshamed of you!"

And now let's hop aboard a Christmas Jingle, then jangle out to Brecksville where our transmitter men are frantically preparing for Xmas.

Al Stewart is all set to make some movies this Christmas morning. Understand Al has some fine pictures of past Christmas scenes.

Christmas day is always a day that is long remembered at Hugh Walker's house. Hugh says he's glad to see St. Nick arrive, but sorry to see the greenbacks depart. Me too, Hughie.

Art Butler (Assistant Stn. Eng.) is all set for a big day. "The boys are in the know, so excuses won't do," Art says.

And now I must tell you about Art and the past duck season. You have heard of fishermen who put rocking chairs in their boats when they go fishing. . . . Well, Art goes them one better. . . . He built himself a portable house that is better known at the Four Wheel Blind. It's heated with a small coal stove and has windows that open when you turn a knob. . . . Ingenious use of weights made this

possible. Well, when the duck season opened, Art hooked his portable blind onto his car and away they went to his favorite duck pond. When he arrived at the pond he merely stepped from a heated car to the heated blind. When a duck came in to land Art turned a knob. . . . the window flew open and he let go with a 12 gauge shot gun loaded with number 5 shot. At the crack of the gun his retriever set sail for the pond, grabbed the duck, then returned it to Art.

After a successful day in the blind Art returned home. . . . His wife cleaned and roasted the day's kill. . . . That, ladies and gentlemen, is what we call using the noggin for something other than a rafter duster.

C. C. Russell (Stn. Eng.) planning to spend Christmas day at home with his family. Mr. Russell's daughter will be home from college during the holidays.

John Cheeks isn't giving out any statements regarding his plans for Christmas.

Fred Everett's father is a lawyer, so I'll have to watch my step when quoting Fred. He knows all the answers before you think of the questions. I rather imagine his two children know a thing or two regarding Christmas law, though.

Jerry Jerome intends to hang his own socks over the fireplace this year.

And now back aboard our jingle to the studios. . . .

J. J. Francis, CS, asking Santa to replace the cabin cruiser that went over a dam in the Ohio River last fall.

Barney Pruitt, CS, and Tommy Cox, SE, say they'll hang me if I don't quit pestering them for Christmas communiques.

They say Charley Ames, SE, is looking for someone to work his watch Christmas day, so I think it best not to call on him for a statement.

Marion Hercec (Eng. Secretary) says she knows Santa personally so we naturally assume that Santa will fill her stockings, and in so doing, fulfill the wishes of our likeable Marion.

In closing I would like to wish Editor Stolzenberger, the members of the Journal staff, and the readers of The Broadcast Engineer's Journal a Merry Christmas and a Happy New Year.

Greetings from Lee Gordon

Director "Do You Remember" Program

Morning Tune Recaller of the Past Five Years or So

SEASON'S GREETINGS

G. H. Anderson
 V. E. Andrews
 H. G. Austin
 A. F. Blake
 J. E. Carpenter
 G. S. Dutton
 R. C. Fell
 *G. R. Glasscock
 J. M. Hall
 W. C. Jones
 *A. C. McClellan



"Nature Sketches" . . . two miles above sea level on Trail Ridge Road . . . ND20 and associated equipment

W. L. Morrissey
 W. S. Neal, Jr.
 F. A. Nelson
 W. C. Nesbitt
 C. A. Peregrine
 G. G. Pogue
 K. N. Raymond
 J. H. Rohrer
 C. W. Schuknecht
 R. C. Thompson
 *(Men in Service)

N.A.B.E.T. . . . DENVER

RHAPSODY of the ROCKIES

from

OUT OF THE WEST

Milton Shrednik — KOA

"Music by Shrednik"



Season's Greetings

DIAL - MEN

from

Andrew Gainey

BARITONE

"Rhapsody of the Rockies"

CHRISTMAS GREETINGS



TO THESE

KOA-ites

NOW IN SERVICE

(Listed in order entered active service)

NAVY

*A. C. McCLELLAN
 *GLEN R. GLASSCOCK
 *J. A. SLUSSER
 STARR YELLAND
 E. A. SPROUL
 LLOYD E. YODER
 BERRY LONG, JR.
 A. T. GUNNING
 JAMES R. BENNETT

ARMY

ROBERT YOUNG
 GEORGE MATHEWS
 NORMAN SORENSON
 H. G. ROBERTS
 E. R. PEARSON
 STANLEY K. BROWN
 WALTER CASS
 WILLIS B. BALLANCE
 TOM MECHLING

SPECIAL SERVICES

TOR TORLAND — American Ambulance Corps in Africa
 ED. BRADY — U. S. Army Air Force
 BILL MICHELSEN — U. S. Merchant Marine
 JEANNE M. CARTER — WAAC
 BILL DAY — U. S. Army Air Force
 BILL PEREGRINE — Signal Corps

*Engineers

— FROM THE KOA STAFF "at home"

Denver News

By V. E. Andrews

DENVER? Oh yes, that's the place out in Colorado that does network switching; feeds Milt Shrednik to NBC; and does a lot of recording for Blue delays. The latter remark is justified by about two and a quarter hours of recording for the Blue each day. The transmitter gang is even busy since KOA was made a key station for the Seventh Service Command.

Do you remember the sail-boat Stan Neal and Aubrey Blake were building? Well, it was launched and approved by the gang. Stan and Louise (little woman) gave all skeptical visitors a ride around Sloans Lake. Misfortune hit the builders of the lighter-than-water craft when a cable supporting the mast broke to keep them from entering the Sloans Lake regatta. The broken mast was spliced, but installed about an hour too late to enter the race. Stan's brother made all the fittings for the boat which is second to none. Stan has so many boats—a sail-boat and a motor-boat—that he was prompted to buy a home in Bonnie Brae with a double garage so he can dry-dock his navy. The moving bug also hit Joe Rohrer who bought a home in East Denver before gas rationing.

The transmitter gang makes one report about their so called hunters. Seems as though Harold Austin went into first place when he bagged an elk. In second place is pheasant hunter Carl Nesbitt. And last (as usual) is George Anderson with his patented method of killing his pheasant.

The night crew at the transmitter is threatening to join AFRA in competition with Davis award winner Gil Verba. Why not when they have a chance to say "this is Denver, K-O-A" during the grave yard shift?

We seem to be out in the country now so let's bring Gene Carpenter into the picture with his little farm. The engineering gang practically ate him out of chicken and home last summer. His wife, Max, should be tired of frying chicken by now! Gene still has about eighty laying hens (when Walt Morrissey doesn't fly so low in his plane as to scare them out of eggs) and only needs one egg route—to studio "D". The latest edition is a chicken house full of pigs—well, five anyway.

Perry Peregrine is getting as much skiing in as possible before he dwindles down to an "A" ration card. Incidentally, he is again proving his mastery of photography with his mountain and cloud pictures.

Circuit breaker Anderson wants suggestions to enable him to discover breakers that drop out on him—is his face red!

Aubrey (ET) Blake is spending quite a few of his days off at Boulder. His grandparents live there but that isn't the only reason! SHE attends the University of Colorado. Aubrey has taken some 8 mm. kodachrome that can't be duplicated.

I'm sure anyone going through Denver is welcome to see some real movies of the Colorado Rockies.

We are holding our Nabet meetings at an old cafe built in 1880—the Navarre. Our chairman, Russ Thompson, gave his full report of the 1942 convention. What a RECORDING!

Milt Hall is spending his week's vacation installing storm windows in his home. Guess he'll have to return to work to rest up—like the rest of us.

The latest edition to the engineering staff is Kenny Raymond who replaces "Pinky" Kahle. "Pinky" leaves the first of December for Washington to work for the Army-Navy Communications Production Expediting agency. Howard Johnson left KOA to work for the O.W.I. here in town.

Neal is having a lot of fun with his interceptor alarm circuit. A lot of circuits were used before the final gadget was put into operation. P. S.—Ask Stan how he likes the 885 tube, then duck!

Three visitors dropped in on us this month. Cliff Rothery stopped and picked up Russ on their way to the convention. Our old pal Jordan of N. Y. maintenance gave us an unexpected pleasure by stopping in the control room on a Saturday afternoon. And the greatest surprise was the Stolzenberger family (have you noticed how long the news is?).

Well, let's close this edition from Denver with a quotation from a former member Bill Kumpfer who says "to get along with the people in this old world, you must have a personality that is RESONANT with theirs, otherwise they will soon start to BEAT on you."

May it be a "White Christmas" gang, and a Merry Merry one to all from the Denver Chapter.

BUY WAR BONDS

RECORD CARTON

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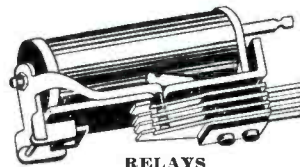


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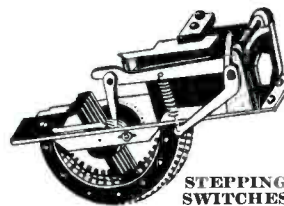
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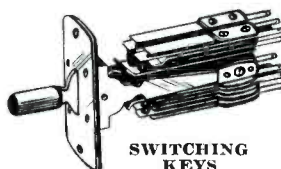
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F.C.C. Action on the War Emergency Radio Service

Report No. 48 — (RULES AND REGULATIONS)

The Commission en banc on November 6 modified its Rules Governing Stations in the War Emergency Radio Service (Part 15, Sections 15.2, 15.61, 15.62(a)(4), 15.64, 15.75, 15.82(d) and 15.83(b) to read as follows:

"Sec. 15.2 *Civilian defense stations*—The term "Civilian Defense Station" means a station operated by a municipal government for emergency communication relating directly to the activities of the United States Citizens' Defense Corps* or other equivalent officially recognized organization.

"Sec. 15.61 *Eligibility for station license*—Authorizations for civilian defense stations will be issued only to municipal governments, such as cities, towns, counties, etc.

"Sec. 15.62(a)(4) *Methods to be used in monitoring, supervising, and controlling the operation of all stations for which license is requested, including method of compliance with Restricted Order No. 2.*

"Sec. 15.64 *Communication with other stations*—Within the scope of service permitted under Sec. 15.63 and during tests and drills, civilian defense stations may be used to communicate with other stations in the war emergency radio service, with stations in the emergency radio service (police, forestry, special emergency, and fire stations), and with United States Government stations, in those cases which require cooperation or coordination of activities. Transmissions not directed to a specific authorized station are prohibited.

"Sec. 15.75 *Tests*—The licensees of civilian defense stations are permitted to make such tests as are necessary for the purpose of maintaining equipment, making adjustments to insure that the apparatus is in operating condition, training personnel, and perfecting methods of operating procedure, *Provided*, That such tests shall be conducted only during the following periods:

(a) Tests may be conducted by individual stations during the three months' period immediately following the date on which the respective station license was first granted, in accordance with the following schedule:

Time Zone	Eastern	Central	Mountain	Pacific
Wednesdays	10 p.m.-12 mid.	9-11 p.m.	8-10 p.m.	7-9 p.m.
Sundays	5-7 p.m.	4-6 p.m.	3-5 p.m.	2-4 p.m.

(b) Tests may be conducted by individual stations during any period of the respective station license, in accordance with the following schedule:

Time Zone	Eastern	Central	Mountain	Pacific
Sundays	5-7 p.m.	4-6 p.m.	3-5 p.m.	2-4 p.m.

All times given are local standard (war) time.

"Sec. 15.82(d) *Methods to be used in monitoring, supervising, and controlling the operation of all stations for which the license is requested, including method of compliance with Restricted Order No. 2.*

"Sec. 15.83(b) *State guard stations may be used to communicate with stations in the war emergency radio service, in the emergency radio services (police, forestry, special emergency, and marine fire stations), and with United States Government stations, in those cases which require cooperation or coordination of activities. Transmissions not directed to a specific authorized station are prohibited.*"

**The United States Citizens' Defense Corps is an organization of enrolled civilian volunteers established within the Office of Civilian Defense to implement the passive defense.*

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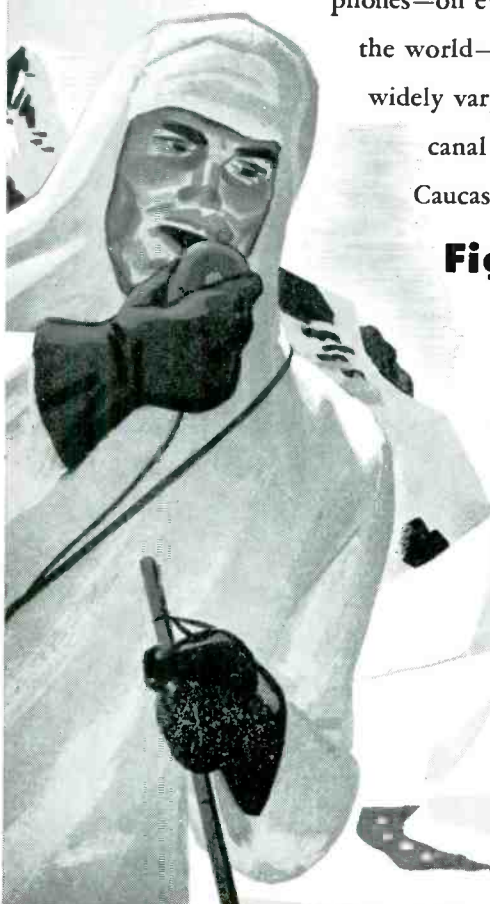
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Bibliography of Submarine Communication

By Ed. Stolzenberger

(Since the original publication of this bibliography in our July, 1942, issue, we have been swamped with requests from Government agencies and universities for additional copies. Our supply of July issues has been exhausted, and we are reprinting this bibliography by popular request.—Ed. S.)

THE present submarine warfare is a challenge to the ingenuity of every communications engineer in the country. This data is presented as a stimulus for original thought on the subject. Under-water communication has been carried out by sound or acoustic waves, both sonic and ultrasonic, and by electromagnetic waves of various frequencies. As is in general true in radio communication, minimum absorption occurs at the lowest frequencies and maximum directivity may be obtained at the shorter wavelengths, both for sonic and electric waves. Following the bibliography, a partial list of United States Patents relating to this subject is appended for further reference.

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(Continued on Page Fifty-nine)

TECHNICAL PRESS REVIEW



By Ed. Stolzenberger

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

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

Proceedings of the I.R.E.

for November, 1942

Proposed Standard Conventions for Expressing the Elastic and Piezoelectric Properties of Right and Left Quartz

By W. G. Cady and K. S. Van Dyke

Three sources of confusion in the literature on quartz crystals have recently been pointed out: the distinction between right and left quartz, the conventions respecting the positive directions of the crystal axes, and conventions respecting the signs of angles when the axial system is rotated. After further consideration of this subject in the present paper, it is recommended that writers employ only that definition of right and left quartz which is now generally accepted, and that uniform conventions be agreed upon for axial directions and rotations. Voigt's usage in the main is advocated with this important exception: it is proposed that a right-handed system of axes be used for

right quartz, left-handed for left quartz. This arrangement may appropriately be called the Right-Left axial system. The advantages are that all elastic and piezoelectric constants then retain the same sign for both types of crystal, and that all equations having to do with rotated axes apply equally to both types. No heed need be given to the distinction between right and left quartz except when angles are to be laid off on an actual specimen, and then the difference lies only in the reversal of the x axis for left quartz. A table showing the conventions used by various authors is included.

Operation of a Thyatron as a Rectifier

By L. A. Ware

The half-wave thyatron rectifier circuit is treated theoretically taking into account the difference between the firing potential and the tube drop during conduction. Four loads are considered ranging from a pure resistance to a pure inductance, the impedance angles being 0, 59.15, 85.6,

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and 90 degrees. The first three of these are checked oscillographically and good correspondences are obtained between (1) calculated average current and measured current, and (2) oscillographic waveshape of current and calculated waveshape. It is also noted that errors in the current calculation due to erroneous values of E_f (firing potential) are higher for loads of higher impedance angles.

The Q Meter and Its Theory

By V. V. L. Rao

The ratio of the reactance to resistance of a coil or condenser may be expressed as its Q. Direct-reading instruments for this measurement are commercially available. The theory of their operation is given and includes corrections to increase the accuracy of the results of the measurements.

Some Aspects of Coupled and Resonant Circuits

By J. B. Sherman

An analysis is presented of the coupled impedance and its components in the two-mesh, inductively coupled circuit with a tuned secondary. A similar analysis is made of the impedance and its components in the parallel-resonant circuit having dissipation in the inductive branch.

On Radiation from Antennas

By S. A. Schelkunoff and C. B. Feldman

This paper presents some theoretical remarks and experimental data relating to applications of the transmission-line theory to antennas. It is emphasized that the voltage, the current, and the charge are affected by radiation in different ways, a fact which should be considered in any adaptation of line equations to antennas. It is shown experimentally and theoretically that in an antenna of length equal to an integral number of half wavelengths, which is energized at a current antinode the effect of radiation on the current and the charge (but not on the voltage) can roughly be represented by adding to the resistance of the wires another fairly simple term.

On the Pickup of Balanced Four-Wire Lines

By C. W. Harrison, Jr.

It is demonstrated that for practical purposes the pickup of undesired energy by a balanced four-wire line when compared to the pickup of a balanced two-wire line of the same spacing is so small as to be considered negligible.

A Graphical Method to Find the Optimal Operating Conditions of Triodes as Class C Telegraph Transmitters

By J. C. Frommer

The oscillation of a triode can be characterized by plate-supply voltage, swing of plate voltage, peak plate current, and angle of current flow. For medium-size transmitters it is economical to draw as much output power as consistent with the ratings of the tube. A graph has been plotted with the swing of plate voltage and peak plate current as co-ordinates showing the output and necessary bias if the plate-supply voltage is held at the rated value and the angle of plate-current flow is chosen to produce just the rated dissipation. Grid resistor, grid current, and grid dissipation can be established from another graph. All data are given in ratios applicable to any type of tube.

Electronics

for November, 1942

Arnold's Aim, to Correct Abuses of Patents

Highlights of Thurman Arnold's views on the patent situation, as given in interview to editors of Electronics.

Rebuttal to Arnold

Those who do not agree with Mr. Arnold's contentions about the patent situation present their point of view.

(Continued on Page Fifty-eight)

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TECHNICAL PRESS

(Continued from Page Fifty-seven)

Recording Machinery Noise Characteristics

By H. D. Brailsford

Description of apparatus and technique required to accurately transcribe industrial equipment and other sounds in the field, with suggestions for subsequent laboratory analysis by oscillographic means.

Symmetrical Electrical Systems, Part 1

By E. S. Purington

A special method for determining the characteristics of four-terminal networks which are structurally and electrically symmetrical. This method simplifies such work compared to conventional solutions.

Electrical Remote Control, Part 1

By C. J. Dorr and L. N. Galton

An introduction to the general problem of remote control, outlining a logical approach to the design of equipment for communications and industrial use.

An Instrument for Measuring Surface Roughness

By C. K. Gravley

An electronic device utilizing a Rochell salt crystal, a high-gain amplifier and an oscillograph for quantitatively measuring the roughness and character of physical surfaces.

Superhetrodyne Tracking Design Simplified

By P. C. Gardiner

A short cut to the problem of designing oscillator r-f tracking systems for superheterodynes, reduced to a simple graph.

Impedance Curves for Some Common Networks

By V. L. Edutis

The magnitude and phase for six common networks are given in graphical form in this Reference Sheet.

Bell Laboratories Record

for November, 1942

A Spread-Scale Recorder

By O. D. Engstrom

As the communication art has progressed, the transmission tolerances of telephone circuits have become more severe, requiring a corresponding improvement in measuring technique and equipment. When a telephone circuit had only a few amplifiers or other circuit units, each could be permitted a larger share of the total permissible distortion, and errors in measurement of .25 db meant very little. With the present transmission systems requiring many more circuit units than the earlier systems, this situation has changed. More accurate and faster operating testing equipment has been required, and a recording transmission-measuring set was developed that will cover the voice frequency spectrum in a few minutes. A new "spread-scale" has been developed for this recorder that can be read to 0.02 db.

New Reference Frequency Equipment

By V. J. Weber

Frequencies in radio and carrier telephone are now held constant to a very high precision. The Bell Laboratories have developed new equipment known as the W-10815 reference frequency assembly, which provides frequencies, accurate to two parts in ten million, of 100, 10, 1, and .1 kilocycles. It also includes apparatus to detect any errors in these frequencies, and in such cases to give an alarm if the error exceeds a certain very low value.

Submarine Bibliography

(Continued from Page Fifty-five)

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Partial List of U. S. Patents — 1918-1940

2164858	2085055	2033135	2024214		
1994495	1986647	1968821			
1883433	1858931				
1742704					
1690578	1684848	1670888	1632331	1624412	1611740
1610674					
1598315	1583876	1586972	1579760	1548024	1533645
1523016	1504247	1500243			
1496746	1486821	1480218	1482980	1472558	1473332
1446569	1440361	1440360	1426337	1415339	1414295
1400283					
1397949	1394483	1394482	1393471	1391654	1380869
1388420	1371728	1367415	1353410	1348855	1348826
1348556	1348827	1344074	1324961	1300062	
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KFAR Links Alaska with States

REOPENING of Station KFAR at Fairbanks, Alaska, has established a new American broadcasting frontier for radio programs at a point close to the top of the world. KFAR has been stepped up from 1,000 to 5,000 watts by permission of the Federal Communications Commission, and equipped with twice that power for use after the war as an RCA type 10-DX, 10-KW Transmitter.

Installation of the new equipment was signalized by an NBC Coast to Coast Broadcast originating at KFAR, celebrated throughout Alaska as breaking an important barrier between the Territory and the folks "Back home in the States." Colonel John V. Hart, Commanding Officer of Ladd Field, at Fairbanks, led a group of army officers, Territorial officials and leading citizens who took part in the broadcast.

Alaskans have been clamoring for a long time for a stronger broadcasting service. It took Pearl Harbor, however, to emphasize the fact that this was now a military necessity. In the week following that event, KFAR was the only station on the air in Alaska. It was also the only Alaska station on the air during and after the bombing of Dutch Harbor last June. Since Fairbanks is in the interior of Alaska, it was able to reach most of the territory's population even with the short range it had then—and it was the only means of communication with scores of outlying communities.

The increase of the station's output to five times its former strength demonstrated how the Army, other governmental agencies and industry can cooperate to slash red tape and find short cuts when a specific need becomes urgent. First application for the increase was

made only last January by Colonel Austin E. Lathrop, President of the Midnight Sun Broadcasting Company, which operates the station.

Priorities at that time were more stringent on radio equipment than anything else needed for the war effort. They were still further tightened by the first "freeze order" put out by Donald Nelson, Chief of the War Production Board, stopping all but the most vital new construction in broadcasting. Then came a restriction on any changes in broadcasting equipment. Alaska seemed to be facing a long wait.

Then the Army and Air Corps joined civilian authorities to help get the facts before the FCC. It was shown that even on 1,000 watts the station had been a distinct aid to Army and commercial aviation in a land where the airplane is often the only means of travel. It was also shown that the station was the only means by which military authorities

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could reach the population with instructions in case of emergency.

As a consequence the FCC held a special session at Washington and after hearing all the facts authorized the station to jump its power to 5 kilowatts. The next step was to get priorities. This was solved when KFAR was granted a preference rating certificate by WPB which permitted RCA Victor to provide the required equipment.

In record breaking time an entirely new transmission plant, including the famous RCA type 5-DX broadcast transmitter, was conjured out of the RCA plant, with WPB approval, tested and tried by company engineers and delivered to the transmitter house a few miles outside of Fairbanks. Just two months and thirteen days later it went on the air. Moreover, the installation was made without disturbing daylight programs over the old 1,000 watt equipment, which was an RCA type 1-G broadcast transmitter. In the meantime the old plant was dismantled, moved and reassembled at nights, while the new equipment was being installed.

KFAR's first transmitter was built for Colonel Lathrop in 1939 by Stanton D. Bennett, then only twenty-three years old, but already a veteran in radio installation and operation. He is now Chief Engineer of the station, in which post he designed the layout in conjunction with RCA Engineers. Previously he had installed a number of other RCA equipped stations in the northwestern states, and before that he had held every job in a radio station from copy boy to announcer.

KFAR is now equipped not only with more power, but also with new control equipment and amplifiers designed to meet the specifications of high fidelity. It is still operating on its old frequency—610 kilocycles. With its powerful short wave equipment it is now able to tie in with NBC coast to coast hookups and to open new fields of entertainment for the flying fighters at Ladd Field and other Alaskan Posts. The station has planned a series of programs to feature news of soldiers, with officers and men as speakers.

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

Season's Greetings

CHICAGO CHAPTER...N.A.B.E.T.

NBC and BLUE

Studio Group

J. Alusic
R. C. Bierman
C. C. Blanchard
C. M. Butler
C. A. Cabasin
H. L. Cavanah
C. V. Corliss
D. R. Fitch
F. E. Golder
L. E. Heiden
A. W. Hjorth
H. P. Jackson
H. C. Johnson
G. F. Kemp
W. C. Lahman
R. E. Lavoie
E. A. MacCornack
G. Maher, Jr.
L. M. Mulatz
G. W. Smith
H. L. Reynolds
M. F. Royston
B. H. Speirs
E. G. Squires
R. B. Whitnah
M. J. Wilson

Field Group

W. H. Cummings
G. J. DeVlieg
R. R. Jensen
R. A. Limberg
H. D. Royston
F. C. Schnepfer

WMAQ Transmitter

A. D. Aldred
R. E. Fitzpatrick
D. E. Howser
C. P. Lonie
H. R. Maule
R. A. Mingle
A. J. Schroeder

WLS-WENR Transmitter

F. C. Ahlgrim
W. T. Anderson
A. J. Forgach
W. J. McDonnell
J. F. Mehren
H. F. Kohnitz
N. S. Ponte
H. R. Rawson

Maintenance Group

R. E. Brooks
A. H. Elkins
A. A. Harrison
E. A. Holm
J. F. Martin
H. G. Newbauer
W. C. Prather
A. Schomaker
R. D. Wehrheim
H. T. White

Supervisory Group

W. K. Cole
W. O. Conrad
R. S. Davis
M. H. Eichorst
B. F. Fredendall
W. F. Lanterman
J. R. Miller
V. D. Mills
A. H. Otto
J. H. Platz
M. W. Rife
R. B. Sturgis
G. E. Webster

WLS Studio Group

J. P. Daugherty
M. J. Donnelly
W. P. Keller
C. F. Nehlsen
V. L. Fulton
B. Whyland
H. B. Wyers
C. W. Ostler

WOW, Omaha, Group

E. R. Anderson
G. Flynn
D. R. Glanton
H. Griffin
J. Herold
P. McDonald
M. L. McGowan
F. A. Rudd
R. E. Peck

In the Service

Lt. P. J. Moore, USA.	Warrant Officer
Lt. D. J. Kempkes, USA.	H. D. Crissey, USN.
Capt. L. L. Washburn, USA.	A/C R. E. Hunt, USA.
Lt. C. L. Pierce, USA.	Lt. T. G. Bombaugh, USN.
Capt. P. H. Clark, USA.	Lt. A. L. Hockin, USN.
Lt. T. E. Gootee, USA.	Lt. A. R. Johnson, USN.
Maj. F. C. Shidel, USA.	Lt. W. H. Taylor, USA.
Capt. E. L. Bernheim, USA.	L. E. Dutton*
	E. G. Eisenmenger*

* Civilian Service



=====

A Merry Christmas

and

A Happy New Year

Boys

CHICAGO LOCAL

AMERICAN FEDERATION OF RADIO ARTISTS

=====

Compliments of "LONELY WOMEN"

PATRICIA DUNLAP

VIRGINIA PAYNE

THE LONELY MAN — MURRAY FORBES

WILMS HERBERT

BETTY LOU GERSON

EILEEN PALMER

Merry Christmas



FORT PEARSON



CHARLES LYON

CHICAGO



ANNOUNCERS



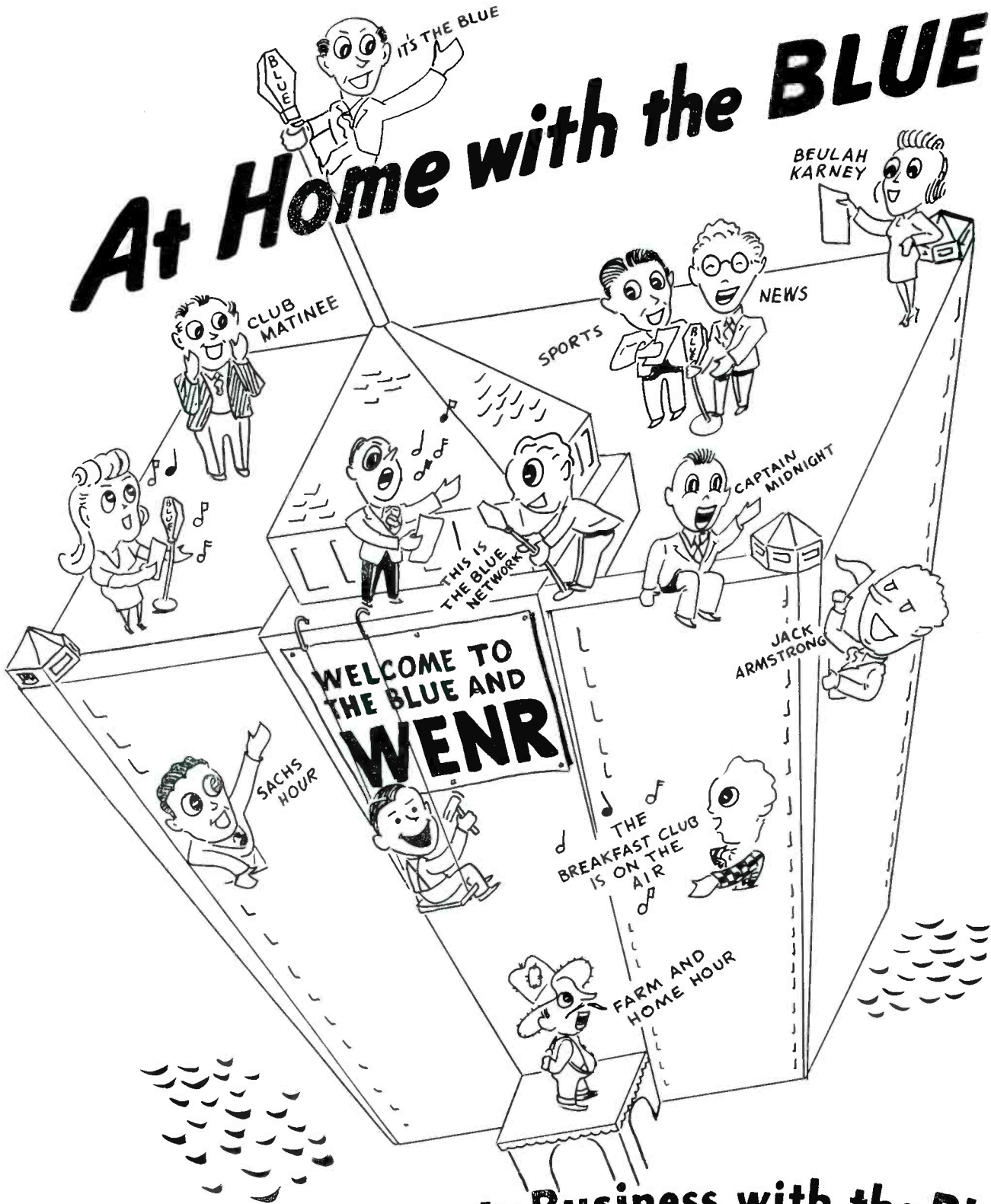
DURWARD KIRBY



BOB BROWN

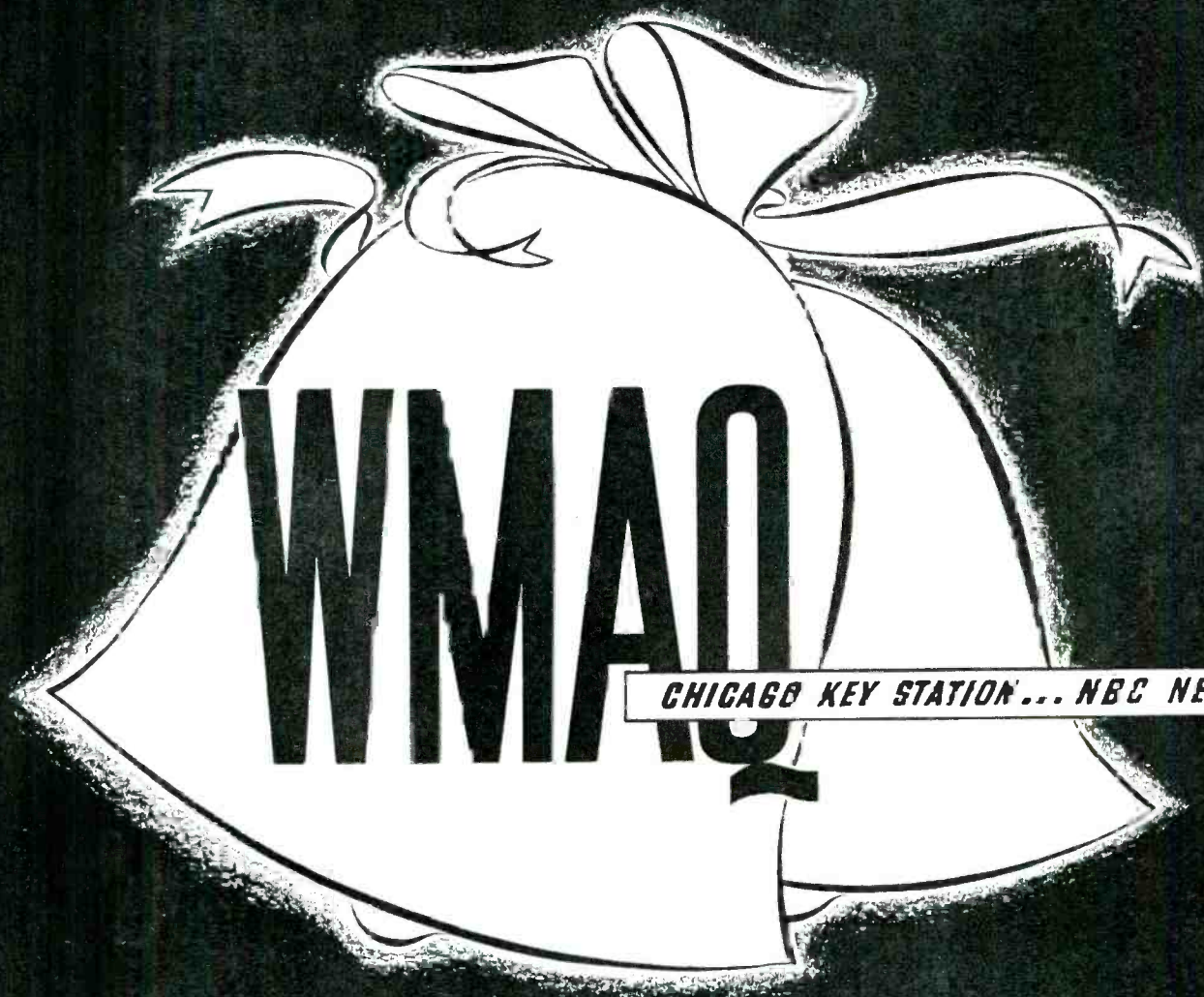
A Happy New Year

At Home with the **BLUE**



it's Easy to do **Business with the Blue**

THE BLUE NETWORK INC. • MERCHANDISE MART • CHICAGO



*Extends
Cordial Season's Greetings
to all Members of*

N.A.B.E.T.





**Wilson Milk
Company**

invites you to
"Smile Awhile"

with

JACK BAKER

BLUE NETWORK



Merry Christmas



FERN PERSONS



Breakfast Club Matinee

ALSO

"Songs by Nancy Martin"



"A Happy
Good Morning
to You!"

Happy
Jack Turner
WLS and NBC



Season's Greetings

SHANOFF'S

The Merchandise Mart Jewelers
Main Arcade, Merchandise Mart

CHICAGO

"Jewelers to the Radio Profession"

Season's Greetings



CLIFF SOUBIER



Uncle Henry - on - Lone Journey

Thanks, Fellows



JANE STOCKDALE

Christmas Greetings

To the NBC Staff

Dr. Gary M. Baker

FIRST FLOOR EAST CORRIDOR
MERCHANDISE MART
Chicago



HUGH STUDEBAKER



Season's Greetings

Merchandise Mart Shop
for Men

Haberdashery and Sportswear
of Distinction

Second Floor

The Green Shutters

The Little Colonial House
A Block East of Michigan
212 East Ohio Street

Southern Home Cooking You'll Enjoy

Private Parties

Delaware 1673

JACK ARMSTRONG

The All American Boy



EDWIN H. MORSE

Director

Charles Flynn Jack

John Gannon Billy

Sarajane Wells Betty

James Goss Uncle Jim

Herbert Butterfield Weissoul

Frank Dane Whirley

Forest Lewis Herman

FRANKLYN MacCORMACK

Announcer



RAY BIERMAN Engineer

HARRY BUBECK Sound Technician



Merry
Christmas
to
All You
Boys
and
to all
of
Your
Friends



VIC, SADE and RUSH

What Can Performers Do for the War Effort?

Chicago AFRA Tries to Answer

PEARL HARBOR! When the world-shaking words stopped reverberating in your ears, no doubt they sounded in your heart. Did you ask yourself as we all did: "What can I do? If I had only learned a trade, could do something useful and worthwhile! Buy bonds—yes; but how can you win a war by singing or acting?" The reassuring answer has come from the Treasury Department, the Army, the Navy, the Office of War Information: "Radio is a powerful propaganda and morale medium. Please help us." We have tried to do our share.

Like everyone, our first and greatest service has been the lives of our young men. From Chicago AFRA eighty-two men are now in the armed forces; three girls—two WAACS and a WAVE. We boast one Major in the Army,



Ray Jones, Executive Secretary, Chicago AFRA



Norman Barry, First Vice-President, Chicago AFRA

a Captain, about fifteen Lieutenants: one Lieutenant Commander, several Lieutenants in the Navy; many soldiers and sailors, two Coast Guardsmen and several Marines—three of our boys will certainly spend Christmas overseas—and many more are at embarkation points and will be there soon. They are flying bombers, acting as radio men, recording sound for official newsreels, writing and producing shows for their fellow soldiers. I only wish we had sufficient space to reprint their splendid and inspiring letters. They are soldiers first now—performers second—but the same high standards of performance persists. "God bless them, every one!"

On the home-front our activities have included daily personal appearances and broadcasts for the Treasury Department. During the month of September, the month in which the recreation and amusement industry was asked to establish a new high quota in purchase and sale of bonds, Chicago AFRA bought and sold over the air a half-million dollars worth of bonds. A benefit for Russian War Relief gave twelve thousand five hundred dollars for medical supplies. Daily performers appear at Navy Recruiting Center to brighten that first gruelling day of enlisting sailors. Special announcements and broadcasts have stimulated Merchant Marine, Marine, Fly for the Army, Fly for Navy, Coast Guard recruiting programs. Every month, radio stars appear at the Chicago Service Men's Center and each Sunday morning, some of radio's lovelies act as breakfast hostesses for the USO. Through Camp Shows,



Virginia Payne
President, Chicago AFRA

Inc., hundreds of radio-ites have appeared at nearby camps. In addition, hundreds of hours have been contributed by radio femininity to knitting, making surgical dressings and first aid instructing for the Red Cross. AFRA'S Red Cross Committee has contributed largely to the Blood Bank. Recently, when Chicago's quota was raised to thirty-five hundred pints of blood a week, radio's blood-donors produced a special broadcast to acquaint the public with this service and the need for it. Veteran blood-donors authored, directed and acted the script—*So That Men May Live* at the "Freedom Fair" sponsored by the coalition of all relief agencies, Chinese Greek, etc. The week of December twelfth to eighteen, radio names will again contribute their services. Every Thursday evening a galaxy of stars appear throughout the metropolitan area of Chicago for the office of Civilian Defense in a pageant entitled "*The Fight for Freedom*". Monday through Friday each week, radio's families stress the OWI's message of the week on *Victory Front*.

In the midst of these important activities, we debated the wisdom of attempting the fifth annual AFRA Antics. But in the presence of war as well as in peace time, illness and need exist. So, on November twenty-first, among the flags of the United Nations, to the music of Phil Levant's

(Continued on Page Seventy-one)



Paul Nettinga, Second Vice-President, Chicago AFRA



Philip Lord, Treasurer, Chicago AFRA

Season's Greetings



Jim Campbell

Blue — Chicago



"Greetings"



KARL WEBER

S
E
A
S
O
N
S
GREETINGS

Shapiro and Daskal

... Merchandise Mart

... Florists to Radio

Merry Christmas

from

Jencinema Productions

What Can Performers Do?

(Continued from Page Seventy)

orchestra, radio performers, executive, and fans gathered. About two hundred service men were our guests—ten of them our own, here on brief leave. Souvenir program, autograph cafeteria, circus and game-room, splendid floor show, all marked it our best Antics. The generosity of all our friends has made it possible for us once more to alleviate the suffering caused by ill health and economic worry. To the Engineers, always unfailing in their support, and to all others who may read these pages, a deep "Thank you" for your daily understanding and cooperation in this new experience of radio at war.

A happy Christmas to all of you, and a year of victory and peace!

The Story of Lucy Ludicrous

"Will she live, doctor?"

"I must operate immediately!"

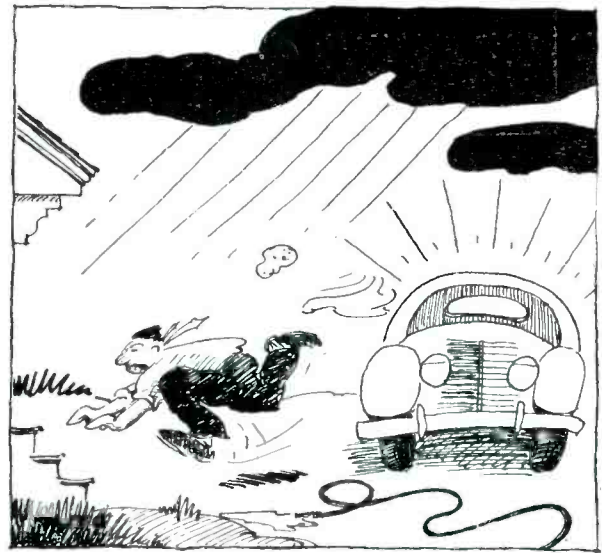
"Is it serious, doctor?"

Whack!

Ladies and gentlemen . . . Do you have that let down feeling when you get up each morning? You do! Tsk! Tsk! That is nature's way of warning you of an unequalized equalizer . . . Well, here's a priceless little tip just for you! Hiram's Egg Shaped Equilibrium Equalizing Pills will equalize your equilibrium in no time . . . Rush to your nearest store and get equalized!

Bang! Bing! Bong!

—Bert Pruitt.



Weather Forecasters

Some people have the knack of knowing
When the rain will fall.
They gaze into a cloudless sky
And see a future squall.

Some say their ankles telegraph
A warning to their brain,
And others stake their life upon
The beaten weather vane.

Occasionally you run across
The ones who somehow know
A secret way of finding rain
In every cawing crow.

But I've a method all my own
That long has been a proof;
I wash my car then make a dash
For some protecting roof!

— Bert Pruitt.

Same Stuff — Same Guff

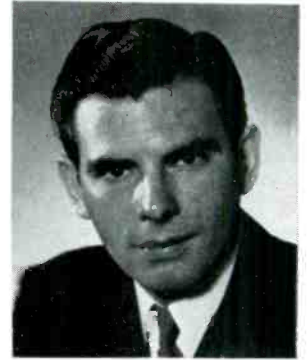


YOUR BLUE-EYED BOY

Rugged
MICHAEL ROY

... Protecting arm and guiding
light of the working girl

"Good Reading"



Nelson Olmsted



HOPE SUMMERS

CHARACTER ACTRESS



Constance Crowder

"Doris Cameron"
in Right to Happiness

"Mother Moynihan"
in Painted Dreams

"Mrs. Brewster"
in That Brewster Boy

**Greetings,
Engineers**

from

SEASON'S BEST

from

the Heart of the West

CHICAGO

Vincent Pelletier

**CLIFTON
UTLEY**

Best Wishes for a
Victorious New Year



LOUISE MASSEY
and the WESTERNERS

Greetings

EDWARDS SHOES

2nd Floor — Mdse. Mart

Nunn Bush for Men
Fine Shoes for Ladies

Season's Greetings



ESCORTS and BETTY

BLUE — CHICAGO



**Season's
Greetings**



Myron Wallace



A Very
Merry
Christmas

MARION MANN

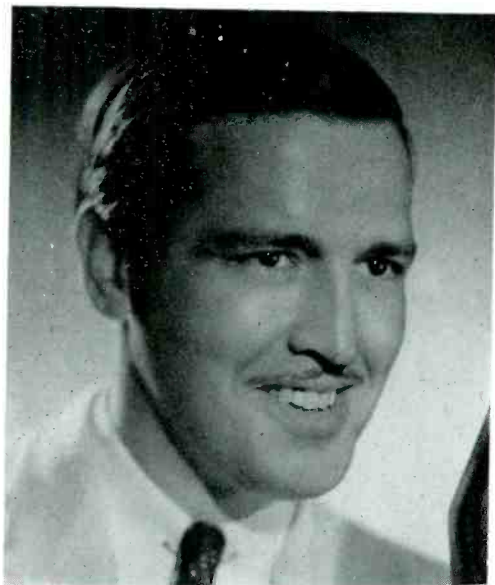


"Peaks on You, Too!"

N.B.C.

SOUND

TECHNICIANS

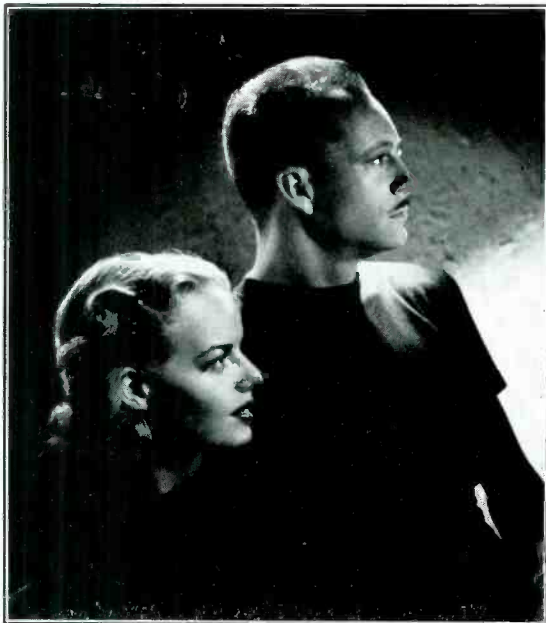
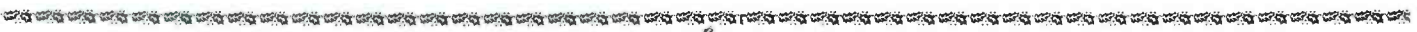


DON DOWD



NORMAN BARRY

Holiday Greetings to the Gang and
Best of Luck to Those in the
Service, We Miss "Ya"



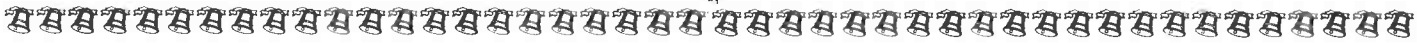
Best Wishes
from
Eileen and Les Tremayne



Merry Christmas and Happy New Year

The Four Vagabonds

While our country takes care of Hitlerism,
We look to Christmas for our Optimism.



Season's Greetings



KATHRYN CARD

NCAC CHICAGO

Helpmate

Forest Rangers

Guiding Light

Laurette Fillbrandt

Merry Christmas

Russ Young



HARVEY HAYS



CLEVE
CONWAY

NBC
CHICAGO



Christmas Greetings

from

"CURLEY" BRADLEY
of
CLUB MATINEE

Calling All NABET Engineers

MATTHEWS

LUSTRO-HAIR
DRESSING

Guaranteed to Please or Money Refunded

Distributors

CHAS. E. MATTHEWS

Merchandise Drug Store

THE MERCHANDISE MART

WELLS STREET ENTRANCE

CHICAGO, ILL.



The
Breakfast Club
with
DON McNEILL

Holiday Greetings . . .

To the Boys!

ED ROBERTS

Announcer

Season's Greetings



RUTH LYON

NBC — Chicago



JACK BAKER

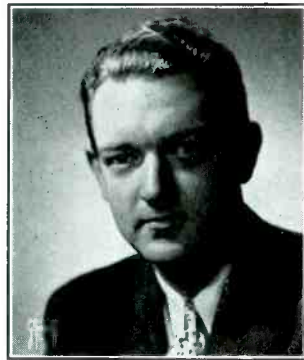
of

BREAKFAST

CLUB

Season's
Greetings

GENE BAKER



Season's Greetings



Norma Ransom and Arthur Peterson

Holiday Greetings
Photographic Equipment

COMPLETE LINE CARRIED — NEW OR USED

Write for Your Needs . . . Shipments Made
All Over the U. S.

Complete Film Rental Library Available

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6208 Cermak Road

Berwyn, Ill.

DINNING

SISTERS

Best Wishes



The NEW YORK CHAPTER of N.A.B.E.T.

*extends Holiday Greetings to its many friends
in the industry
and to its members who have answered the call:*

In the Armed Forces

Arber, J. K.	Conn, J. W.	Miller, J. A.
Bauer, R. W.	Ewert, A. C.	Montilla, F.
Bertero, E.	Falcone, P. F.	Perry, A. J.
Brown, W. R.	Fisher, G.	Tervola, V. U.
Carson, W. S.	Flood, H. V.	Truhlar, J.
Caselli, V. J.	Gurin, H. M.	Youngster, N. C.
Coleman, J. V.	Haerer, W. A.	
	*Williams, A. T.	

Other War Activities

Ashworth, H. T.	Isberg, R. A.	Sturgell, D.
Bigwood, R. F.	Jones, H. W.	Trevarthen, W. H.
Chubbuck, E.	Larson, J.	Tullius, V.
Cooper, A. A.	Sellar, G. M.	Whittemore, D. B.
Geist, H. J.	Study, R.	

Behind the Mike

By Con Conrad

W. K. Cole, NBC Chicago engineering department, now using his nights off for teaching radio to Navy men at Northwestern University, Evanston.

R. E. Hunt, NBC engineering department, Chicago, has been called to active duty with the Army Air Corps. He reported to Santa Anna, California.

Robert Roberts, WSBC, Chicago, has taken military leave and has joined the Navy.

Claude Snider, formerly Chief Engineer for CKX, Brandon, Man., was recently promoted to the rank of Major of the Royal Canadian Artillery. He is now stationed in Canada after having served several months overseas.

Freda Knodle doing engineering duties with KFNF, Shenandoah, Iowa, also doubles at the mike for certain announcing duties.

Melvin Cody from the engineering staff of KFOX, Long Beach, has taken up new duties with KMPC, Beverly Hills, Calif.

Paul Lindsay, formerly of WCAX, Burlington, Vt., has been appointed Chief Engineer of WHEB, Portsmouth, N. H.

Dennis Doughty, who several years ago deserted the engineering ranks to become a baker, has returned to the ranks taking up new duties with W-53 PH the FM unit of WFIL.

John Vincent, former engineer for KWKW, Pasadena, Calif., has resigned to join KPAS of the same city.

Marshall Seacrist, engineer for WGES, Chicago, Ill., has taken military leave and has joined the Navy as a Chief Petty Officer.

Arthur Muchlvenin, formerly a vaudeville juggler, has joined the engineering staff of WMFF, Plattsburg, N. Y. Perhaps he has joined the transmitter staff, his past abilities would come in handy juggling hot transmitter tubes.

Malcolm Mobley, Sr., has joined the technical staff of KGFJ, Los Angeles. His son, Malcolm, Jr., is employed in the engineering department of KMPC, Beverly Hills, Calif.

C. C. Blanchard of the engineering staff of NBC, Chicago, Ill., has joined the Navy as an Air Cadet and is now waiting call to active duty.

George McClanathan and Howard Zile have taken military leaves from WAIT, Chicago, Ill., and have joined the Army Signal Corps.

Robert Henderson, engineer for WBZ-WBZA, Boston-Springfield, recently joined the Navy as a warrant officer and is now serving in the Carribean area.

Mrs. Dorothea Brown, Mrs. Ruth Dorin and Miss Ethel Teal are all at present on the engineering payroll of WRNL, Richmond, and are undergoing training for future duties. They are being tutored by the stations Chief Engineer, Walter Selden.

Season's Greetings



DICK LEIBERT

Cordially with Greetings

Clark Dennis



*"You've been looking at me for a long time—
Here's looking at you"*

DON GODDARD



Hi, Guys!



ROGER FORSTER

*"Linda's First Love"
"Soldiers of the Press"*



Season's Greetings

Bill Hightower

Season's Greetings

from

Mary Margaret McBride



Happy Greetings for 1943



Lucille Manners

Cordial Greetings
of the Season

Pedlar & Ryan, Inc.

Pepper Young's Family
Mr. District Attorney
Screen Guild Players
Dinah Shore



Thanks for everything

My best to you and yours



GEORGE F. PUTNAM

NBC NEW YORK

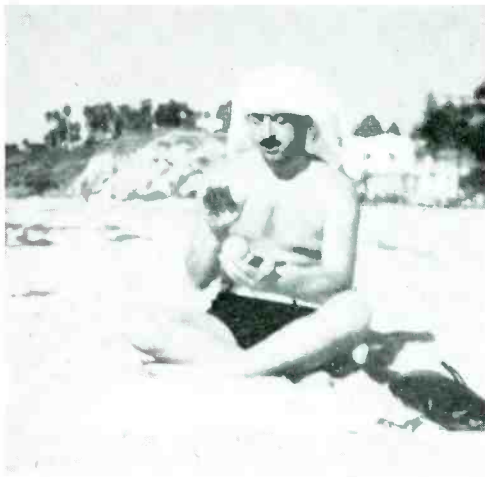


Laguna Beach, Calif.

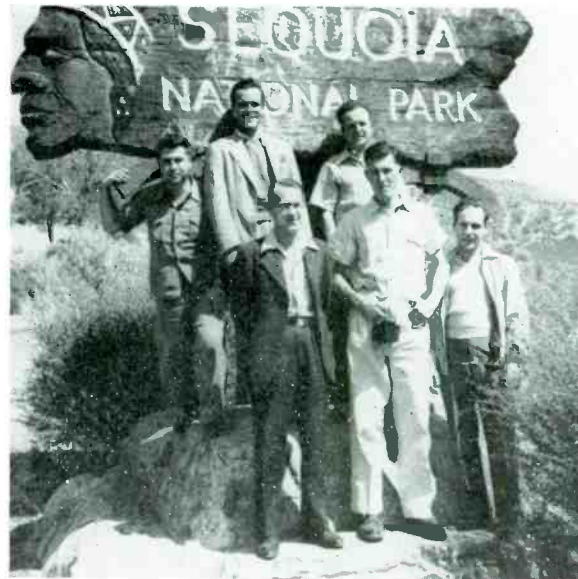


R. W. Jordan relaxes in grass skirt

Some Members of NBC-NY Staff Relax While Out-of-Town on Business



Editor Ed. Stolzenberger consults his crystal ball



(Back, left to right): Stoddard Dentz, Dorm Albert, and Harry Mallen. (Front, left to right): Ted Nolen, "High-pockets" Clark, and Eddie Nathan.



Ted Nolen snatches a few brief moments of California sunshine and relaxation



Stoddard Dentz fashions some local seaweed!



Tarantula on road to Sequoia Park. For indication of size, this photo was taken as the tarantula crossed the white line in the road.

The Engineering Chapter of N. A. B. E. T.

extends Holiday Greetings to its many friends
in the Industry, and to its members in the
armed services:—

ARMY and NAVY

Gurin, H.	Plaisted, R. J.	Burrell, J. E.
Chipp, R. D.	Peck, S. L.	Conn, J.
Knight, J. B.	Folkerts, H. F.	Moffett, L.
Pickard, R. W.	Carson, W. S.	McMillin, W. R.
Sweeny, C. P.	DeBaun, J. R.	Davis, J. L.

Merry Christmas



Association of Technical Employees



of

WOR



In the Spirit of the Yuletide
Greetings to the Engineering Staff
FRANK BLACK

The Season's Best

CLYDE KITTELL

Season's Greetings From



PAUL LAVALLE



**Christmas Cheers
to the Engineers**

STUART METZ

W2LMJ

NBC — CBS



Season's Greetings

CHARLES PAUL

ORGANIST - CONDUCTOR



My Best Wishes Always

LUCILLE WALL

In a New Business Now, Boys

LISTEN FOR

"Prairie Wind" "Oh Lord Give Me a Humble Heart"

"There's Nothing Like an Irish Morning"

"Arizona Moonlight" and "Pillow Case Bay"

BEST WISHES FROM

ALICE REMSEN MUSICAL PUBLICATIONS

427 1/2 East 52nd Street, New York, N. Y.

PLaza 8-1309

Season's Greetings



MILT HERTH TRIO

"Greetings"



"RAD" HALL

**My Best Wishes
To the Engineers**



FORD BOND



"You Made Me What I Am Today"

"Merry Xmas and Thanks"



ALLEN ROTH

"Greetings and Thanks"

DEE ENGLEBACH
JOE RINES

"Best Wishes of the Season"



HUGH JAMES

"Hello There!"

from

TED MALONE

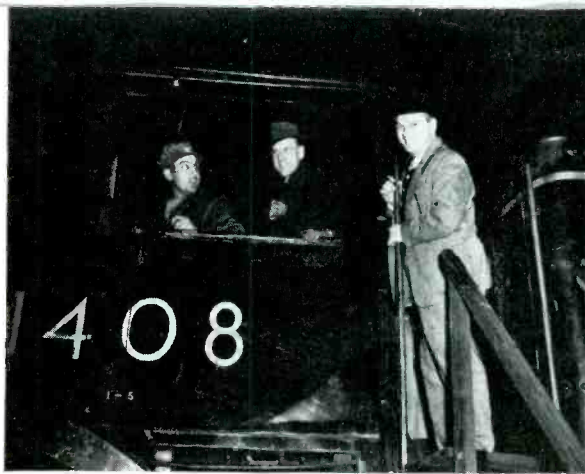
and

ROSA RIO

Season's Greetings



RAY NELSON



TRUTH OR CONSEQUENCES EXPRESS—NOV. 22, 1942, NEW HAVEN, CONN. N. Y., N. H. AND H. RAILROAD YARDS

Center, with a gleam in his eye, F. E. Harold Campbell, Right, F. E. George Butler. Mrs. Erica Davies, failing to answer the question, was sentenced by "Simon Ligree, ain't we Devils" Ralph Edwards, to drive the huge N. Y., N. H. and H. locomotive as her "Consequence" from the previous week.

ND31 pack transmitter, shown with Butler, received by ND25 receiver, locomotive in motion. Maximum distance, one mile. F. E. Joe Conn, not shown, (he was the photographer) who thumbed rides as we passed his receiving location. To best of our knowledge, first NBC broadcast from cab of locomotive in motion.

New York News By C. A. Younger

Greetings of the Season and all best wishes to the following New Yorkers who are now serving in the Armed Forces:

J. K. Arber	Private	U. S. Army Signal Corps
R. W. Bauer	Lieutenant	U. S. Navy
C. Bertero	Ensign	U. S. Navy
W. R. Brown	Captain	U. S. Army Signal Corps
J. C. Burrell	Lieutenant	U. S. Navy
W. S. Carson	Lieut. (jg)	U. S. Navy
V. J. Caselli	Staff Sgt.	U. S. Marines
R. D. Chipp	Lieutenant	U. S. Navy
J. V. Coleman	2nd Lieut.	U. S. Marines
J. W. Conn	Lieutenant	U. S. Navy
J. R. DeBaun	Lieutenant	U. S. Navy
A. C. Ewert	Lieut. (jg)	U. S. Navy
P. F. Falcone	Sergeant	U. S. Army Signal Corps
G. Fisher	Radioman (2C)	U. S. Navy
H. V. Flood	1st Lieut.	U. S. Army Signal Corps
H. F. Folkerts	Lieut. (jg)	U. S. Navy
H. M. Gurin	Lieutenant	U. S. Navy
W. A. Haerer	Chief Radioman	U. S. Navy
J. L. Kennedy	Private	U. S. Army
J. A. Miller	Chief Radioman	U. S. Navy
F. Montilla	Ensign	U. S. Navy
S. L. Peck	Lieut. Cmdr.	U. S. Navy
A. J. Perry	1st. Lieut.	U. S. Army Air Force
R. W. Pickard	Lieutenant	U. S. Navy
R. J. Plaisted	Lieut. Cmdr.	U. S. Navy
J. J. Rooney	Lieut. (jg)	U. S. Navy
V. U. Tervola	2nd Lieut.	U. S. Army
C. P. Sweeney	Lieutenant	U. S. Navy
J. B. Knight, Jr.	Lieut. Cmdr.	U. S. Navy
L. R. Moffatt	Lieutenant	U. S. Navy

We have one Gold Star in our Service Flag. It is in memory of the late A. T. Williams, First Lieutenant, U. S. Army Air Force, who succumbed to an attack of jaundice while on duty in Texas.

NABET NEWCOMERS: With the loss of so many men to the Armed and Civilian War Services the Engineering Personnel here has undergone a particularly heavy turnover during the past year. The latest initiates to the NY Chapter are SE George Mathes, ex-Navy Radioman

who brings us heavy experience in Radio and PA Distribution Systems and Ship-to-Shore Telephony: SE Bill Simpson, ex-WNEW Supervisor whose Ham call W2BUY is remembered by many who pounded brass when 200 meters was short-wave: ME Pat Haines who left a Radio business of his own out in Long Island to join us and ME J. A. Smith, ex-WWRL who also worked for some of the better known Recording Companies. R. F. Glendon and Jerry Truhlar are Apprentices working presently in the Studio Group. Both men began their careers in Radio Broadcasting as Engineering clerks.

* * *

THE OUTER SANCTUM: Pictures now grace the walls and ceiling of our Lounge. The one under the clock serves as Gil Markle's inspiration each day when he comes in to work. Serge DeSomov, with his characteristic flair for the aesthetic has contributed a Gallery (?) Selection. It hangs over the chair in which Ralph Reid once snoozed.

It appears that the Fair Sex will violate the sanctity of the Lounge from time to time. Girls are being broken in to replace the Messenger Boys who have left for War. It is expected that those assigned to the Fifth Floor tour will be hard of hearing.

MARKLE GETS NEMO JOB: After eons of wondering what a Nemo assignment was like, our revered Night Councilman, Gil Markle got one. But did he get the kind where he had to lug 85 pounds of gear up a long flight of stairs and then nudge the customers out of the way? Not on your life. He was sent to the Hotel Taft where the equipment remains between shows and dinner is always "On the House". What's more it was Thanksgiving Day!

QUICK VU's AROUND RADIO CITY: Stolzy back home. Announcer Lyle Van now Proud Papa—little boy. Ray Kelly now NBC producer—Fred Knopfke replaces him as Head Man of Sound Effects with Clem Walters as assistant. Johnny Wellington, Blue Production, one of those rare possessors of "Natural Pitch". Strike any note or chord on the piano and he will call it—but right. Helene Mazurek is that cute little trick who keeps the 5C record bins in order. Schedule maker Billy Wells' headache: Two Simpsons, one MacDonald and one McDonald on SE staff. Old Maid gives way to Red Dog as favorite card game between shows. Many have been bitten.

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Managing Editor, ED. STOLZENBERGER
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*"Happy Xmas and a
Prosperous New Year"*

York Bar and Restaurant

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REPORTS"**

Best Wishes

Best Wishes and
The Season's Greetings



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Greetings

from

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Bergen

and

Charlie
McCarthy



Best Wishes

MARTIN BLOCK



"The Best for the Season"

RADIO CITY BAR AND GRILL
NEW YORK

BUY — AND KEEP BUYING
U. S. WAR BONDS, and We'll
All have another Merry Christmas
in
1 9 4 3

"The Story of Hazel Wimmer"

By Bert Pruitt

We now switch you to Brecksville, Ohio, to bring you the stage performance of Hazel Wimmer, starring in that well-known stage play, "Hark! Who shot?"

"You're a villain, Samuel Hard! Leave my home at once! Never dare show your villainous face here again. Go!"

* * *

"Ladies and Gentlemen, due to circumstances . . . What's that engineer . . . Oh yes, slip up in time . . . Ladies and Gentlemen, due to circumstances beyond our control, we have just brought you the last sentence of the last act. We now take you to the stage where Miss Wimmer is receiving congratulations from her magnificent performance in "Hark! Who shot?"

"Hazel, dear . . . you were wonderful!"

"Thanks, mother."

"You should be on the radio!"

"Why?"

"Well . . . Well . . . Well wouldn't you like to be the leading lady in a daytime cereal?"

"Yes, but . . ."

"You must go to Cleveland. I know the Program Manager at KNOB. His name is Thesaurus."

"Should I go way up there?"

"Of course!"

Hazel went.

"Good morning . . . Is Mr. Thesaurus in?"

"Who?" Inquired the receptionist at radio station KNOB.

"Mr. Thesaurus."

"Business?"

"Good . . . Oh no . . . Audition . . . Drama!"

"Please have a seat over there Miss Wimmer."

Two days later the engineer and announcer on the morning watch went through the lobby on their way to lunch.

"Wonder who she is?" The announcer looked at the engineer when he said this.

"Dunno . . . She's been in that chair for two days."

"That's funny . . . She looks tired too."

Two minutes later Mr. Thesaurus dashed into the lobby.

"Are you Miss Wimmer?"

"Yes," wearily replied Hazel.

"This way please."

* * *

Ladies and gentlemen, what will happen to Hazel? Will her run-down condition go against her? Is this man Thesaurus on the up and up? What about that engineer and announcer? Why were they interested in her? Will Thesaurus try to . . .

To avoid the suspense, Part II follows directly:

We left Hazel Wimmer with Mr. Thesaurus the Program Manager of Radio Station KNOB. We have done quite a bit of worrying about Hazel, but let's hope for the best.

You remember how Hazel starred in the stage play, "Hark! Who Shot?" Immediately after this performance Hazel's mother advised her to go to Cleveland and see Mr. Thesaurus at Station KNOB.

She went, and after waiting in KNOB's lobby for two days Mr. Thesaurus dashed in.

Ladies . . . Do your feet hurt? Well, mine do too so what the heck are you complaining about? You know there is a war on and our supply of Zippo Korn plaster is at rock bottom. So please help to win the war by not buying any . . . Thank you!

And now we switch you to KNOB . . . Take it away, Thesaurus!

Hello folks . . . This is the engineer handling the audition. You remember when the announcer and I went to lunch last month? Well, we got back OK. The announcer and Thesaurus are in the studio with Miss Wimmer and a Mr. Crunch. Mr. Crunch came by just a moment ago and went

(Continued on Page Ninety-two)



Season's Greetings and Best Wishes

To a Swell Gang

All NBC Engineers

from

THE THREE SUNS

ARTIE DUNN

MORTIE NEVINS

AL NEVINS

Hotel Piccadilly



New Tubes Announced by RCA Mfg. Co. Harrison, N. J.

THE following new tube types are being made available to equipment manufacturers by RCA for use in connection with WPB rated orders:

RCA-1C21 Gas-Triode.

RCA-2AP1 High-Vacuum Cathode-Ray Tube.

RCA-5R4-GY Full-Wave High-Vacuum Rectifier.

RCA-6AG5 R-F Amplifier Pentode (Miniature Type).

RCA-6J6 Twin Triode (Miniature Type).

RCA-934 Vacuum Phototube (2 15/32" long x 23/32" in diameter).

RCA-935 Vacuum Phototube (Ultraviolet-Sensitive Type).

The 1C21 is a cold-cathode, glow-discharge triode designed for use primarily as a relay tube. The discharge can be initiated with a very small amount of energy applied in the grid circuit. It is similar to the type OA4-G but is more sensitive.

The 2AP1 is a high-vacuum, cathode-ray tube similar to type 902 except that it has separate leads to all deflecting electrodes and the cathode, employs a magnal 11-pin base, and can be operated with higher anode voltages.

The 5R4-GY is a coated-filament type of full-wave, high-vacuum rectifier having a maximum peak inverse voltage rating of 2800 volts, a peak plate current rating of 650 milliamperes, and a maximum d-c output current rating of 175 milliamperes when a choke-input type of

filter is used. The 5R4-GY has a micanol base.

The 6AG5 is a heater-cathode type of r-f pentode with a sharp cut-off characteristic and a high value of transconductance. Having Miniature construction, the 6AG5 is useful in compact, light-weight equipment as an r-f amplifier up to about 400 megacycles, and as a high-frequency intermediate amplifier. It has low input and low output capacitance.

The 6J6 is a Miniature twin triode having two grids and two plates with a common cathode indirectly heated. The twin units may be operated in parallel or in push-pull. With push-pull arrangement of the grids, and with the plates in parallel, the 6J6 is particularly useful as a mixer at frequencies as high as 600 megacycles. It is also useful as an oscillator.

The 934 is a small high-vacuum phototube intended primarily for use in sound and facsimile equipment but it is also suitable for light-operated relays and light-measuring equipment. Its S4 photo-surface has exceptionally high response to blue and blue-green radiation and negligible response to red radiation.

The 935 is a high-vacuum phototube possessing extraordinarily high sensitivity to radiant energy rich in blue and near ultraviolet and will respond in the region down to about 2000 Angstrom units. Because of its excellent stability, consistency of spectral response, and extremely high sensitivity, the 935 is particularly suited for use in measuring

ultraviolet absorption of gases and liquids.

RCA is also making available to equipment manufacturers the following new cathode-ray tubes for use in connection with WPB rated orders. One of these tubes—the 3BP1—is equipped with the new DIHEPTAL base which permits wide separation of the low-voltage pins from the high-voltage pins.

RCA-3BP1 is a 3-inch, high-vacuum, cathode-ray tube having electrostatic deflection, electrostatic focusing, green fluorescence, and medium persistence. It has a 2-inch diameter bulb neck, separate leads to all deflecting electrodes and the cathode, and an overall length of about 10 inches. All leads terminate in the Diheptal base.

RCA-3EP1/1806-P1 is a high-vacuum tube similar to the 3BP1. It has the same ratings as the 3BP1 but a different bulb with 1 3/8 inch diameter neck and a magnal base. Separate leads to all deflecting electrodes are provided, but the cathode is connected to the heater within the tube.

RCA-7CP1/1811-P1 is a short 7-inch, high-vacuum, cathode-ray tube having magnetic deflection, electrostatic focusing, green fluorescence, and medium persistence. It has a 1 3/8 inch diameter bulb neck and an overall length of about 13 1/2 inches. Except for anode No. 2 which is connected to a snap terminal on the side of the bulb, the other electrodes, including the cathode, all have separate leads terminating in an octal base.

"The Story of Hazel Wimmer"

(Continued from Page Ninety-one)

wild when he saw Miss Wimmer. It seems that Mr. Crunch is President of the Pep Pill Co. They specialize in Vitamine B Pills.

Well . . . Mr. Crunch took one look at Miss Wimmer . . . He noticed her run down condition . . . this condition being a direct result of the two days she spent out in our lobby.

They are signing the contract now. Mr. Crunch says they'll make a million dollars building Miss Wimmer up.

Thesaurus looks disappointed. The announcer's looks are blank.

Take it away New York!

Ladies and Gentlemen . . . That's a typical success story. We knew Miss Wimmer would come through. We take this opportunity of thanking the Brecksville owners of the stage. O.B.T.'s for the use of their circuits. KNOB's lobby, the announcer and engineer. The author of "Hark! Who Shot?" And the owners of the paper mill for making this magazine possible.

. . . The End . . .



You can write this ad . . .

Set down, if you will, all the qualities you would like in an instantaneous recording blank . . . Make no compromise with quality . . .

We have an idea that you will find these exact things in the

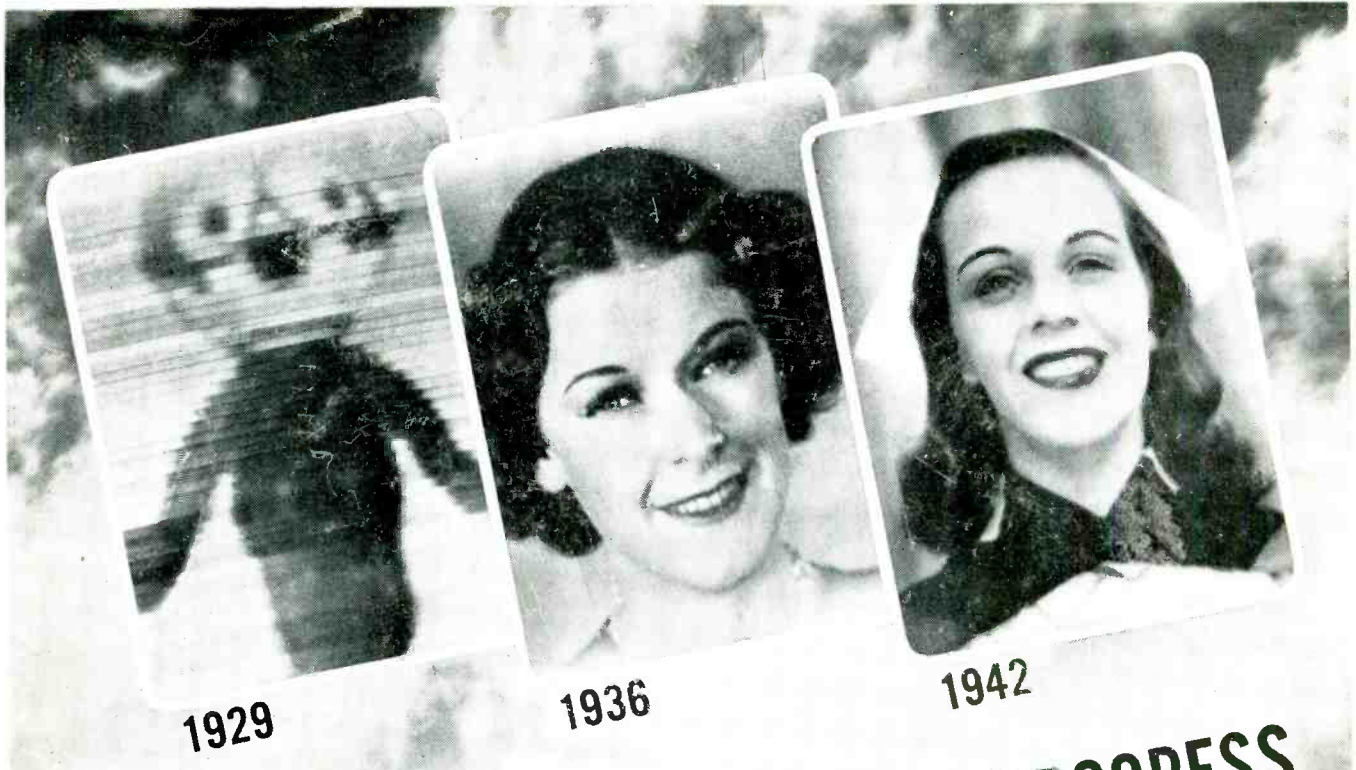
ADVANCE GLASS BASE
Instantaneous Recording Blanks

Advance Recording Products Co.

36-12 34th Street

STillwell 4-7837

Long Island City, N. Y.



1929

1936

1942

Unretouched pictures
photographed directly
from RCA television
receiver screens.

FROM TELEVISION'S ALBUM OF PROGRESS

Felix the Cat had a bewildered look on his face in 1929 when he swung around for hours on a phonograph turntable in front of television's early scanning disks. Felix's image was slashed into 60 horizontal lines—60 streaks of light and shade. Engineers of RCA watched the antics of Felix as he was tossed through space to receiving screens. They realized that all streaks and flicker must be removed.

Scientists of RCA Laboratories abandoned mechanical scanners and developed an all-electronic system of television, featuring the Iconoscope and Kinescope, electronic "eyes" of the radio camera and the receiving set. Motors and high-speed disks were eliminated both at transmitter and receiver. Electronic television became as quiet and fool-proof in operation as a home radio set.

By 1936, the number of lines per picture had been increased to 343, with marked improvement in quality. But the research men still were not satisfied. They

continued to experiment, and to develop new equipment, for finer pictures of 441 lines. Before Pearl Harbor, 525-line television pictures were on the air from the NBC station atop the Empire State Building.

The streaks had vanished. Television at last had the texture of rotogravure. Now, faces and scenes are photographed directly from television screens without betraying the presence of scanning lines.

Brought to life by electronic tubes, and given wing by radio, television emerged from RCA Laboratories to reveal its practical usefulness. Today, knowledge gained from years of television research is contributing vitally to the war effort.

Recognizing the importance of television as a post-war industry and useful public service,

RCA is continually pioneering in the science of radio sight. Television's album of progress has only begun.



RCA LABORATORIES

A Service of Radio Corporation of America. RCA Building. New York

PIONEER IN RADIO, ELECTRONICS, TELEVISION

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