THE PACIFIC COAST PROGRAM
AND TECHNICAL MONTHLY

CHARLES W. HAMP
Columbia Broadcasting System

January, 1931
Price 25 Cents
WE PAUSE TO REFLECT

As Christmas draws nigh on the many things that justify feelings of gratitude and joy during the Holiday Season.

Our very satisfactory Crosley radio business this season is due to a combination of superlative merchandise at amazingly low prices and to a host of boosters—both dealers and users—we are thankful and we wish you all

A Merry Christmas
and
A Happy New Year

KIERULFF & RAVENSCROFT
RADIO EQUIPMENT

135-139 West 17th Street
LOS ANGELES

121-131 Ninth Street
SAN FRANCISCO

Ask us about Auto and Motor Boat Radios
When You Buy A Bosch Radio for Christmas

Without the "sound and fury" of glowing catchwords and intricate technical terms, there are certain tests which determine modern radio---tests which anyone can make.

HERE THEY ARE:

- Holding distance programs steady in volume and getting away from annoying fading.
- Eliminating static racket, fizz and sputter, or cutting it down below the music level.
- Bringing in perfect programs within ten kilocycles of each other on the dial. (Ten kilocycles is marked by each of the small black lines on the tuning dial.)
- Complete and easy control of tone, without any sacrifice of tonal quality or fidelity of reproduction.
- Automatically controlled volume from station to station.
- Advanced design, which makes a radio modern for years to come.
- Beauty of console to properly fit into any home furnishings.
- No tone of its own, but faithful reproduction.
- PLUS—protected investment, safe from irresponsible price fluctuations, and safeguarded by a strong and reputable manufacturer.

BOSCH RADIO MEETS THESE TESTS 100%! And brings you a dozen more improvements and added satisfactions. We suggest you make these tests. And don't you be satisfied with less than Bosch Radio performance!
THE NEW
SUPER ANGELUS
WITH TONE CONTROL

Licensed under
RCA
HAZELTINE
and
LA TOUR
Patents

MODEL 70A . . $69.50 Complete with Tubes
Illuminated Vernier Dial
Magnavox Dynamic Speaker

"YOU CANNOT BUY MORE QUALITY"

MFD. BY DAVISON-HAYNES MFG. CO.
717 So. Mateo St. Los Angeles, Calif. Phone TR 1072

Distributed By
Southern California
LISTENWALTER & GOUGH
819 East First Street
Los Angeles
Washington
SEATTLE HARDWARE CO.
Seattle, Wash.

Northern California
KAEMPER-BARRETT CORP.
871 Folsom Street
San Francisco
Oregon
CRONIN DISTRIBUTING CO.
Portland, Ore.

7 Tubes
3 Screen Grid, Fully Shielded
January, 1931

Features In This Issue

We Applaud.......................................................... 15
For Your Entertainment.............................................. 16
KFRC’s Two Ednas...................................................... 17
On Your Right, Ladies and Gentlemen . . . By Jose Rodriguez... 18-19
Folgeria........................................................................ 20
Variety......................................................................... 21
With the Commission.................................................... 22
Anent Television......................................................... 23
DX Prize Contests......................................................... 24-25
‘Round the World DX Club . . . By Edward Roth................. 25
‘Round the Dial............................................................. 26
A 50,000 Watt Broadcast Station . . . By E. H. Schreiber...... 27
The Super-Heterodyne . . . By K. G. Ormiston.................... 28
Just a Few Rambling Thoughts . . . By Ted Osborne.......... 29
Classified Programs..................................................... 30-34
Chain Programs for January........................................... 35-39
On Radio Row............................................................. 42
Radio Goings on Around Town...................................... 43
Looking Backward with R. B. Yale.................................. 44
As I Was Saying........................................................ 45

National Broadcasting Company, Inc.
711 Fifth Avenue, New York, N. Y.

Now Is the Time

BUSINESS lethargy has forced prices to unbelievably low limits during the current year. Every indication, supported by reliable analyses made by those who have no reason to be artificially optimistic, pronounces this to be the greatest bargain time since long before "the good old days." The dollar has nearly 50% more buying value than a year ago. Amazing bargains are on every hand. And commodities are available that are lastingly useful at the prices which will not again be in vogue for many a year. It makes it worth while to disturb some of those savings with which the banks are glutted and buy more this winter. The yield will, in view of the certain raise in prices within the year, be many times higher than ordinary savings interest rates, particularly in the face of a prospective cut in interest on the part of banks if the present tremendous volume of savings continue. It is common knowledge that savings are swollen by $250,000,000 over last year and the American Bankers’ Association gives even a higher figure.

The picture of the consumer’s purchase stimulating retailing, distribution, production and finally his own income is an old one. But the truth and sound logic of it remains. One of the most stable, bargain-priced articles that will furnish pleasure through bad times and good is a radio set. They will never cost you less. And they have not been developed to a higher degree of performance than right now. There are still twenty million families in America without receivers and it is essentially worth the while of those who can possibly afford it to get the latest type radio at the astonishing prices prevailing now. Aside from the profitable buying policy a purchase at this time is a strong and definite step toward the return of prosperity. For prosperity must be bought. Neither talk, political parties nor the climate can bring it back. If we wait for the ordinary course of necessity to again consume normal production there will be a long wait and the prolonging of suffering.

Order that radio set today and do your bit.

Copyright, 1930, Horwood Publishing Co., Inc.


New York Office
J. W. HASTIE
155 East 42nd Street. Vanderbilt 4661

Los Angeles Office
HORWOOD PUBLISHING CO., INC.
314 E. 12th Street. WESTmore 3024

San Francisco Office
H. H. CONGER CO.
929-930 Hearst Bldg. Garfield 8990

www.americanradiohistory.com
KITS OR PARTS
RECEIVING AND TRANSMITTING
Always a Complete Stock

Alco Loops
Acme Apparatus
Acme Wire
Advance Crystals
Aerovox Wireless Products
American Beauty Irons
Amertran Products
Anperites
Amisco Condensers
Bear Grip Ground Clamps
Birnbach Products
Bodine Loops
Branston Honeycomb Coils
Carborundum Products
Cardwell Condensers
Carter Products
CeCo Tubes
C R L Resistance
Chicago Kester Solder
Clarostats
Corning Pyrex Insulators
Daven Radio Parts
DeJur Rheostats
DeLuxe Products
Dictograph Units
Dubilier Condenser Corp.
Dudlo Mfg. Co. Wire
Dunham Loops
Dunton Solder
Eby Binding Posts
Ekko Ground Clamps
Electrad Products
Elkon Chargers
Formica Insulation Co.
Franco Batteries
Frost Products
Goodrich Rubber Panels
Gosilco Wire
Hammarlund Products
Hedgehog Transformers
H-K Sodderdipt Lugs
Jefferson Products
Karas Products
Kellogg Parts
Kersten Horns
Knapp Power Units
Kodel Products
Kurz-Kasch Dials
Kuprox Chargers
Lynch Leaks
Magnavox Dynamics
Marco Products
Master Voltage Controls
Mershon Condensers
Mueller Universal Clips
Naald Parts
National Soldering Irons
National Tubes
National Co. Parts
Parvoit Condensers
Phonovox Pickups
Pilot Kits
Polymet Condensers
Preston DX Ground
Racon Horns
Radio Owls
Ray-O-Vac Batteries
Raytheon Tubes
Readrite Meters
Recto Bulbs
REL Apparatus
Remler Products
Samson Transformers
Sangamo Condensers
Sensory Insulators
Skindervicken Buttons
Silver Marshall Products
Spaulding Bakelite
Sprague Condensers
Steinite Eliminators
Sterling Testers
Super Ball Testers
Sunset Aerials
Sunset Grounds
Supreme Instruments
Sylvania Tubes
Thordarson Transformers
Tobend Condensers
Tom Mack Products
Universal Battery Clips
Universal Microphones
Utah Units
Ward-Leonard Products
Weston Meters
X. L. Variodensers
Yaxley Products

AMATEURS NOTE
We carry EVERYTHING FOR THE AMATEUR — shortwave kits, transmitter parts of all kinds, anything that the "Ham" will want for his outfit.

Kits, keys, transformers, chokes, relays, tubes, resistors, condensers and hundreds of parts of special interest to amateurs will be found in the AMATEUR HEADQUARTERS OF THE WEST.

AMATEUR RADIO STATION W6FBI located in our building at present. You are invited to come in and look it over.

RADIO SUPPLY COMPANY
H. A. DEMAREST, President
912-914 S. Broadway
VA 3170-3178-3179
Los Angeles
WHOLESALE
Largest Radio Parts Jobber West of Chicago
SEND FOR THE NEW 1930-31 CATALOG

www.americanradiohistory.com
TIFFANY = TONE

MIDGET Combination

RADIO- PHONOGRAPH

Use it either as a straight radio — or play your own records electrically through the set.

Fine for Dancing, Porch or Outdoor Parties. Enjoy those special records which you prize.

Beautiful in Design — Cabinet walnut with maple overlay.


Phonograph Motor, electric induction type, noiseless, 50-60 cycle, 110 volt, positive speed regulation.

Pacent Electric Pick-up — new style, with velvet smooth volume control.

9950

THE BIGGEST VALUE EVER OFFERED

We also call attention to our amazing value in our

MANTEL TYPE

TIFFANY = TONE RADIO

HERBERT H. HORN
RADIO MANUFACTURING CO.
1623-28 NO. HILL ST.
Los Angeles, Calif.
U. S. A.

$59.50

COMPLETE WITH TUBES
TONE CONTROL
4 SCREEN GRID
Electro DYNAMIC SPEAKER
EVERY LEADING RADIO MANUFACTURER REPRESENTED in our COMPLETE stock

TRANSMITTING EQUIPMENT
SHORTWAVE EQUIPMENT
PUBLIC ADDRESS EQUIPMENT
TUBES TRANSMITTING and RECEIVING

FREE OFFICIAL RADIO LOG SHEETS
In Handsome Loose Leaf PERMANENT BINDER

OR IF YOU ARE AN "OUT-OF-TOWN" "HAM" JUST SEND US YOUR,
QSL CARD AT ONCE!
BEFORE THE SUPPLY IS EXHAUSTED and We will gladly MAIL it to you.

MAIL ORDERS FILLED SAME DAY RECEIVED

DEALERS BUSINESS SOLICITED

INSIDE PARKING FREE TO OUR PATRONS

RADIO MANUFACTURERS SUPPLY CO.
1000 So. Broadway
CORNER 10TH ST.,"THE FAMOUS RADIO CORNER"
LOS ANGELES

INSIDE PARKING FREE TO OUR PATRONS
Newest, Practical, Approved—Volume Controls

SATISFACTORY, LASTING PERFORMANCE means continued sale of ANY Product

1. Show us the set that develops a noisy volume control and we’ll show you a declining line on the “sales chart.”

2. Good volume controls perform three major operations—Eby builds them to cover not only these three but adds a Final Seal of Satisfaction.

3. Durable, sealed and lubricated. Ceramic core with full soldered internal connections. Zero hop-off due to copper plated resistance strips soldered to contact point.

4. They are Rugged. They will Wear. They are built to low capacitance coupling and finally—they are NOISELESS and—REMAIN NOISELESS.

Western Representative
W. C. HITT
1984 SUNSET BLVD.
LOS ANGELES CALIFORNIA

The H. H. EBY Manufacturing Co.
Makers of Quality Products
PHILADELPHIA, PA.
Falck announces a new, genuine, fully licensed Super-Heterodyne

For years the radio trade has looked on Super-heterodyne as the "Rolls-Royce" of radio reception. Now Falck announces a genuine, fully licensed screen grid Super-heterodyne . . at a popular price. For selectivity, tone quality, and distance getting ability no radio in this price field approaches the new Falck 98.

DEALERS:
Due to the tremendous interest occasioned by the introduction of this model, to insure delivery, dealers are advised to place advance orders with your nearest Falck distributor.

Mfd. by Advance Electric Co., Los Angeles, Est. 1915
World Famous Radio Receivers

Console Quality
in a Midget Broadcast Receiver
You Can Place Anywhere

PILOT MIDGET
This attractive two-tone walnut miniature
A.C. receiver has proved the equal of high
priced consoles in many locations
throughout the country. Because—it em-
body’s console features; 2-224 Screen
Grid stages, 1-224 Screen Grid Power
detector, 1-227 Audio stage, 1-245
Power Audio output stage and specially
designed electro dynamic speaker. A super
powered 280 voltage supply gives trouble-
free operation from any 110-20 volt house
current line.

Pilotron tubes are standard equipment
because Pilot retailers know none are
more reliable.

PRICE
Complete in
Modernistic
Cabinet
$59.50

For World-Wide
Radio Reception
Short and Long Waves, 14 to 500 Meters

PILOT Super-Wasp
Rev. J. W. Nilson, Balanque, Congo-Belle Africa
says: “Here in the heart of Africa I have received
9LO, JB, 2BL, 5NR, AKF, PCJ, WGR (2XAF),
WRNY (2XAL) and more stations on loud speaker
with my Pilot Super-Wasp.”

David W. J. Jones, Brisbane, Australia says: “I
have received on my Super-Wasp all the test
transmissions between 2XAF (Schenectady, U. S. A.)
and VK2ME (Sydney NSW), Aero, ICT Holland,
G8SW England and Sydney—London phone
service.”

Austin R. Baldwin, St. Raphael (Far.) France.
says: “I heard from KDKA 25.1 meters,
and now rebroadcast a concert from London.” Shortly
after the music from London came in clearly,
having twice crossed the Atlantic.”

Pilot Super-Wasp Comes in KIT FORM
which can be assembled in a few hours

BATTERY SET KIT
$29.50
Kit K-110: The bat-
tery-operated Super-
Wasp. Batteries and
Tubes extra.

A.C. SET KIT
$34.50
Kit K-111: The A.C. Super-
Wasp. Use your own A.C.
pair or Pilot K-111 spe-
ically designed for the
Super-Wasp. Power Pack
and Tubes extra.

PILOT RADIO
At Dealers Everywhere or Write to
PILOT RADIO & TUBE CORPORATION
LAWRENCE, MASS.
Chicago Office: 231 S. Wells Street
New York Office: 325 Broadway
OFFICES IN PRINCIPAL COUNTRIES OF THE WORLD
San Francisco Office: 1278 Mission Street

www.americanradiohistory.com
Always in the van—the trend toward the "midget" was foreseen in Polymet laboratories long before the demand for "midget" parts. Polymet engineers have produced unhurried, efficient, amply-tested essentials for wide-spread incorporation in these "pony" models. These parts measure up in every particular, except size, with standard Polymet Products—more cannot be said.

Polymet's prompt deliveries—from three large factories—help speed the production schedules of most leading receiver manufacturers.

Catalogs on request.

Polymet Manufacturing Corporation
District Representative
THE SPECTOR COMPANY
RIALTO BUILDING, SAN FRANCISCO
Three pickups that are leaders in their field

With the perfection of three new Pacent Phonovoxes, both radio and phonograph dealers have a remarkable opportunity to increase sales.

More than half the new radio sets are now equipped with jacks to hook up phonograph pick-ups. An electric pick-up bearing the name "Pacent" is your guarantee that there is nothing better.

CATALOG No. 107
THE NEW MASTER PHONOVOX
(Illustrated above)
Contains 12 features that make it the greatest value in pick-ups today. List Price $15.00

CATALOG No. 107 SPECIAL
SPECIAL HI-OUTPUT MASTER PHONOVOX
Gives the highest degree of output with extraordinary tone quality of any electric pick-up on the market.

CATALOG No. 108B
THE NEW OIL-DAMPED PHONOVOX
(Illustrated above)
This Phonovox provides the finest reproduction available for talking "movies" and broadcast station work. Adjustable needle pressure. Absolutely no rubber. Freezing is impossible. List Price $25.00

All prices slightly higher West of the Rockies and in Canada

Pacent Electric Co., Inc., 91 Seventh Ave., New York, N. Y.
The Biggest Sales Making Idea the Tube Business Ever Saw!

The New **Sylvania** Dealer Plan

**RADIO TUBES**

We believe this to be the smartest promotion ever got out. And the very first time in radio history radio received personal merchandising help. Until we started out with your plan our men were as enthusiastic and all building business with it. They have waited for a long time for a plan which would really help sell radio tubes. And now we have the new Sylvania Merchandising Plan is something that just a

Ask Today!

Sylvania Products Company
Emporium, Penna.

I'd like to know more about your new Merchandising Plan.

NAME ______________________________

Address ______________________________

City ________________________ State __________

REG. U.S. PAT. OFF.
BECAUSE: Boris Karmarenko was born in that section of China, controlled by Russia, called Manchuria; because in 1925 he came to America and then to Hollywood where he organized his balalaika orchestra consisting of several musicians from Manchuria who played with him in a famous Siberian Orchestra: because, not only do the Karmarenko entertainers play Russian music, but American fox trots and Spanish music as well; and most of all, because they entertain over the eight members of the United Broadcasting Company every Thursday at 7 p.m.
FOR YOUR ENTERTAINMENT

Charles W. Hamp is home again, and at a salary which has eclipsed every other radio star on the air. It is rumored that for doing his act, Charlie will be rewarded with a salary of $150,000 a year by the same sponsor who started him out on his meteoric rise to fame and fortune. KHJ will release Mr. Hamp's program to the Columbia Broadcasting System beginning January 2nd. (See page 29 for daily schedule.)

Opening for the second time with two weekly courses, the Pacific Coast School of the Air will be resumed through the facilities of the National Broadcasting Company on Monday, January 5th. The NBC is firm in its belief that there is a definite need for educational broadcasts of this type to supplement the courses included in the regular school curricula. KGO, KOMO, KGW, KPO, KFI, KFSD, KTAR, KHQ will carry the program.

Another Charlie is back in his home alley and his last name's Wellman. "Thirty minutes of mellowed melody," popularized on the coast by Charlie Hamp, is conducted by Wellman every day in the week except Saturday and Sunday over KNX and KHJ. At the Don Lee station, the schedule is Tuesday and Thursday at 10:30 and over on the Paramount lot, Charlie dispenses cheer at 9:30 a.m. Monday, Wednesday and Friday.

Capt. Edward Molyneux, leading French couturier, will speak to the women of America direct from his atelier in Paris during an international broadcast on the evening of February 6 next. This will be the first time Paris fashion hints have ever been broadcast from Paris to America and the first commercial broadcast from the French capital to be heard here. Mrs. Edna Woolman Chase, editor-in-chief of Vogue magazine; Michel de Brunhoff, editor of the French magazine Vogue, and a French orchestra will contribute to the remainder of the half-hour broadcast. Capt. Molyneux speaks excellent English. He will go on the air at 3 a.m., Saturday, February 7 (Paris time), and will be heard at 7 p.m. (Pacific time), through CBS coast stations.

Over at KFI-KECA, we picked up quite a bit of news. Remember Harold Isbell who used to announce for KNX? Well he developed the home-coming instinct so popular this month and is now established at KFI-KECA. Another thing, KECA has extended their schedule to thirteen hours daily, which will put them on the air at 8:30 a.m. and sign them off at 11:00 p.m. with a pause between 10:30 and 11:00 a.m. Alexander Bevani, noted operatic coach, singer and pedagog is giving lessons in Italian over KECA on Monday, Wednesday and Friday mornings at 4:00 o'clock.

Up at KHJ the Studio Editor sat on one end of the divan and on the other end sat an attractive blond collegiate looking person who, when Dick Creeden arrived to make introductions, turned out to be Miss Velva G. Darling, California girl, whose column is featured daily in more than 100 metropolitan newspapers and whose "Modern Girl Philosopher" is an added attraction to KHJ's morning program. Miss Darling is known as the "Modern Girl Philosopher," in short, her stuff is what is usually called "Advice to the Lovelorn." A few years ago, Miss Darling wrote the only column written by a girl on the student paper of Stanford University. On leaving school she plunged into the newspaper racket. She has flown across the continent with Lindbergh; has worked on murder stories; has interviewed countless celebrities; and calls herself—"a real modern girl." She explains the purpose of her broadcast: "I want to talk to girls and share their confidences. I will invite them to write to me for helpful advice and will answer their letters in my daily talks, using only the initials of their names. I will endeavor to interpret the modern girl to mothers who do not understand their daughters."

Not every radio performer can boast a dual personality that is an asset before the microphone. Stephen Gaylord, KOL's efficient Studio Director, is the possessor of a fine dramatic baritone that is heard to advantage in selections of "The Americans Come" calibre. A few steps toward the mike, a dimendendo on the accompaniment, and listeners hear a pleasing "croon" rendition of "Three Little Words" or numbers suited to that type of presentation. Not long ago, Stephen announced the program, sang several numbers and station attaches were bewildered when they were informed that there were NOT three artists, but only Gaylord at the microphone. Such versatility must be applauded!

Merry Christmas
and Prosperous New Year
to Our Readers
Exhaustive research has revealed that KFRC's two charming Ednas, Edna O'Keefe and Edna Fischer, have only one factor in common: they both are very fond of cauliflower.

Of course, they are both very lovely, very charming young ladies and both are loved for the quality of their respective artistic endeavors. This is what keeps them in their jobs. But otherwise—well, here are the statistics:

<table>
<thead>
<tr>
<th></th>
<th>Edna O'Keefe</th>
<th>Edna Fischer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>5'3&quot;</td>
<td>5'</td>
</tr>
<tr>
<td>Weight</td>
<td>115</td>
<td>117½</td>
</tr>
<tr>
<td>Eyes</td>
<td>brown</td>
<td>hazel</td>
</tr>
<tr>
<td>Hair</td>
<td>brown</td>
<td>golden red</td>
</tr>
<tr>
<td>Married</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>Athletic</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Age</td>
<td>19</td>
<td>26</td>
</tr>
<tr>
<td>Favorite Vegetable</td>
<td>Cauliflower</td>
<td>Cauliflower</td>
</tr>
</tbody>
</table>

And so you see, as you run your eye up and down the two columns, that the only thing the girls really get together on is cauliflower. I suppose we could look further and find that they are both fond of dogs and cats, both read Cosmopolitan (most women do), and very friendly, and both are crazy about football games, but why spoil a good opener for the story. You see, with cauliflower mentioned in the opening paragraph, all cooks, grocers, seed stores, men and truck gardeners may also be inveigled into reading about the girls in addition to their host of admirers.

Edna O'Keefe threw down her school books one night after a hard day at the San Francisco Girls high school and never picked them up again. She had a job on KFRC. Some of her high school chums had dared her to go up to KFRC and try out, and Edna's venturesome spirit couldn't resist. On that horror of horrors (for most candidates) the audition period, she sang "The Desert Song." Why she chose the Desert Song is still one of the mysteries surrounding her. She felt that the wildest African tiger had nothing on that still, non-committal microphone, which threatened at any moment to reach over and bite a chunk out of her right shoulder.

But even that experience was nothing compared to her first appearance on the Golden State Blue Monday Jamboree. She gave up all hope after the first note.

Edna Fischer walked calmly into the KFRC studios one noon time and played "Soliloquy," by Rube Bloom, for Helen O'Neil, the station's program director at that time, and so impressed Miss O'Neil with the quality of her work that she was engaged on the spot.

Unlike Edna O'Keefe, Edna Fischer's school had been the show business, which she had embraced at the age of 19 when she joined the Topsy and Eva show of the Duncan Sisters in San Francisco. (She was born in Oakland, the other Edna in San Francisco.) Heart trouble with a purely psychological cause was at the bottom of her desire to leave home. The show broke up shortly after acquiring Edna, but undaunted, she sold her beloved grand piano, slipped the slender roll into the pocket of her gingham dress, and departed for New York, seeking fame. If she couldn't have love she could at least have her name in lights.

(Continued on Page 25)
On Your Right, Ladies and Gentlemen

By JOSE RODRIGUEZ

Gossip, in the radio world, seems to be as necessary to our well-being as lipstick to a co-ed’s.

Perhaps it is a little unjust to specify “in the radio world,” for gossip is such a universally accepted entertainment that it wouldn’t be extravagant to paraphrase the history of mankind with the phrase “they were born, they gossiped and they died.”

Last month in Radio Doings, I indulged in some gossip that has been crowding my press-agent’s chest for months. I told readers all about several radio personalities as they appear to the candid—if sometimes bilious—eyes of a station executive. Somehow, I not only got away with it, but succeeded in passing the censor with this second itemized list of radio favorites as I see them in KFI and KECA.

So this second installment of official gossip leads off with:

Doomed to sing operettas and songs of light tenderness, he is a devout and fervent student of church music. He looks like a Hussar cadet, but composes masses and motets. Inspires women to the most motherly sentiments.

James Burroughs
Tenor

Almost white hair, lively young, lively manner. A positive danger to confidence men, burglars, defalcating bankers and impressionable movie actresses.

Nick Harris
Detective and Spell-Binder

Plump and cheerful, grown so perhaps from reading intricate scores at first sight for capricious singers. Nothing worries or perturbs her, as if indeed, what could worry or perturb anyone who accompanies Ravel songs at first sight?

Margaret Kintz-Duncan
Pianist

Thin, scholarly face, princenet glasses, spare of build. Before he opens his mouth you say to yourself “Tottenham Court road, Piccadilly, Plumstead Heath, Hounsditch, Petticoat Lane,” so completely a Londoner is he. Still young, but has traveled more than the Wandering Jew.

Tom Terriss
Raconteur (High hat for storyteller)

Small, slender, not a hair of his head out of place, not an incorrect crease in his immaculate clothing, his crayon-line mustache drawn with uncanny symmetry. Books programs with one hand, pirouettes tap-dances with both feet, holds off ten dozen artists with the other hand, and imitates Eddie Foy with the face—all at once.

Harry Hall
Assistant Program Director

Happily married to a druggist, she is an incurable match-maker. Her giggle is also incurable. Fiercely loyal to her job—singing ballads. Living in an epoch of disillusion and skepticism, she nourishes a real belief in Santa Claus, the triumph of virtue, the might of truth and the veracity of salesmen.

Helen Guest
Balladist

Tall, lanky, soft-spoken, he has the indefinable air of sharing secrets with King Oberon and Titania. (I hope you notice our erudition.)

Baron Keyes
The Story Man
January, 1931

Paul Roberts
Tenor

It's a good thing you can see the picture for yourself, or you wouldn't believe me. It's also a good thing that when she sings no one can see her, for if they could, she would be classed a burning menace to the tranquility of mankind.

Cactus Kate
Stenographer

Looks like Friar Tuck made up to act a businessman. Endless repertoire of quartet music that can and cannot be sung. The last authority on raisins and specific gravities.

Helen Clive
Soprano

Solidly routined and most versatile musician. If he wore a beard, was rude and had an accent, he would rise very high. But he is smooth shaven, cordial and genial. Looks as if he had never been foolish enough to resist temptation.

Paul Taylor
Baritone

One of the last giants of the Liszt group, he evokes something of the gracious and calm outlook on all things that distinguishes the true aristocrat. His fame and worth are so well established, that he can afford to unbend and crack roguish little jokes.

Pryor Moore
Conductor

Looks—and acts—like a heroine of Sir Walter Scott, if his heroines had had brains as well as looks. A little too stately and quiet-voiced for the approval of crooners and Flaming Youth.

George Liebling
Pianist-Composer

An insufferable prig, who thinks he knows everything and imagines himself quite a sad rip with the ladies.

Zhay Clark
Harpist

Blue mascara, orange rouge; breaks out into unexplainable little falsetto hums about Daddy and the blues, snaps her fingers and wiggles; all things are either "cute" or "goofy;" spells like Chaucer; a sweet little grasshopper — and winter coming on!

Jose Rodriguez
Writer of Editorial Review

www.americanradiohistory.com
Richard Graves fixes Zuniga, the Pirate, with a stern and glittering eye while Black and Blue, those fearless "detectives," look on with burning interest. Lurking in the background, and on the very portals of La Golandrina is Hunfredo, deep-dyed villain of Folgeria, that delightful serial comic opera of the air, which is released from KHJ to the Columbia Chain every Thursday at 9:00 p.m. Richard Graves, sterling example of young American manhood is admirably played by Kenneth Niles; Black is Charles Forsythe, KHJ's Sound Technician; Blue is none other than Len Wright, member of KHJ's Orchestra; Zuniga is Lindsay MacHarrie and Bob Swan is particularly diabolical as Hunfredo. Beginning January 5th, from 5:30 to 6:00 p.m. daily except Sunday, Black and Blue will be on the Don Lee Chain with a skit of their own. Some of the weighty problems they will settle are: Who is stealing from the warehouse of Brownstone and Parker? What is the mystery of the old flour mill? Who are the police watching? Who was the man shadowed by Black and lost in the fog? If you like thrills and mystery and menace and intrigue dished up with a lot of humor and human interest, you will not want to miss one of Black and Blue's radio adventures.
This is the low-down on why the “Happy Chappies” are happy chappies. Only three short years ago, KFRC started a little propaganda about two lads, who, it was rumored, did harmonizing as it had not previously been done. From KFRC these lads journeyed to KTAB and then decided that Southern California audiences should not be deprived of their entertainment. Soon there was a great furor over at KFI-KECA and the Happy Chappies burst on the horizon with “When the Bloom Is on the Sage,” which is still panicking audiences. Now out at KMPC, Nat Vincent and Freddie Howard, the Happy Chappies, are packing them in the studio every day with a noon-day program of harmonizing that is really excellent. Their sixty-minute program is an all request fare.

If there is anyone within KNX’s coverage that hasn’t enjoyed Bert Butterworth’s “Optimistic Do-Nuts” program, we are ashamed of them. Seven years ago the Davis Perfection Bread Company (and that’s quite a break, because we are not allowed to mention sponsors in this department) decided to pioneer radio advertising; so Mr. Butterworth went into a huddle with himself and when he emerged he had conceived the “Optimistic Do-Nuts” which holds the record for being the oldest sponsored program in western broadcasting, having had all these seven years, the same sponsor, same time, same idea, same station, etc. And five years ago there appeared Mr. Jasper Weldon, otherwise Windy Whitewash, who came out of the east to sing a most amazing bass along with the other entertainers. Whitewash traveled on the Butterfield circuit (no relation of Bert’s) as a member of a male quartet and, perhaps, that’s where he perfected such bass voice classics as “When the Bells in the Light-House Ring Ding Dong,” “Asleep in the Deep,” and “Old Black Joe.” During the day Mr. Weldon is employed by a local furniture store and every Friday night at 8:00 o’clock finds him busily managing the male quartet and performing with the “Optimistic Do-Nuts.”

Wesley Tourtelotte...KNX

Wesley B. Tourtelotte, after a short vacation, returned to devotees of organ music on a recent Sunday evening and will be heard every night except Sunday from 7:00 to 7:30 o’clock.

Mr. Tourtelotte has had an interesting career. He was first started on the piano at the tender age of six years, and he continued his lessons during his school days at Hartford, and Middletown, Connecticut. When he later went to the University of Pennsylvania to study mechanical engineering, he continued his piano study and broadened out to also master the pipe organ with the well-known Ralph Kinder, organist of the Holy Trinity church in Philadelphia.

It was while so employed that he joined the Air Service in Springfield, Mass., and was promptly sent to Arcadia Balloon School in California. When the war ended, Mr. Tourtelotte lent his engineering talents to one of the big local oil companies.

During all this time, he had hammering at the back of his brain, his desire for musical expression. He got in touch with one of the local broadcasting companies and originated the first midnight organ concerts, about two and one-half years ago.

From Mr. Tourtelotte’s first radio broadcast, his fame has grown until today he is one of the best known and best liked organists on the air, and KNX feels fortunate in being able to broadcast the new series of Tourtelotte organ concerts.

The Happy Chappies...KMPC

The Happy Chappies add another interest and apparently the requestees can’t get them too old or obscure for the boys. Nat Vincent, peering over Fred Howard’s shoulder, plays one of the meanest “by ear” pianos in these parts and Fred Howard writes lyrics and tenorizes with Nat’s baritone. These lads have won a secure place in the hearts of shut-ins as well as other listeners by their happy spontaneous and obliging manner. If you aren’t Happy Chappies addicts, better tune in KMPC any noon and fall under their spell. And if this phenomenal success isn’t something to be happy about, we don’t know about happiness.

Jasper Weldon...KNX
WITH THE COMMISSION

Twenty Stations on Probation

Pending further investigation of charges of irregularities, twenty broadcast stations, cited for alleged violations of regulations, were granted extensions of licenses until December 31st by the Federal Radio Commission. Two of these stations are on the Pacific Coast: KMPC of Beverly Hills, Calif., and KEPS of Portland, Ore. KGAR, Tucson, Arizona, also is on probation, and the examiners have definitely recommended that this station be refused further renewal on December 31.

** KJR Wins Fight for Channel

The KJR-KOMO-KVI controversy which has been waging for some time in the Northwest, has been finally settled by the Federal Radio Commission. It will be remembered that Judge Sykes held court in Seattle last June in this case. Under the decision announced December 12th, KJR will remain on 970 kilocycles and has been granted permission to install on RCA 5000 watt transmitter. The application of KOMO for 15,000 watts on 970 kilocycles was denied, and this station will remain on 920 kilocycles.

** Lafount Opposes Channels for Education Only

The apportionment of certain hours on commercial broadcasting stations for educational purposes under the direction of the Federal government would be preferable to the setting aside of 15 per cent of the channels for educational stations in the opinion of Radio Commissioner Harold A. Lafount.

"If every station, including the great nation-wide networks, were required to contribute an hour and fifteen minutes each day, the demands of education might be cared for admirably and nation-wide coverage guaranteed," he said.

The assignment of 15 per cent of the broadcasting channels to education would be unwise economically and technically, he believes. This plan, he said, would not cover the nation as effectively as the scheme he proposes.

Moreover, the granting of certain channels to educational interests would bring similar demands from other groups and organizations.

** More Equalization Plans Advanced

The Federal Radio Commissioners are unanimously agreed that something should be done about the unequal distribution of broadcasting facilities, but they are at a loss as to which of the three plans proposed by themselves should be adopted.

Maj. Gen. Charles McK. Saltzman, chairman, and Judge E. O. Sykes have come forward with suggestions following proposals by Judge Ira E. Robinson, former chairman, and Commissioner William D. L. Starbuck. Judge Sykes' plan is, in fact, an indorsement of the scheme offered by Judge Robinson, while Commissioner Harold A. Lafount has approved Chairman Saltzman's idea.

The line-up is, therefore, two against two with Starbuck sponsoring an independent plan. Unless the commissioners are playing politics, as some of their critics charge, it is likely that a compromise proposal will be adopted.

General Saltzman's suggestion, in brief, is to reduce gradually the "unfit and unworthy" broadcasting stations in the 24 states that are over-quota and at the same time increase the facilities of states that are under-quota.

This plan, he believes, will bring about a more equitable distribution of stations, hours, and power "with a minimum of violence or inconvenience to worthy stations now existing." The unfit stations would be eliminated, he suggests, by a strict enforcement of all rules and regulations of the commission.

Judge Sykes not only indorses Judge Robinson's plan for increasing the facilities in under-quota states, but also recommends the withdrawal of stations from over-quota states "because of interference which would be created by allocating to under-quota states their quota."

He proposes that the Engineering Division of the commission make a thorough study of the broadcasting set-up and prepare a schedule of equal distribution of facilities according to population and area for submission to the commission.

Commissioner Starbuck's plan provides for a gradual equalization, first among the Five Zones and then among the respective states. Proper applications from under-quota areas would be accepted, while the over-quota sections would be slowly reduced by mortality.

** White Would Kill Third of Stations

Representative Wallace H. White, of Lewiston, Maine, who, after this session of Congress will move to the Senate, returned to the third session of the Seventy-first Congress with blood in his eye for the Federal Radio Commission.

Hardly had the legislative bodies had time to get settled before he introduced a resolution calling for a survey of all broadcasting stations with a view of eliminating from one-third to one-half of them. The proposal was referred to the house committee on Merchant Marine and Fisheries, of which he is chairman.

Giving as his reason for the action that several members of the committee felt that there are too many radio stations, Mr. White criticized the Radio Commission for adding to, rather than reducing, the number of such stations.

"Under the original act, it was the belief of the committee that it would give the Federal Radio Commission a chance to cut down the number of radio stations," he said, "but since that time there has been no decrease."

"In fact, even where a radio station has 'died,' the Radio Commission has not taken advantage of the opportunity to keep a station off the air but instead has issued licenses to fill the gaps."

The "excuse" of the commission that it is "not certain of its power" and consequently is afraid to drive stations off the air, is "not well founded," Mr. White asserted.

"There should be a reduction of from one-third to one-half of the number of stations," he concluded.

** Advertising Aroused Commissioner's Wrath

On the warpath on the subject of too much advertising in the air, Commissioner Ira E. Robinson declared:

"Advertising over the radio can be accomplished without disguising the public, but assuredly it is not so now. If the present overdose continues, no returns from advertising by radio will be received. The method is simply killing the goose that lays the golden egg."

Judge Robinson cited the case of a station in Argentina that was barred from the air for eight days because it was broadcasting more than 250 words of advertising between successive numbers.
ANENT TELEVISION

Commercial television is either several years in the future or else just around the corner, and the odds are on the former.

Just when the foremost industrial engineers in the field and Dr. C. B. Jolliffe, chief engineer of the Federal Radio Commission, had decided that visual broadcasting is still in the experimental stage and is likely so to remain for some time, a 24-year-old radio engineer, backed by his attorney, threw a mild bombshell into a conference on television by announcing that he had developed a tube that will make commercial television possible at once.

The youth, whom his attorney called "one of the ten mathematical wizards of the age," is Philo T. Farnsworth, technical head of the Television Laboratories, San Francisco, Calif. Together with his attorney, Donald K. Lippincott, he was in Washington to attend the conference of television engineers called by Dr. Jolliffe although as yet he has obtained no license to operate even an experimental visual broadcasting station.

This young man was not greeted with wild acclaim either by the industrial or the commission engineers. Instead, his announcement was met with apparent skepticism. The suggestion of his counsel that the commission not provide such a wide band for television experiments as now thought necessary, on the ground that Farnsworth's invention enables a television station to transmit images on a band no wider than the radio broadcast, was immediately quashed.

The Farnsworth system employs a cathode ray tube in which the electron stream is deflected by means of a moving magnetic field. The scanning disk and the accompanying mechanical devices are thus eliminated. Very successful demonstrations have been made in San Francisco for some months past. Dr. Vladmir Zworykin of the RCA Victor Company has been working along the same lines with equal success. Without doubt the Farnsworth system is the most practical and at the same time the most successful method yet developed. In conjunction with a receiver such as the Stenode Radiostat of Dr. Robinson's, the Farnsworth system overcomes the two serious obstacles which have confronted radio television. Namely the motor and scanning arrangement which is not acceptable to the public, and the necessity of employing a very wide band of frequencies for transmission. Robinson's receiver (described elsewhere in this issue) permits of the reception of a wide range of modulation frequencies in a very narrow receiver channel.—Tech. Ed.

Following the conference, Commissioner Harold A. Lafount said that the commission would accept the youthful inventor's offer to demonstrate his tube, probably within the next fortnight.

If this demonstration convinces the Radio Commissioners, Farnsworth will likely be granted the application he plans to file for the erection of a station in New York City. If not, his experiments will doubtless be confined to his laboratory for some time.

There was a great deal of mystery about "the revolutionary tube development," and that probably explained much of the antagonism that rebuffed it. A great many assertions about it were made and several written testimonials were offered, but no actual proof of its worth was presented.

After the conference, C. W. Horn, chief engineer of the National Broadcasting Company, expressed the belief that television would not be ready to provide public entertainment for several years.

"Only when it can compete with the talking motion picture can we hope to attain any success with television," he said. "And that is still far off. While we have made great strides in the art during the last two years, we are still far short of the perfection of the motion picture film."

Farnsworth contends that he is able to transmit a television image of 300 lines with far more details than those of 40, 50 and 60 lines now broadcast experimentally by other engineers.

By narrowing the wave bands to 10 kilocycles, whereas television now requires 100 kilocycles, he has increased the sensitivity of his transmitter to a point that direct television pick-up is possible, he said. This would adapt the system for use in visual broadcasting of football games and other sport events.

At the outset of the conference, Dr. Jolliffe announced that the engineers were called only to work out methods of reducing interference between experimental television stations, to determine the progress of the art, to study means of combining visual and voice transmission, and to ascertain what channels are best adapted for television.

Leading radio and television scientists of the nation participated in the parley. Virtually all agreed that they were not ready for commercial visual broadcasting.

* * *

Television Stations Reallocated

The Federal Radio Commission this week adopted the recommendation of the recent television engineering conference regarding the reallocation of the assignments of the 19 experimental stations so as to afford greater geographical separations and eliminate interference on the short wave channels.

Other proposals of the conference are now being considered by the Engineering Division of the commission and will probably be likewise recommended for approval within the next week or so.

This realignment of visual broadcasting stations is expected to aid in the experiments and to hasten the day when the art will be ready for public entertainment on a commercial scale.

The new reallocation went into effect on December 15th. The assignments are as follows:

<table>
<thead>
<tr>
<th>Callsign</th>
<th>Frequency</th>
<th>City, State</th>
</tr>
</thead>
<tbody>
<tr>
<td>W3XK</td>
<td>2,100-2,100 Kc</td>
<td>Wheaton, Md.</td>
</tr>
<tr>
<td>W2XCR</td>
<td>2,000-3,000 Kc</td>
<td>Jersey City, N. J.</td>
</tr>
<tr>
<td>W2XAP</td>
<td>2,000-3,000 Kc</td>
<td>Portable</td>
</tr>
<tr>
<td>W2XCD</td>
<td>2,000-3,000 Kc</td>
<td>Passaic, N. J.</td>
</tr>
<tr>
<td>W9XAO</td>
<td>2,000-3,000 Kc</td>
<td>Chicago, Ill.</td>
</tr>
<tr>
<td>W2XBU</td>
<td>2,000-3,000 Kc</td>
<td>Near Beacon, N. Y.</td>
</tr>
<tr>
<td>W3XAK</td>
<td>2,000-3,000 Kc</td>
<td>Bound Brook, N. J.</td>
</tr>
<tr>
<td>W3XAD</td>
<td>2,000-3,000 Kc</td>
<td>Camden, N. J.</td>
</tr>
<tr>
<td>W2XBS</td>
<td>2,000-3,000 Kc</td>
<td>New York, N. Y.</td>
</tr>
<tr>
<td>W2XCW</td>
<td>2,000-3,000 Kc</td>
<td>South Schenectady, N. Y.</td>
</tr>
<tr>
<td>W8XAV</td>
<td>2,000-3,000 Kc</td>
<td>East Pittsburgh, Pa.</td>
</tr>
<tr>
<td>W9XAP</td>
<td>2,000-3,000 Kc</td>
<td>Chicago, Ill.</td>
</tr>
<tr>
<td>W2XR</td>
<td>2,000-3,000 Kc</td>
<td>Long Island City, N. Y.</td>
</tr>
<tr>
<td>W2XBO</td>
<td>2,000-3,000 Kc</td>
<td>Long Island City, N. Y.</td>
</tr>
<tr>
<td>W9XAA</td>
<td>2,000-3,000 Kc</td>
<td>Chicago, Ill.</td>
</tr>
<tr>
<td>W9XG</td>
<td>2,000-3,000 Kc</td>
<td>West Lafayette, Ind.</td>
</tr>
<tr>
<td>W1XAV</td>
<td>2,000-3,000 Kc</td>
<td>Boston, Mass.</td>
</tr>
<tr>
<td>W2XK</td>
<td>2,000-3,000 Kc</td>
<td>Long Island City, N. Y.</td>
</tr>
<tr>
<td>W9XR</td>
<td>2,000-3,000 Kc</td>
<td>Downers Grove, Ill.</td>
</tr>
</tbody>
</table>
RESULTS OF DECEMBER CONTEST

The night of December 13th was not particularly good for DX. The static level was high and the signal strength of many stations was lower than usual. However, many fine logs were submitted in the contest, and the three judges appointed by Mr. Roth, namely Messrs. Armstrong, Hastings and Ormiston, spent several hours carefully considering the relative merit of the lists.

John Webb, of 5153 Rockland avenue, Eagle Rock, Calif., was awarded the prize of an Avalon midget radio. Mr. Webb used a Crosley Gembox and his equipment comprised a Goslaco aerial, Sunset ground and Sylvania tubes. He logged a total of 83 stations, 15 of which were local. The 68 DX stations were properly listed with time and identification. The list of calls with time is as follows: (other details are omitted here.)


The Avalon midget radio was offered as the Grand Prize through the courtesy of the manufacturer, The Avalon Radio Manufacturing Company, of Los Angeles.
'Round the World DX Club News

The Club is now fully organized and is well on the way to a successful future. It is a friendly, sociable, non-profit organization, devoted to the art of tuning in distant stations. The Club holds meetings semi-monthly at 314 East 12th street, Los Angeles, and cordially invites all DX fans to become members.

Applications for membership are being received daily. The Club recently received an application from Mr. Inglis, who lives in far-away New Zealand.

The entrance fee is one dollar with monthly dues of fifty cents. This money is used by the Club to defray the necessary expenses incurred by the Club, such as membership cards, stationery, etc. There are no salaries or rentals paid. The officers gladly donate their time for the benefit of the Club.

The Club membership roll includes DX fans from all walks of life. Radio dealers, housewives, lawyers, advertising men, salesmen and people from many other vocations. They get together with one common interest—the reception of distant stations. An hour of each regular meeting of the Club is devoted to the discussion of DX work by the members. During these informal friendly discussions much valuable DX information is exchanged which is of benefit to all.

Another interesting feature of Club activities is the Prize DX Contest which is held each month. The first was held on the night of December 19, and the results will be published in the next issue of RADIO DOINGS. Valuable prizes are awarded to the two most successful contestants. A Silver Cup has been donated by one of the Club members, and will be presented to the winner each month. Any member who wins the cup for three consecutive contests will thereafter retain the cup as a perpetual trophy. The second prize, a Radio Owl, was donated by Taylor-Travers Corp., Ltd., Los Angeles, manufacturers.

The Club charter still remains open for new members. Send in your membership application now. The only necessary qualification is a bonafide interest in DX reception. Enclose a dollar with your application to cover the entrance fee. Address 'Round the World DX Club, 314 East 12th street, Los Angeles, Calif. All applications are placed before the Club at its regular meetings and are voted upon by the members present. The entrance fee is returned in case of rejection.—Edward C. Roth, President.

* * *

Standard Signals for Amateurs

The nearly 20,000 amateur radio station operators in the United States are now able to ascertain whether or not they are operating on their precise frequency as the result of an extensive service just started by the American Radio Relay League.

The third standard station W6XK, of Los Angeles, began operations this month, completing the coast-to-coast system, which includes WIXP, of South Dartmouth, Mass., and W9XAN, of Elgin, Ill. They operate on regular schedules.

Each station uses a thermostat or temperature controlled piezo crystal type frequency standard having a frequency of 100 kilocycles. With these standards the transmission is accurate to within .01 per cent. Each frequency standard has been checked against the national standard at the Bureau of Standards, which is accurate to within one part in 20,000,000.

The "ham operators" expected to reduce the interference in amateur radio communication by constant checking with these standard stations.

Short, Short Story

Robert Gordon Duncan, the self-styled "Oregon Wildcat," for some time conducted an objectionable type of broadcasting over Station KVEP, Portland, Oregon, under the guise of anti-chain store propaganda. Besides attempting to vilify the characters of many reputable citizens and officials, he frequently used in the course of his talks profane, indecent and obscene language.

Excerpts of Mr. Duncan's talks were recorded on dictaphone records at the Department of Commerce Frequency Monitoring Station, Portland, and these constituted sufficient evidence to cause the Federal Radio Commission to deny a license renewal to KVEP. The station was forced to close, and later Duncan was indicted by the Federal Grand Jury on five counts for alleged violation of Sections 29 and 33 of the Radio Act of 1927.

Duncan was tried in Medford, Oregon, early in October and was convicted. On November 18, Federal Judge Bean sentenced Duncan to six months imprisonment and also imposed a fine of $500.

Edwin W. Lovejoy, U. S. Supervisor of Radio for the Seventh Radio District, was one of the principal witnesses in the trial. The dictaphone records were made under his direction at the monitoring station, and it was this evidence which was the basis for both the cancellation of KVEP's license and the indictment and conviction of the "Oregon Wildcat."

The moral to this story is: Be careful what you say in front of a microphone, because the precedent has been established!

* * *

KFRC's Two Ednas

(Continued from Page 17)

Her sympathy for jazz and popular songs, and her uncanny skill in the interpretation made it a simple matter for her to find work. She became Duncan Sisters' accompanist and made records with them; played in vaudeville and then rejoined the Duncan Sisters. She returned to her Oakland home, and from there set out on a tour of the world with Oklahoma Bob Albright. In London she stopped off for a good many weeks to fill an engagement at the exclusive Kit Kat Club. Back in New York she played at the Palace and then returned home again. Her next move was to join the staff of KFRC.

Perhaps the most important item in connection with her world girdling vaudeville tour was her meeting with Milton Hayes, purser on the ship upon which she was going to Australia. They were married about two years later.

Edna O'Keefe has had most of her theatrical training right on KFRC. She has a natural talent for impersonation that just won't be downed. In addition to her singing she is a valuable member of the station's dramatic department. The Deep Dramatic Stock Company of the Golden State Blue Monday Jamboree would soon be off the deep and on the rocks without her.

She is a very self-possessed little lady, with a sparkle in her brown eyes. As to her comeliness, we just refer you to the picture which accompanies this story. She dresses becomingly in vivid colors that accentuate her beauty.

Contrasting their personalities again, Lady Fischer is more impulsive than Lady O'Keefe, and she is subject to rather plaintive, wistful moods. She takes life more seriously. But there is one thing upon which they really do agree. Cauliflower is the king of the vegetables.
Two New Japanese Stations

Our Japanese correspondent, M. Nakamura, whose address is Yamate, Oiso, Kanagawaken, Japan, writes that two new stations have been added to the chain of the Broadcasting Corporation of Japan. They are as follows:

<table>
<thead>
<tr>
<th>Call</th>
<th>Location</th>
<th>Wave-Length</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOKK</td>
<td>Okayama</td>
<td>429 meters</td>
<td>500 watts</td>
</tr>
<tr>
<td>JOLK</td>
<td>Fukusha</td>
<td>441 meters</td>
<td>500 watts</td>
</tr>
</tbody>
</table>

Three more stations will be added within the next three months. These will be JOKK, Kyoto; JOPK, Shizuoka, and JONK, Nagano. Mr. Nakamura adds that all of the BCJ stations are pleased to receive reports of reception from American listeners.

* * *

Worth Trying For

Here is some information for the "Round the Dial" page.
The following stations can usually be picked up after 4 a.m.:

- WMT (600 Kc.)
- WRUF (830 Kc.)
- WWJ (920 Kc.)
- WJAG (1060 Kc.)
- KFH (1300 Kc.)
- KSCJ (1330 Kc.)
- KMAC (1330 Kc.)
- KGNF (1430 Kc.)

XEB (1095 Kc.), XEZ (695 Kc.) and XEM (765 Kc.) may frequently be picked up between 6 and 8 p.m. WCAU (1170 Kc.) has been coming in very good recently between 6 and 9 in the evening. If the weather is very good CFFC (910 Kc.) may be played on Friday from 5:30 to 6 p.m. WFIW (940 Kc.) may be picked up Sunday after KOIN signs off about 11:30 p.m. KGDM (1100 Kc.) can be played daily just before they sign off at 5 o'clock in the evening. WRHM (1250 Kc.) can be picked up daily from 3 to 5 a.m. as during these hours KFOX is off the air. WSAI (1330 Kc.) can be played from 3 to 4 a.m., or until KSCJ comes on. A good catch is WJKS (1360 Kc.) which can be picked up very often on Saturday night after KGER signs off. KGIW (1420 Kc.) may be picked up on Sunday night after KFQU or KGGC signs off. KGKY (1500 Kc.) can be played on Thursday night about midnight.—A. E. Armstrong, 2021 Bonita Drive, Glendale, Calif.

* * *

From KFI to KFWB to KTBR

To those who have not as yet added the two Montana stations to their logs, I have some news. Radio stations KGIR and KGEX are on the air with a frolic program every Sunday morning. KGIR is on 'til 3 a.m. (M.S.T) and KGEX is on from 1 a.m. to 3:30 a.m. (M.S.T.) They both come in very good and are well worth logging.

It may be interesting to know that KDYL in Salt Lake City, Utah, is now on the air with a brand new transmitter and when the church stations are not on the air you can get KDYL just as good as KOA or KSL.

Here is something else that is interesting to the Los Angeles, DXers. Radio KTBR in Portland, Oregon, purchased their present 500 watt Western Electric transmitter from our own KFWB when they got their increase to 1000 watts. When KTBR got the former KFWB's transmitter they in turn sold their former little 50 watt transmitter to the manager of KMO and he again in turn took the "little one" to Yakima, Washington. It must be a game. Anyway, KTBR comes in good on Saturday nights.

I wonder how many of you DXers have gotten WMBI in Chicago, Illinois. It is on quite a few times during the late evening hours. I got it for the first time on a Saturday night and they signed off at exactly 1 a.m. (C.S.T.) Here's hoping that many of you can catch them for they are not in many logs. WBT on the channel that WMBI has, is coming in fine every evening.

Station KVOA in Tucson, Arizona, was recently granted permission to broadcast nights. They now run on 500 watts daytime and 250 watts nighttime. Being on a frequency of 1260 Kc., we may be able to get it some night.

I have already received several requests for the information on the Mexican stations and would gladly send more out if requests are received.—George Schmidt, 1642 West 82nd street, Los Angeles, California.

(Ed. Note—It is interesting to recall that the original KFWB 500 watt transmitter now used by KTBR was purchased from KFI when they increased to 5000 watts.)

* * *

More Mexican Data

I have some information that I thought might interest some of your readers:

I received station CMBC at Havana, 1070 Kc., after WTAM signed off at 10 o'clock. They used a power of 500 watts and came in with fair volume.

WGBF can be received on Saturday night after 9:30 or 10:00 o'clock.

I played WJAG at 10:30 p.m. on Saturday. They came in good.

WMBI can be heard after 8 or 9 o'clock several nights during the week. I have heard them on Monday and Friday nights.

WGST, the Georgia Tech station, can be heard after 8 p.m. on Sundays. They come in loud even though they use only 25 watts.

KLCA can be heard before 9 p.m. on Sunday evenings. KOY is off the air at this time.

Last Saturday I played WGAR in Cleveland between 11 and 12 p.m. They use a power of 500 watts and broadcast on a frequency of 1450 Kc.

I have quite a hard time trying to identify some of the Mexican stations. Here are the ones that I have received during the past week:

- XEN, 720 Kc.; XEW, 780 Kc.; XEJ, 857 Kc.; XES, 890 Kc.; XEG, 890 Kc.; XED, 960 Kc.; XE1 1030 or 1040 Kc.; XER, 1150 or 1160 Kc.—this one did not announce in English but the call letters in Spanish sounded like XER.

I also get Spanish stations on 750 Kc., 860 Kc. or 870 Kc. and 920 Kc. Can anyone help me out?—Donald Teague, Jr., R. F. D. No. 2, Santa Paula, Calif.

* * *

I have just attempted to log a station which comes in on WHAM's frequency, 1150 Kc. It is a Spanish speaking station, broadcasting a dance program of American music. I could not get the call letters, although they announced after every piece. It sounded like HAKI or HAKR. Do you know of any such station? I played them from 10 to 11:15 p.m., when they signed off. —G. E. Tompkins, P. O. Box 584, Las Vegas, Nevada.
WESTERN ELECTRIC 50 KILOWATT BROADCAST STATION

Excerpts from a paper presented before the Los Angeles Chapter of the Institute of Radio Engineers, December 15, by E. H. Schreiber, Program Service Supervisor, Southern California Telephone Company

There are two important considerations which determine the strength of signal and the service area of a broadcast transmitter. The first of these is the POWER of the transmitter, which is considered as the energy contained in the unmodulated carrier wave. The second is the DEGREE OF MODULATION, or comparative amplitude of the signal with which the carrier is modulated. It is expressed in percent and is defined as the ratio of the signal or voice frequency amplitude to the carrier frequency amplitude.

The power of the transmitter is limited by law, being assigned by the Federal Radio Commission. Operating with the maximum allowable power, it then follows that service area of the station may be increased by use of the maximum modulation, or 100 per cent. With 100 per cent modulation, the power rises to peaks four times as great as with 50 per cent modulation, and gives a signal twice as loud.

The transmitter to be described is rated at 50,000 watts and 100 per cent modulation. Under this maximum modulation, the equipment must provide for an output of 200,000 watts.

The equipment layout of the transmitter proper consists of seven panel units with a screen inclosure.

The first is an oscill-modulator of 50 watts output and 100 per cent modulation. This is followed by three push-pull stages, amplifying the modulated RF power. The first power amplifier unit using two 250 watt tubes occupies the second unit. Third and fourth units contain the second power stage and associated output and has water-cooled tubes. The fifth unit houses the final power stage incorporating six water-cooled tubes each capable of a peak output of 40 K.W.

The last two units constitute the front of an electrically screened inclosure housing the output circuits for this latter stage. There is a full complement of meters, the cases of which are either grounded or mounted behind glass for protecting the operating personnel.

The power panel which is separate from the others is made up of three units with the control arrangements on the first. A power supply of 250 K.W. at 440 volts is required. The left panel houses the control arrangement, which is such that the trans. can be started by a single set of push buttons, the various circuits being energized in the proper sequence by means of suitable relays and contactors. The central unit is a three phase, half wave, rectifier supplying power at 1600 volts to the plates of the air-cooled tubes. The six-tube rectifier on the right supplies plate power at 17,000 volts for the water-cooled tubes. The filament and plate transformers for the latter are located in the power room on the floor below. The filter consists of two units, one for each side of the push-pull circuit, employing a 6 mfd condenser and a 12 henry inductance. Two 24 volt, 550 ampere D.C. generators (one spare) supply power to the filament circuits. Grid bias voltages are obtained from a 2 K.W., 300 volt unit which is also installed in duplicate. The large power tubes are cooled by means of distilled water which is conducted to the anodes of the amplifier tubes through insulating hose coils. The total heat transferred by the cooling water is approximately 175 K.W. A flow of 75 gallons per minute is maintained. Four 56 in. by 58 in. radiator units are provided which maintain the water below 180 degrees F, under all atmospheric conditions.

A tract of land about 1200 by 1200 feet is required for a 50 K.W. transmitter. A two-story building is erected near one edge of the property which contains the transmitter equipment. The basement contains the generators, transformers and filters. The main floor has a radiator and fan room, a transmitter room housing the equipment units, a speech input control room, and miscellaneous rooms for the attendants.

The actual design of the antenna for this transmitter is determined by the customer's requirements. The tendency has been toward higher structures in an effort to increase the total radiation and localize the signals to some extent. In one instance an 800 foot flat top suspended between two 400-foot towers was used very effectively. Still greater efficiency is anticipated from the use of two single insulated towers over 900 feet in height for a frequency of about 600 Kc. The tower is guyed at a single point at about two-thirds of its full height.

In either case a small copper shielded coupling unit is located directly beneath the antenna. This connects with the transmitter building by means of a 500-foot transmission line, balanced with respect to ground, so as to reduce radiation from it.

The maximum deviation from the prescribed wave length that is permitted by the existing government regulations is ±90 cycles—somewhat beyond the capability of the ordinary wave meter. In the absence of adequate frequency control apparatus, very serious beat-note interference has been of frequent occurrence. Considerable improvement has been brought about by the extensive adoption of piezo-electric reference oscillators and automatic piezo-electric control. This system of control is capable of maintaining the assigned frequency to ±2 1/2 cycles for long periods. These crystal control circuits, which are now in general use, are pro-

(Continued on Page 41)
The word "Super-heterodyne" is before the public today in an ever increasing degree. The advertisements of many of the leading radio manufacturers blazon this intriguing word across pages of advertising as though to hypnotize the beholder. And its elegance spellbinds, because even though you may be but casually interested in radio, there is a vague idea in the mind that this word signifies a circuit which represents the acme of perfection in receiving circuits.

It is timely, therefore, that we stop and analyze the "super," review its advantages and disadvantages, and gain a mental picture of what the name means when expressed in terms of actual radio performance.

The super-heterodyne system of reception is briefly as follows: The received signal frequency is combined with a second frequency, which is generated within the receiver. The resultant frequency, which is still an inaudible radio frequency, is then amplified through an RF amplifier, the tuning of which is fixed and constant. A second detector and audio channel completes the circuit. This method of reception was patented by Armstrong in 1920. The great advantage of Armstrong's invention was in the fact that the frequency which resulted from the heterodyning or combining of the signal and locally generated frequency, could be made low enough to be amplified with satisfactory efficiency by the tubes of that day. Tubes with an appreciable degree of inter-electrode capacity do not amplify the higher frequencies as well as the low.

As applied to modern practice, the super-heterodyne has three important advantages. First, an RF amplifier may have a vastly greater gain at a frequency such as 175 kilocycles than at broadcast frequencies. Second, an RF amplifier which functions always at but one frequency with accurately tuned circuits may have greater efficiency than one which must be constantly variable over the broadcast band. Third, the receiver may have a greater and more constant selectivity than is possible with other types because of the highly selective circuits which may be used with the amplifier (due to their being fixed and not constantly variable) and because energy of this frequency is obtained by adjustment of the local oscillator as well as tuning to the received signal.

In terms of performance, these features result in a high sensitivity and selectivity. These two vital qualities have ever been the strong points of the "super," but have been usually acquired only in exchange for certain disadvantages. Chief among the disadvantages is the presence of harmonics, "image frequency" interference, and "repeats" of the locals, due to the many possible combinations of frequencies between the received signals, the locally generated frequency and the harmonics of both. The second important disadvantage is the ability of the local oscillator to reduce heterodyne interference in the neighboring receivers.

The Radio Corporation of America has passed through many years of development work in super-heterodyne receivers, and only now, in conjunction with General Electric and Westinghouse, have they produced a series of supers which are devoid of harmonics, do not radiate, possess real 10 kilocycle selectivity and a sensitivity of a fraction of a microvolt per meter. In order to accomplish the satisfactory elimination of the disadvantages of the super-heterodyne they have used a tuned link circuit and a signal frequency amplifier ahead of the first detector or mixing tube. And we do not believe that it can be accomplished in any other way.

It is vitally important that the mass of super-heterodyne receivers which will be sold this year be absolutely free from the radiation evil. If not, it is likely that we will see city ordinances passed prohibiting the sale or use of such sets. It is equally important that there be no harmonics cluttering up the dial, for the public will not stand for this type of interference.

** The Stenode Radiostat Circuit **

For the benefit of the technically minded, we are reproducing the circuit diagram of the new Stenode Radiostat receiver perfected by Dr. Robinson of London. This circuit is more or less upsetting modulation theories, and radio receiver design. Heretofore great care has been exercised in receiver design to provide for a band pass of 10 kilocycles width, in order that the sidebands may be passed intact, thereby preserving the tone quality of the set.

Dr. Robinson, working on the basis that modulation constitutes a variation in amplitude of the carrier frequency, and that the side bands are a by-product and unnecessary in the receiver, has inserted a quartz crystal in the last radio frequency circuit of a conventional super-heterodyne. This crystal is arranged in a bridge circuit so that energy reaching the grid of the following tube can come through the crystal only. This crystal passes a frequency band not more than 50 cycles in width. And yet, this set possesses tone quality on a par with our best receivers! It was recently demonstrated to the engineers of the Federal Radio Commission, Bureau of Standards and others in this country. While it is a high priced laboratory experiment at present, it has great promise. Selectivity on the order of 50 cycles or less would not only solve the interference problem, make possible the operation of thousands of stations in the present band without interference, but also meet television's greatest obstacle. The name "Stenode Radiostat" means "narrow-path radio device," and it is surely well named.

---

** Robinson's Stenode Radiostat Circuit **

[Image of Robinson's Stenode Radiostat Circuit]
January, 1931

RADIO DOINGS

Page Twenty-nine

Just a Few Rambling Thoughts

By TED OSBORNE . . . KHJ

Here's the low-down on Ted Osborne, whose column will appear each month in RADIO DOINGS and whose presence on KHJ's Hallelujah Hour adds greatly to the fun. Born February 29th, 1847, in a Walla Walla Walla Walla Walla (vamp 'til ready), Washington, tenement house, just under the large X marking the spot. Was expelled from High school (1861-1869) and flunked out of the University of Oregon (1916). Later president (1879-1893) Has never attended Harvard and numerous other Universities.

Collaborated with Henry Wadsworth Longfellow on "Hiawatha," completed by Longfellow. Wrote "The Lady of the Lake," by Sir Walter Scott. "The Vision of Sir Launfaul," by Tennyson, and numerous other short poems. Has written Greta Garbo four times, but all manuscripts have been returned unopened.

Invented the automobile in 1892, the electric light in 1877 and the cotton gin in 1918. (Book of recipes on request.) Invented the radio in 1907. Wounded four times, three of them fatally. Took up writing instead of politics as a profession, for, as he says, he would rather be trite than president.

Has won 17 beauty contests, plays the typewriter entirely by ear, is 104 years old and never uses tobacco except for smoking purposes.

Th' man who keeps his friends is th' one who never gives 'em away.

Marriage is a funny proposition; it makes some men settle down an' enables others t' settle up.

Poverty ain't no disgrace, but just now I can't think of any other argument in favor of it.

A man's pleasures, like his life insurance, cost more th' older he gets.

An optimist is a feller who thinks that a kick in th' pants is meant t' send him forward.

Th' feller who thinks he loses his temper is just kiddin' himself; he only displays it.

To th' average man, livin' within his income is a good deal like tryin' t' dress in an upper berth.

Sometimes little things have a big effect on humanity. If Cleopatra had been cross-eyed, th' history o' th' whole world might o' been different.

Honest confession is good for th' soul, but it's bad for th' reputation.

A woman ain't never satisfied 'til she's got a man for herself; an' when she has, she ain't never satisfied neither.

Th' unwritten law is used so much nowadays, it might just as well be written.

Money doesn't always make happiness. A man with $10,000,000 isn't any happier than a man with only $9,000,000.

If your butcher gives you short-weight for your money, return good for evil; give him a long wait for his.

When a girl's heart is broken, she usually spends th' rest of her life distributing th' pieces.

CHAS. W. HAMP

The Highest Salaried Individual
Radio Artist in the World
Direct from New York After a Sensational Triumph

STARTING JANUARY 2, 1931,
OVER THE COLUMBIA CHAIN

KHJ—Los Angeles
KWG—Stockton
KFBK—Sacramento
KMJ—Fresno
KFRC—San Francisco
KOIN—Portland
KVI—Tacoma
KOL—Seattle
KFPY—Spokane

Every Week

Sunday, 8:30-8:45 P. M.
Tuesday, 7:15-7:30 P. M.
Friday, 7:30-7:45 P. M.

15 Minutes of Sunshine

KHJ—Los Angeles

Tuesday Morning, 10:30 to 11:00
Thursday Morning, 10:30 to 11:00

The Most Versatile Human
in Radio
Something New

The ordinary printed program arrangement is unquestionable, absolutely. Listeners want something more comprehensive and much more usable. Supported by nine years of radio program experience we have finally evolved the most complete and amazingly convenient plan of program guidance ever published. If you have a “yen” for an hour’s entertainment of dance music run your eye down the index to the features, turn to the page indicated and make your selection. If it’s a play that intrigues your fancy, it’s only the work of a second to find where and at what time plays are being broadcasted. This new classified method shows you at once a list of all types of entertainment on the air on the Pacific Coast.

---

Index to Features

|------------------|---------------------------------------|-----------------------------|-------------------------|-----------------------------|-------------------|---------------|---------------------------------|------------------------|-------------|----------------|--------------------------|----------------|-----------------------------|-----------------------------|

|------|------------------|---------------------------------------|-----------------------------|-------------------------|-----------------------------|-------------------|---------------|---------------------------------|------------------------|-------------|----------------|--------------------------|----------------|-----------------------------|-----------------------------|

**Dance Orchestras**

**IN SOUTHERN CALIFORNIA**

KFI—11-12 PM. Hotel St. Francis Dance Orchestra (ex. Sat.)

KIJI—10-12 PM. Earl Hurlbut’s Biltmore Hotel Orchestra.

KPFW—10-12 AM. General Electric Orchestra, from Roosevelt Hotel.

KFW—10-12 PM. General Electric Orchestra.

KFWL—11-12 PM. Louis Romanelli Cotton Club Orchestra.

KXK—11-12 PM. Gus Arnhim’s Coconut Grove Orch.

KGJ—6-7 PM. Glenn Edmund’s Elks Club Orchestra.

KGB—10-11 PM. Louis Romanelli Dixieland Orchestra.

KFO—11-11:30 PM. Roscoe. Brothers’ Cafe Orchestra.

KFR—11-11:30 PM. Lou Hiller’s Rainbow Gardens Orchestra.

KRC—11-11:30 PM. Louis Romanelli and His Kings of Dixieland.

KRF—11-11:30 PM. Silver Slipper Orchestra.

**SUNDAY NIGHTS**

KIJI—10-10:11 PM. Val Valente’s Music from Roof Garden.

KPKW—7:30-9 PM. Al Newman’s Hotel Roosevelt Orchestra.

KGJ—10-10:11 PM. Louis Romanelli Orchestra.

KG—10-10:11 PM. Morris’s Dixieland Blue Orchestra.

KGJ—11-11:30 PM. Brick English and his Orchestra.

KPD—11-11 AM. Tower’s Café Orchestra.

**IN NORTHERN CALIFORNIA**

KFW—10-11:15 PM. Anson Week’s Hotel Mark Hopkins Orch. (Ex. Tues.)

10-11 PM. Val Valente’s Orchestra.

11-12 PM. Monday, Wednesday and Saturday. Earl Hurlbut’s Orchestra from Biltmore.

11-12 PM. Thursday. Hotel St. Francis Orchestra.

KPO—11-11 PM. Jesse Stafford’s Dance Orchestra.

KLA—11-11 PM. Dance Orchestra.

KAA—12-12:30 PM. Dixie Blue Boys Band. (SUNDAY NIGHT)

KFR—9:30-11 PM. Val Valente and His Roof Garden Orch.

KLA—11-11 PM. Hotel St. Francis Orchestra.

**IN THE NORTHWEST**

KG—11-12 PM. Thursday. Hotel St. Francis Hotel Orchestra.

KWO—11-11 PM. Monday and Wednesday. Multnomah Club Dance.

KV—11-12 PM. Monday, Wednesday and Saturday. Earl Hurlbut’s Orchestra from Biltmore.

10 PM. Thursdays. Biltmore Hotel Orchestra.

11-12 PM. Monday and Tuesday. Anson Week’s Hotel Mark Hopkins Orchestra.

10-11 PM. Wednesday and Saturday. Mike Don’s Orch.

11-12 PM. Monday and Friday. Val Valente’s Orchestra.

KMO 9-11 PM. Saturday. Leon Mills and His Orchestra.

**Symphony, Concert and Salon Orchestras**

Columbia Broadcasting Co.—12:00 Noon. New York Philharmonic Symphony Concert with Arturo Toscanini, conductor. (Sun.)

11:00 AM. Columbia Little Symphony. (Wed.)

12:00 Noon. Columbia Symphony Orchestra. (Mon., Tues. and Wed.)

KLY—12:00 Noon. Columbia Symphony Orch. (Wed.)

KLYK—12:00 Noon. Columbia Symphony Orch. (Fri.)

KFLY—12:00 Noon. Columbia Symphony Orch. (Thurs.)

KLYT—12:00 Noon. Columbia Symphony Orch. (Sat.)

KLYU—12:00 Noon. Columbia Symphony Orch. (Sun.)

3:00 PM. Toscha Seidel and Concert Orch. (Wed.)

4:00 PM. Columbia Little Symphony. (Thurs.)

8:00 PM. Symphony Orchestra, Charles W. Badger, conductor. (Mon. and Sat.)

9:00 PM. Symphony Orchestra, John G. Pheasant, conductor. (Fri.)

11:00 PM. Symphony Orchestra, John G. Pheasant, conductor. (Sat.)

National Broadcasting Co.—4:00 PM. Sunday Concert. KGOM.

6:00 PM. Symphony Orchestra, Charles W. Badger, conductor. (Mon. and Sat.)

8:00 PM. Symphony Orchestra, John G. Pheasant, conductor. (Fri.)

8:00 PM. Symphony Orchestra, John G. Pheasant, conductor. (Sat.)

United Broadcasting Co.—7:00 PM. Concert Orchestra. (Daily Ex. Fri.)

10:00 PM. Monday. (Sun.)

11:00 PM. Tuesday. (Mon.)

12:00 Noon. Wednesday. (Tues.)

1:00 PM. Thursday. (Wed.)

2:00 PM. Friday. (Thurs.)

3:00 PM. Saturday. (Fri.)

4:00 PM. Sunday. (Sat.)

5:00 PM. Monday. (Mon. and Sat.)

6:00 PM. Tuesday. (Tues.)

7:00 PM. Wednesday. (Wed.)

8:00 PM. Thursday. (Thurs.)

9:00 PM. Friday. (Fri.)

10:00 PM. Saturday. (Sat.)

11:00 PM. Sunday. (Sun.)

12:00 Noon. Monday. (Mon. and Sat.)

1:00 PM. Tuesday. (Tues.)

2:00 PM. Wednesday. (Wed.)

3:00 PM. Thursday. (Thurs.)

4:00 PM. Friday. (Fri.)

5:00 PM. Saturday. (Sat.)

6:00 PM. Sunday. (Sun.)

7:00 PM. Monday. (Mon. and Sat.)

8:00 PM. Tuesday. (Tues.)

9:00 PM. Wednesday. (Wed.)

10:00 PM. Thursday. (Thurs.)

11:00 PM. Friday. (Fri.)

12:00 Noon. Saturday. (Sat.)

1:00 PM. Sunday. (Sun.)

2:00 PM. Monday. (Mon. and Sat.)

3:00 PM. Tuesday. (Tues.)

4:00 PM. Wednesday. (Wed.)

5:00 PM. Thursday. (Thurs.)

6:00 PM. Friday. (Fri.)

7:00 PM. Saturday. (Sat.)

8:00 PM. Sunday. (Sun.)

9:00 PM. Monday. (Mon. and Sat.)

10:00 PM. Tuesday. (Tues.)

11:00 PM. Wednesday. (Wed.)

12:00 Noon. Thursday. (Thurs.)

1:00 PM. Friday. (Fri.)

2:00 PM. Saturday. (Sat.)

3:00 PM. Sunday. (Sun.)

4:00 PM. Monday. (Mon. and Sat.)

5:00 PM. Tuesday. (Tues.)

6:00 PM. Wednesday. (Wed.)

7:00 PM. Thursday. (Thurs.)

8:00 PM. Friday. (Fri.)

9:00 PM. Saturday. (Sat.)

10:00 PM. Sunday. (Sun.)
Concert and Salon Orchestra

KGA—8:00 PM, Henri Damaski's Orch. (Sun.).
4:00 PM, Concert Ensemble. (Mon. and Fri.)
9:00 PM, Damaski's Neapolitan Or. (Wed.)
8:00 PM, Kalamazoo Symphony. (Thurs.)
KVI—12:00 Noon, Columbia Salon Orchestra. (Ex. Fri., Sat. at 11:30 A.M.)
12:00 Noon, N. Y. Philharmonic Orchestra. (Sun.)
KOL—12:00 Noon, Columbia Salon Orchestra. (Ex. Fri. and Sat.)
KST—6:00 PM, General Electric Program with Walter Damrosch. (Saturday.)
KOA—9:00 PM, Luncheon Ensemble. (Ex. Fri.)
KDIV—(See Columbia Broadcasting Co.)

Sport Talks (Subject to Change During Jan.)

KTHM—7:00 PM, Herald Sport Talks. (Thurs. only.)
7:00 PM, Football Results. (Sat. only.)
KPSD—7:00 PM, NBC, Main Events from Honolulu. (Mon. and Fri.)
KXX—9:45 PM, Broadcasting Main Events from Hollywood Regency Stadium.
KHJ—9:30 PM, Sports Edition of the Air. (Thurs. only.)
KPHH—7:30 PM, R. W. Sherry's Sport Talks. (Mon. and Fri.)
8:30 PM, Mark Kelly's Examiner Sport Period.
9:30 PM, Olympic Auditorium Event. (Tues. only.)
9:30 PM, Wilminton Bowl. (Wed. only.)
KFCO—7:30 PM, NBC, Granitat Rice Interview. (Wed. only.)
KPEC—6:45 PM, Top Warner's Sport Talks. (Wed. only.)
6:00 PM, Hobbs Sports Authority. (Thurs. only.)
6:45 PM, Pat Frayne's Sports Talk. (Friday only.)
8:45 PM, Dink Templeton and Rick Morse discuss forthcoming football events.
KHQ—5:00 PM, Sport News. (Wed. only.)
7:00 PM, NBC, Granitat Rice's "Topnotchers." (Wed. only.)
5:15 PM, Sport News. (Mon. only.)
KGW—7:30 PM, Grantland Rice's Sport Program, NBC. (Wed. only.)
KMD—9:00 PM, Wrestling Match from Greenwhich Coliseum. (Tues. only.)
KJJ—5:00 PM, Ken Stuart's Sport Talk. (Daily.)
KKN—5:00 PM, Ken Stuart's Sport Talk.
KGA—5:00 PM, Ken Stuart's Sport Talk.
9:30 PM, Wrestling Bouts.
KOA—7:30 PM, NBC, Grantland Rice Sport Talks. (Wed. only.)
KF—7:30 PM, NBC, Grantland Rice Sportlogues. (Wed. only.)

Travelogues and Book Reviews

KF—3:00 PM, Winnie Fields Moore, the Nomad Novelist. (Mon., Wed. and Fri.)
3:00 PM, Los Angeles Public Library Book Reviews. (Monday.)
12:30 PM, "Seeing Southern California." (Tues. and Fri.)
8:30 PM, Tom Terris, "The Vagabond Movie Director." (Tuesday.)
KJJ—3:30 PM, Margaret Macdonald's Book Review for Jones Book Store. (Wed.)
8:45 PM, Los Angeles Public Library Book Review.
5:00 PM, "Seeing Southern California." (Wed.)
KXX—5:00 PM, Travelogue. (Daily Ex. Sun.)
KTHI—1:30 AM, Book Review. Prof. Howard W. Kroll. (Mon.)
KFCA—7:30 PM, Winnie Fields Moore, Nomad Novelist.
KTAH—4:00 PM, Books and Drama with Samuel R. Jackson. (Sunday.)
8:00 PM, International Adventures with Col. Ed. P. Bailey. (Mon.)

Light and Comic Opera

Columbia Broadcasting System—2:00 PM, Light Opera Gems. (Fri.)
9:00 PM, "Poligaller." Don Lee Chown.
United Broadcasting Co.—7:00 PM, Opera Sketches. (Wed.)
KTHI—6:15 PM, "Kalamazoo's Opera." (Wed.)
KMD—6:15 PM, "In With the Show." (Wed.)
9:00 PM, "Poligaller," Serial Comic Opera of the Air. (Thurs.)
KFWC—9:00 PM, "Poligaller." (Thurs.)

Foreign Language Lessons

KFD—3:30 PM, French Lessons. (Tues. and Thurs.)
KPI—11:45 AM, French Lessons by Annette Doherty. (Mon. and Wed.)
KPI—12:45 PM, German Lessons by Annette Doherty.
KPI—11:45 AM, English Lessons by Ayra Z. Drew. (Wed. and Friday.)
KPI—9:30 PM, Spanish Lessons. (Tues. only.)
KECA—3:15 PM, German Lesson, by Annette Doherty (Thurs. only.)
4:00 PM, Alexander Bevan, on the Italian language.
KPHC—2:45 PM, French Lessons by Dr. Thatcher. (Thurs. only.)
KN—2:15 PM, French Lessons, CBS. (Sat. only.)

Religious Services and Talks for Sunday

National Broadcasting Company—12:00 Noon, National Youth Union
1:00 PM, Dr. S. Parkes Cadman KGO KTHI KQOM KGW KJO
2:00 PM, National Vespers KGO KTHI KQOM KGW KJO
KTAH—3:00 PM, Catholic Hour KQOM KGW KFCA KPI
KHJ—7:45 PM, 8th Parker's Sunday Evening.
Columbia Broadcasting Co.—1:00 AM, Cathedral Hour KZVY KFPI
KPSN—7:45 PM, Sunday Evening at Seth Parker's.
KPH—10:50 AM, Temple Baptist Church.
4:30 PM, Leila Casberg, "Advanced Thoughts."
KPM—3:00 PM, Church of the Latter Day Saints.
KHJ—11:00 AM, First M. E. Church of Los Angeles.
5:30 PM, Rabbi Magnin. (Sat. only.)
KXX—9:00 AM, Scriptural Research Bureau.
10:00 AM, Inspirational Bible Readings.
1:00 PM, First Presbyterian Church of Hollywood.
8:00 AM, Daily Except Sunday—Inspirational Talk and Morning Prayer.
6:30 PM, Saturday—Announcement of leading Los Angeles Church Services.
KPSN—8:00 AM, Sabbath Sunrise Service.
10:30 AM, Sunday Morning.
2:30 PM, Dispensational Message.
6:30 PM, Evangelistic Service.
7:00 AM, Daily Parkes Sunday, Family Altar Service.
2:30 PM, Wednesday and Saturday, Divine Healing.
7:30 PM, Thurs., Baptismal.
8:30 PM, Thurs. and Fri., Nevada Hour.
KFCO—9:30 AM, Radio Sunday School.
10:45 AM, Trinity Church Service.
5:00 PM, Vesper Hour.
7:00 PM, Trinity Church Service.
9:00 PM, South Park Christian Church evenings.
9:30 PM, Tues., Torrance Methodist Church.
7:00 PM, UN Church Bible Class.
7:45 PM, Union Rescue Mission.
KTHI—8:00 AM, Church of the Open Door.
8:15 AM, Daily Except Sunday, Devotional Service.
9:15 AM, Daily Except Sunday, Gospel Song Requests.
2:00 PM, Visiting Pastors.
1:00 PM, Devotional Bible Study. (Ex. Mon. and Sun.)
10:30 AM, Bible Study.
KFOX—11:00 AM, St. Luke's Episcopal Church.
8:00 PM, First Church of Christ, Scientist.
KTAH—10:50 AM, Third Church of Christ, Scientist.
12:00 Noon, National Youth Conference.
2:00 PM, Catholic Hour.

NORTHERN CALIFORNIA

KTHI—10:00 AM, Bible Class from 19th Ave. Baptist Church.
11:00 AM, Church Services from 19th Ave. Baptist Church.
1:00 PM, Church of the Latter Day Saints.
3:30 PM, Church Service.
KTO—10:30 AM, Interdenominational and Non-sectarian Church Services.
12:00 Noon, National Youth Conference.
1:00 PM, S. Parkes Cadman Cathedral Hour.
2:00 PM, National Religious Services.
11:30 AM, Daily Except Sunday, Scripture Readings.
KFWI—8:00 PM, Second Church of Christ, Scientist.
KHOW—10:15 AM, Watchtower Program.
1:00 PM, Watchtower Program.
6:00 PM, Watchtower Program.
11:00 AM, Morning Services, First Baptist Church.
7:30 PM, Evening Services.

NORTHWESTERN STATES

KTHI—10:30 AM, Old St. Mary's Church Services.
KGW—10:00 AM, International Bible Students.
12:00 Noon, National Youth Conference.
7:45 PM, Seth Parker's Program.
KOMO—11:00 AM, First Unitarian Church.
11:15 AM, Plymouth Congregational Church.
12:15 PM, National Youth Conference.
1:00 PM, S. Parkes Cadman.
2:00 PM, National Religious Service.
2:00 PM, Catholic Service.
8:00 PM, First Church of Christ, Scientist.
KJR—10:00 AM, International Bible Students Association.

INTERMOUNTAIN STATES

12:00 Noon, National Youth Conference.
7:15 PM, First Presbyterian Church.
8:15 PM, L. D. S. Service with Great Mormon Organ.
KOA—10:15 AM, First Church, Scientist, Services.
12:00 Noon, National Youth Conference.
1:00 PM, S. Parkes Cadman.
3:00 PM, Catholic Church.
7:45 PM, "Seth Parker's Sunday Evening at Seth Parker's.

ARIZONA

KTAR—10:00 AM, First Methodist Church Services.
2:00 PM, National Vegetors.
3:00 PM, Catholic Church.
4:15 PM, 3rd Parker's Sunday Evening.
8:00 PM, Sunday at Seth Parker's.
**Educational Features**

**National and International Events**

**KFSO—**5:15 PM, Fifteen Minutes in the Nation's Capital. (Mon. only.)
4:45 PM, Back of the News in Washington, NBC. (Wed. only.)

**KFI—**3:00 PM, Peter America Federation Speaker. (Thurs. only.)
11:00 PM, Standard School Broadcast. (Thurs. only.)

**KMPR—**2:00 PM, USC Lectures. (Mon. and Wed.)
9:00 PM, USC Lectures. (Mon. and Wed.)

**KHJ—**5:00 PM, The World's Business. (Sunday.)
1:30 PM, The Forum. (Daily.)
3:00 PM, Pacific Time Radio Features. (Thurs. only.)
1:00 PM, University of the West. (Fri. only.)
3:15 PM, Dr. Walter Hertzog's School Program. (Fri. only.)
4:35 PM, Council of International Relations. (Fri. only.)
11:30 AM, Columbia School of the Air. (Mon., Wed., and Fri.)

**KXJ—**7:45 PM, Dr. Mara Baumgardt Talking of "Popular Science." (Wed. only.)
3:30 PM, Federation of Women's Clubs. (Fri. only.)

**KGSJ—**8:30 PM, Dr. Wiseman's Talk. (Sat. only.)
11:30 AM, Spanish Program.

**KICA—**National Youth Conference, NBC. (Sun. only.)
11:30 AM, California Federation of Women's Clubs. (Mon. only.)
4:15 PM, Teens G. McDonald, "The World Today." (Mon. only.)
5:15 PM, Fifteen Minutes in the Nation's Capital. (Sat. only.)
4:15 PM, Laws That Safeguard Society, NBC. (Tues. only.)

**NORTHERN CALIFORNIA**

**KTR—**4:00 PM, Short Story Course, Samuel H. Dickson. (Mon. only.)
12:30 PM, Latin-American Program.

**KFWC—**5:00 PM, The World's Business. (Sun. only.)
11:30 AM, American School of the Air. (Ex. Sat.)
3:30 PM, Something About Everything. (Mon. and Wed. only.)
4:00 PM, Current Events, H. V. Kaltenborn, CBS. (Mon. only.)
4:00 PM, The Political Situation in Washington Tonight. (Tues. only.)
3:00 PM, Columbia Educational Features. (Fri. only.)
4:15 PM, Columbia Educational Features. (Sat. only.)
2:45 PM, Columbia Educational Features. (Sat. only.)
6:00 PM, National Radio Forum from Washington. (Sat. only.)

**KPO—**4:45 PM, California State Chamber of Commerce Talk. (Mon. only.)
5:15 PM, Federal Business Association Talk. (Tues. only.)

**KPSW—**7:00 PM, Juste Matthew Irady on Crime Prevention. (Mon. only.)
7:00 PM, Rita Murray's Investment Talk. (Thurs. only.)

**KQW—**6:00 PM, Farm Topic Discussions. (Ex. Sat.)

**KYA—**10:15 AM, R. B. Gorton on Insurance. (Wed. only.)
8:00 PM, Judge Mathew Irady. (Fri. only.)
8:00 PM, R. B. Gorton on Insurance. (Wed. only.)

**NORTHERN CALIFORNIA**

**KHSQ—**12:00 PM, National Youth Conference, NBC. (Sun. only.)
11:00 AM, Standard School Broadcast, NBC. (Thurs. only.)

**KGI—**9:00 AM, Jewish Art Program. CBS. (Sun. only.)
9:30 AM, London Broadcasts, CBS.
10:30 AM, Check-Up on the Nations, CBS. (Sat. only.)
11:30 AM, American School of the Air. 4:00 PM, Current Events, CBS. (Mon. only.)
4:00 PM, The Political Situation in Washington Tonight. (Tues. only.)

**KOMO—**12:00 PM, National Youth Conference, NBC. (Sun. only.)
4:15 PM, Laws That Safeguard Society, NBC. (Tues. only.)
1:30 PM, "The Coast School of the Air. (Mon. and Wed.)

**MOUNTAIN STATES**

**KOA—**9:15 AM, National Oratorio Society. (Sun. only.)
12:00 PM, National Youth Conference. (Sun. only.)
1:00 PM, S. Darkea Cudman from New York. (Sun. only.)
4:15 PM, "The World Today." (Mon. only.)
4:15 PM, Laws That Safeguard Society. (Tues. only.)

**KSL—**12:15 PM, National Youth Conference. (Sun. only.)
5:00 PM, The World's Business. (Sun. only.)
2:15 PM, Adventures in Words. (Tues. only.)
12:45 PM, "Columbia Educational Features, CBS. (Fri. only.)

---

**Organ Concerts**

**National Broadcasting Co.—6:00 PM, Gold Medal Organist. (Wed.)

Columbia Broadcasting System—7:00 PM, Jesse Crawford, Royal's Poet of the organ over KDYL, KOL, KOIN, KHJ KFRC. (Sun. only.)
12:30 PM, Ann Leaf at the Organ over KLZ, KVJ. (Mon. Thurs.)
6:00 PM, Gold Medal Fast Freight Program KLZ, KDYL, KOL, KOIN, KHJ KFRC, KVJ. (Wed.)
1:00 PM, Ann Leaf at the Organ over KLZ, KVJ KFRC. (Sat.)

KMPF—5:15 PM, Harold Curtis from the Egyptian Theatre.

**KFSO—**2:30 PM, Organ Recital from Radio Park. (Ex. Mon.)

**KFI—**3:00 PM, Aeolian Organ Recital. (Sun. only.)

**KJLW—**12:30 PM, Ray MacNeil at the Organ. (Mon.)

**KMPF—**9:00 PM, Organ Recital. (Thurs. and Fri.)

**KTM—**3:00 PM, Dorothy Dee's Organ Recital.

**KJL—**7:00 PM, Jesse Crawford, Poet of the Organ. (Sun. only.)
11:00 PM, Leight Hotch at the Organ. (Sat.)
12:00 PM, Leigh Harline at the Organ. (Nigh.)
11:00 AM, Nell Larson at the Organ. (Mon.)
12:45 PM, Ann Leaf CBS. (Thurs.)
5:00 PM, Organ Recital. (Thurs.)
4:30 PM, Nell Larson. (Wed.)
12:45 PM, Ann Leaf. (Sat.)

**KFSO—**10:00 PM, Organ Recital. (Sun. only.)
11:00 AM, Organ Recital. (Daily Ex. Sun. and Mon.)

**KFWH—**10:00 AM, Wade Hamilton at the Organ. (Thurs.)

**KXX—**6:00 PM, Wesley Tourelletto, noted organist. (Daily.)

**KFXI—**10:30 AM, Organ Recital, Vera Graham.
3:30 PM, Organ Recital, Vera Graham.
10:00 AM, Angelus Abbey Organ Recital. (Sun. only.)
1:00 PM, Archie Fritz. (Sun.)
12:00 PM, Organ Recital.
4:00 PM, Organ Recital by Archie Fritz.
10:00 PM, Organ Melodies, Gilbert Jaffy, virtuolist.

**KPV—**2:00 PM, Organ Recital by J. Newton Yates. (Sun.)
6:00 PM, J. Newton Yates, organist.
12:00 PM, Ballads, Old and New, by J. Newton Yates.

**KTY—**6:30 PM, Organ Program. (Sun.)
5:15 PM, organ Program. (Wed. and Fri.)

**KGER—**11:00 PM, Dick Dixon at the Organ.

**KJCA—**8:30 AM, NBC Organ Recital. (Sun. only.)

---

**SOUTHWESTERN STATES**

**KGB—**9:00 AM, Organ Recital. (Sun.)
11:00 AM, Organ Recital. (Sun.)
12:00 PM, Organ Recital. (Fri.)
11:45 AM, Organ Recital. (Wed.)
12:30 PM, Organ Recital. (Mon.)
3:00 PM, Organ Recital. (Fri.)
3:00 PM, Organ Recital. (Mon.)
4:00 PM, Organ Recital. (Sun.)
1:00 PM, Organ Recital. (Thurs.)
1:00 AM, Organ Recital. (Sat.)

**KPO—**3:00 PM, Organ Recital. (Sun.)
5:15 PM, Morrison Telephone organist. (Daily Ex. Mon. and Sat.)

**KVA—**10:15 PM, Organ Recital, Dollo Sargent, organist.

**INTERMOUNTAIN STATES**

**KOA—**8:30 AM, Organ Melodies. (Mon.)
12:00 PM, Organ Program. (Mon.)
11:15 AM, Organ Recital. (Wed. and Fri.)
7:15 AM, Organ Melodies. (Fri.)

**KSL—**8:15 PM, Mormon Tabernacle Organist. (Sun.)
9:00 PM, Organ Melodies. (Mon.)
11:15 PM, Organ Recital. (Sat.)
11:00 PM, Organ Concert. (Wed.)

**KDYL—**7:00 PM, Organ Recital. (Tues.)
11:30 AM, Ann Leaf at the Organ. (Tues.)
6:00 PM, Gold Medal Organist. (Wed.)
12:30 PM, Ann Leaf at the Organ. (Thurs.)
10:15 PM, Organ Melodies. (Fri. and Sat.)

**ARIZONA**

**KTAR—**7:30 AM, Pipe Organ Recital. (Daily.)
12:00 Noon, Organ Recital. (Sun.)
January, 1931  RADIO DOINGS  Page Thirty-three

News, Stock Market Reports, Weather

SOUTHERN CALIFORNIA

KMTV—12:00 PM. World in Review.  5:45 PM. Reporter of the Air.
KFSD—5:45 PM. San Diego Union News Report.
KMPC—12 PM. Livestock Report.
KHJ—12:30 PM. World-Wide News (L.A. Times.)  4:45 PM. World-Wide News.  10:00 PM. World-Wide News.
KRX—3:15 PM. Monday. Lost and Found Reports.  3:25 PM. Tuesday. Lost and Found Reports.  3:00 PM. Wednesday and Friday. Lost and Found Reports.  3:30 PM. Thursday. Lost and Found Reports.  12 PM. Saturday. Lost and Found Reports.  8:00 PM. Nightly Frost Warnings for Citrus Growers.
KGJ—5:00 PM. Market Reports.
KGER—4:00 PM. News Brevities.
KPSN—8:00 AM. World Wide News.  12:30 PM. World Wide News.  6:00 PM. World Wide News.
KCEA—10:30 PM. KFJ-KKCA Editorial Review.

NORTHERN CALIFORNIA

KFWC—7:30 AM. N. Y. Stock Quotations.  11:25 AM. S. F. Call-Bulletin News Items.  1:00 PM. Closing Stock Market Reports.  1:05 PM. S. F. Call-Bulletin News Items.  5:50 PM. S. F. Call-Bulletin News Items.
KFQ—1:05 PM. Ye Towne Crier.  5:45 PM. News Digest with Scotty Mortland.
KVA—1:30 PM. News casting.  6:45 PM. Delivery of Stock Yard Prices and Quotations.

NORTHWEST

KGW—1:00 PM. Town Crier.
KMO—10:00 AM. Town Crier.  11:45 AM. News Casting.
KMO—12 PM. Farm Talk; Grain and Food Reports.  10:45 PM. News Flashes.
KHJ—7:40 AM. Stock Reports.  12 PM. World in Review.  2:30 PM. News Casting.  5:30 PM. Market Reports.
KEX—7:00 AM. Oregon Journal News.  12:00 PM. Weather Reports.  11:30 PM. Police Reports.
KGA—6:45 AM. News.  12:00 PM. World in Review.  3:00 PM. News Casting.

MOUNTAIN STATES

KOA—11:30 AM. Monday, weather, stocks, markets, livestock.  10:40 AM. Tuesday, weather, stocks, markets, livestock.  11:00 AM. Wednesday and Thursday, weather, stocks, markets, livestock.  10:55 AM. Friday, weather, stocks, markets, livestock.  10:45 AM. Saturday, weather, stocks, markets, livestock.  3:00 PM. Monday, Wednesday, weather, stocks, etc.  3:15 PM. Tuesday, stocks, market reports, etc.  2:45 PM. Thursday and Friday, stocks, weather, etc.  3:40 PM. Saturday, stocks, market reports, etc.
KVI—7:20 AM. N. Y. stock market report and market letter.  11:20 AM. News Casting.  3:30 PM. Ye Olde Towne Crier.

ARIZONA

KTAR—8:45 AM. Radio Newspaper.  1:45 PM. Radio Newspaper.  9:00 PM. Radio Newspaper.

Programs for the Housewife

SOUTHERN CALIFORNIA (Daily Unless Indicated)

KMTV—9:00 AM. Mildred Kitchen Home Economics Expert.
KFSN—9:15 AM. Amy Lou Shopping Hour.  10:50 AM. NBC Woman’s Magazine of the Air. ( Thurs. 10:00 AM.)
KFI—9:00 AM. Helpful Hints to Housewives, Essa Kilmer.  10:30 AM. NBC Woman’s Magazine of the Air. ( Thurs. 10:00 AM.)
KMV—10:15 AM. Josephine Gibson Food Talks. (Monday and Wednesday only.)
KTM—2:00 PM. Over the Tea Cups with Nell Cleafy.
KHJ—9:00 AM. Velva Darling, Girl’s Philosophy.  9:30 AM. Feminine Fancies. (Ex. Saturday.)
10:30 AM. Pure Food Talks. (Ex. Tuesday.)
6:00 PM. Peggy Hamilton, Romance of Fashion. (Tuesday only.)
KFWB—10:00 AM. Prudence Penny.
KFD—2:00 PM. Hints to Housewives.
KRX—9:00 AM. Radio Shopping News.  C. T. R.
10:30 AM. Home Economics Talk by Kate Brew Vaughn.
KFOX—9:30 AM. Beauty Talk.

NORTHERN CALIFORNIA

KTRB—10:00 AM. Household Hour with Alma La Mar.
KFWC—9:30 AM. Feminine Fancies. (Ex. Saturday.)
11:05 AM. Mary Lewis Haines Domestic Science Talk (Monday.)
11:15 AM. Mary Lewis Haines Domestic Science Talk. (Wednesday.)
9:00 AM. Mildred Kitchen’s Household Talk. (Tuesday and Thursday only.)
3:00 PM. Colonial Dames Beauty Talk. (Monday only.)
KPI—10:30 AM. NBC Woman’s Magazine of the Air. (Thursday 10:00 AM.)
11:30 AM. Julia Hayes’ Helpful Hints to Housewives. (Thursday at 11:45 AM.)
11:45 AM. Helen Gordon Barker Art Talk. (Monday only.)
KHOW—2:45 and 3:00 PM. Betty, the Shopper.
KYA—12:15 PM. Parent-Teachers’ Association. (Monday only.)

NORTHWEST

KHJ—10:30 AM. Woman’s Magazine of the Air. Thursday at 10:00 AM.
10:15 AM. Josephine Gibson’s Food Talk. (Monday and Friday only.)
10:15 AM. Mary Hale Martin. (Wednesday only.)
12:45 AM. Home Decorator. (Ex. Tuesday.)
KGV—9:15 AM. Cooking School.
10:15 AM. Josephine Gibson’s Food Talk. (Monday & Wednesday only.)
10:30 AM. Woman’s Magazine of the Air. (Thursday at 10:00 AM.)
11:30 AM. Julia Hayes Talk. (Monday and Tuesday only.)
KVI—9:30 AM. Feminine Fancies. (Ex. Saturday.)
KMO—11:00 AM. Tips on the Shoppe Market.
KOMO—10:30 AM. Woman’s Magazine of the Air. (Thursday at 10:00 AM.)
9:15 AM. Julia Hayes Helpful Hints to Housewives. (Monday and Wednesday only.)
9:45 AM. Way to a Man’s Heart.
KJH—8:30 AM. Thrift Home of the Air.
9:15 AM. Mary From Proctors.
10:15 AM. Beauty Talks.
KEX—9:15 AM. Julia Hayes Talk. (Ex. Saturday.)
KOL—9:00 AM. Shopping Service.
9:30 AM. Feminine Fancies. (Ex. Saturday.)
KGA—9:20 AM. “Mary” over the NBS System.

MOUNTAIN STATES (Pacific Standard Time)

KOA—10:30 AM. Woman’s Magazine of the Air. (Thursday at 10:00 AM.)
8:00 AM. Your Child. (Tuesday only.)
10:15 AM. Mary Hale Martin. (Wednesday only.)
2:30 PM. A Recipe a Day. (Monday only.)
KSN—9:00 AM. Home Economics Program.
9:30 AM. Housewives Program.
10:00 AM. A Visit with Mrs. Jennie Lee.
9:45 AM. Dietary Discussions. (Monday and Thursday only.)
10:30 AM. Helen Webster. (Monday and Wednesday only.)
10:50 AM. Ann Holden. (Monday and Thursday only.)
10:15 AM. Favorite Recipes of Mary Hale Martin. (Wednesday only.)

ARIZONA

KTRB—8:00 AM. Aunt Helen’s Home Hints.
10:15 AM. NBC Josephine Gibson. (Monday and Wednesday only.)
10:50 AM. NBC Magazine of the Air. (Thursday at 10 AM.)
Health Talks and Exercises

SOUTHERN CALIFORNIA (Daily Ex, Where Indicated)

KXCR—8:45 AM. Health Man.
KPSD—7:30 AM. Start O' the Day NBC.
KRL—7:45 AM. Start O' the Day NBC.
2:45 PM: Women's Health Exercises. (Monday and Friday only.)
5:30 PM. Dr. H. Edward Myers "Care of the Teeth." (Monday only.)
12:30 PM. Pure Food and Drug Speaker. (Thur. only.)
KAA—6:45 AM. Earlybirds Exercises by D. P. M. Seixas.
7:15 AM. Pep and Vigor Exercises by D. P. M. Seixas.
7:45 AM. Home Folks Exercises by D. P. M. Seixas.
9:15 AM. Golden Hule Health Service Program.
KGFP—8:30 AM. Dr. Wiseman's Health Talk.
KFOX—1:30 PM. Dr. Harbottle.
8:00 PM. Treatments of "Harmonious Suggestions," by Dr. J. P. Haush. (Monday and Friday only.)
KECA—8:30 AM. Health Exercises, Louis Rueb.
10:15 PM. Health Exercises, Louis Rueb.

NORTHERN CALIFORNIA

KTAH—1:30 PM. Dental Clinic.
4—8:55 AM. Health Man.
KPO—7:30 AM. Start O' the Day.
KFWI—10:30 AM. Health Talk by Dr. T. G. Linebarger.
KHOW—1:30 PM. Health Program by Dr. M. H. McLain.
KQW—11:30 AM. La Vida Huelo Program.
KJHN—10:45 AM. The Health Man.
KYA—7:00 AM. Drury's Daily Dozen.
3:15 PM. Health Talk on Mon., Tues. and Sat.

NORTHWEST

KIQ—7:30 AM. Start O' the Day.
1:30 PM. Dental Hygiene. (Ex. Thurs.)
KGI—7:30 AM. Start O' the Day.
KGO—7:30 AM. Start O' the Day.
KMO—12:45 PM. Tacoma Dairy Health Program.
KOMD—7:30 AM. Start O' the Day.
9:30 AM. Safeguarding the Nation's Food and Drug Supply. (Thursday only.)
KJHR—1:15 PM. Dental Lecture. (Ex. Sat.)
KFX—8:00 AM. Dr. Ira C. Oliner.
1:15 PM. Dental Lecture. (Ex. Sat.)
7:00 AM. Alarm Clock Hour.
KOL—5:30 PM. Tooth Talk, Dr. Irson.
KGA—1:15 PM. Dental Lecture. (Ex. Sat.)

MOUNTAIN STATES (Pacific Standard Time)

KOA—7:30 AM. Safeguarding Your Food and Drug Supply. (Monday only.)

ARIZONA

KTAR—6:00 AM. YMCA Health and Happiness Hour.

For the Youngsters

SOUTHERN CALIFORNIA (Daily Except Where Indicated)

National Broadcasting Co. 2 PM—Matinee Program. (Mon.) KGO
KOMI KGW KFL
United Broadcasting Co. 7:00 PM—Children's Hour KTBK KORE KXL KMID KGA KKYV KFWI KTM
KFI—4:14 PM. Big Brother Don (Ex. Sat.)
5:40 PM. Haron Keyes, The Story Man. (Ex. Sat.)
KMP—9:30 AM. Hob, Bunny and Junior.
4:15 PM. Just Kids Club (Ex. Mon. and Sat.)
KXX—5:15 PM. Big Brother Ken's Kiddies Hour.
KPSG—4:00 PM. Kiddies Hour (Fri. only.)
KTHI—6:00 PM. Aunt Martha's Children's Program. (Sun.)

NORTHERN CALIFORNIA

KTAH—5:00 PM. The Story Man and His Air Castle. (Ex. Sat.)
KPO—5:00 PM. Big Brother. (Ex. Mon.)
KLA—5:00 PM. Big Brother's Club.
KQW—4:15 PM. Baron Keyes' Story Castle.

NORTHWEST

KGW—4:15 PM. "Clitchety-Pluck" of the Air Castle.
KJKE—5:15 PM. Baron Keyes and His Air Castle.
KG—2:00 PM. Children's Program.
KGA—5:15 PM. Baron Keyes and His Air Castle.

MOUNTAIN STATES (Pacific Standard Time)

KSL—3:00 PM. KSL Kiddies' Club.

ARIZONA

KTAR—4:00 PM. Baron Keyes and His Air Castle.

Plays, Stories, Dramatic Readings

(United Broadcasting Company)

8:00 PM—Dramatic Program. (Tues.) KGB KFWI KTM TKT
9:00 PM—Detective Stories. (Thurs.) KGB KFWI KTM TKT
KXIC KXL KMID KXY V KXOS

(Columbia Broadcasting Company)

5:30 PM—"Arabesque, a Desert Play." (Mon.) KKL KPY
7:00 PM—"Hank Simmons' Show Boat." (Sat.) KKL KPY KOL
KFTP KHF KFRC
7:30 PM—Don Amaizo. (Mon.)
6:00 PM—"Majestic Curiosity Shop." (Sun.)

National Broadcasting Company

2:00 PM—"NH" Matinee Period. (Wed.) KGO.
9:00 PM—"The Story Teller." (Thurs.) KGO.
1:00 PM—"Radio Guild." (Fri.) KECA KPSD KTAH.
10:00 PM—"Mystery Serial." (Fri.) KGO KSL KOA
KORE KXL NRB Drama Hour. (Sat.) KOL KPSD KAOA.
KPSD—2:00 PM. Matinee Story Time. (Daily Ex. Sat.)
1:00 PM. Radio Guild. (Fri.)
KFI—6:00 PM. "Sketches in the Trenches." (Mon.)
9:15 PM. "De-17. Emperor," James Carden and Cast. (Mon., Wed. and Fri.)
4:15 PM. Raine Bennett. Post of the Air. (Tues. and Fri.)
8:20 PM. Tom Terris, "The Vagabond Movies Director." (Tues.)
4:45 PM. Noreen Gammill, Original Character Sketches. (Wed.)
KMP—9:00 PM. "Mystery Play." (Tues.)
KHJ—6:30 PM. Prof. Landsey and Leigh Halrline, Reading with Organ. (Thurs.)
9:00 PM. "Folgeria," Serial Comic Opera of the Air. (Thurs.)
7:30 PM. "Behind the Words—a Drama of Thoughts," CBS. (Fri.)
7:50 PM. Hank Simmons' Show Boat. (Sat.)
7:50 PM. Don Amaizo. (Mon.)

(KFWI—6:00 PM. Majestic's Old Curiosity Shop.
KXX—1:15 PM. Eddie Albritton's Reading of Late Fiction. (Daily)
8:00 PM. KNX Players directed by Georgia Pitfield. (Mon.)
8:00 PM. "Mr. and Mrs." Dramatic Sketch. (Thurs.)
KFOX—9:30 PM. "Detective Story." (Thurs.)
KCX—6:00 PM. Nick Harris Detective Story Program. (Sun.)
8:30 PM. Raine Bennett. Post of the Air. (Sat.)
7:30 PM. NRC Empire Builders, Dramatization of the West. (Monday)
9:30 PM. NRC Memory Lane. (Tues.)

NORTHERN CALIFORNIA

KTAH—7:45 PM. Dramatic Sketch from UTC. (Sat.)
KPRC—5:30 PM. Fred Benioff Players. (Sun.)
9:00 PM. "Folgeria," Comic opera of the Air. (Thurs.)
7:00 PM. HankSimmons'ShowBoat.(Sat.)
6:00 PM. Majestic's Curiosity Shop. (Sun.)
KQW—4:30 PM. Story Time. (Daily Ex. Sun.)
KVA—9:15 PM. KYA Players. (Mon.)
8:00 PM. KYA Players. (Sun.)

NORTHWESTERN STATES

KGW—9:15 PM. "On to Oregon," Dramatization. (Fri.)
7:30 PM. Empire Builder's Program, NRB. (Mon.)
9:30 PM. Memory Lane. (Tues.)
KOMO—7:30 PM. Empire Builder's Program, NRB. (Mon.)
KVL—9:00 PM. "Folgeria," Comic Opera of the Air. (Thurs.)
KOL—9:00 PM. "Folgeria," Comic Opera of the Air. (Thurs.)
7:00 PM. Hank Simmons' Show Boat. (Sat.)
7:30 PM. Don Amaizo's Adventures. (Mon.)
6:00 PM. Majestic's Old Curiosity Shop. (Sun.)

INTERMOUNTAIN STATES

KOA—9:30 PM. Empire Builders. (Mon.)
10:00 PM. Mystery Serial, NRC. (Fri.)
9:30 PM. Drama Hour, NRB. (Sat.)
KSL—2:00 PM. Radio Matinee. (Daily Ex. Sun.)
8:30 PM. Dramatic Readings and Music. (Thurs.)
7:30 PM. Empire Builders, NRC. (Mon.)
KDL—6:00 PM. Majestic's Old Curiosity Shop. (Sun.)
5:30 PM. "Arabesque, a Desert Play." (Mon.)
7:30 PM. Don Amaizo. (Mon.)
7:00 PM. CBS Graybar's "Mr. and Mrs." (Tues.)
9:00 PM. "Folgeria." (Thurs.)
7:00 PM. Hank Simmons' Show Boat. (Sat.)
KTAH—6:00 PM. Majestic's Curiosity Shop. (Sun.)
7:30 PM. The Empire Builders. (Mon.)
9:30 PM. Memory Lane, NRC. (Tues.)

Bridge Lessons

KFND—4:00 PM. Bridge Lessons. (Tues. only.)
KFWI—8:00 PM. Bridge Lessons. (Tues.)
KPO—1:00 PM. Bridge Game. (Tues. only.)
KVA—1:45 PM. Willis Boardman Zink, Authority on Contract Bridge. (Wed. and Fri.)
KMO—9:00 PM. Bridge Game. (Wed. and Fri.)
KJH—8:00 PM. Bridge Game. (Wed. only.)
KOA—4:45 PM. Bridge Lessons. (Tues. only.)

Bridge Lessons
National Broadcasting Co.

SUNDAY
8:30 AM — NBC Organ Recital KGO
9:30 AM — Breakfast with Sperry KQH KOMO KQO KFI KPSD
9:00 AM — John Heraley and Dagmar Rybner KGO.
9:15 AM — American Oratorio Society KGO KOMO KGW KECA
10:15 AM — Piano Caspers KGO
10:30 PM — Neapolitan Days KGO KPSD KECA
11:00 AM — Grace Cathedral Service KGO
12:00 PM — Christmas Conference KGO KQH KOLO KPSD KQO KI
1:00 PM — Dr. S. Parkes Chamber KGO KQO KGW KECA
8:00 PM — National Vespers KQO KQO KGW KTAR KEC A
3:00 PM — Catholic Hour KQO KGW KTAR KEC A
4:00 PM — Woman's Sercret KGO KOMO KGW KECA
4:30 PM — Enna Jettick Melodies KQO KOMO KGW KECA
6:00 PM — Studebaker Champions KQH KQO KGW KECA
7:30 PM — Kansas City KFI KPSD KQO KI
8:45 PM — Symphony Service KGO KQO KGW KECA
8:45 PM — Southern Harmony Four KQO KGW KPSD KQO KI
9:30 PM — World Wanderings KQO KGW KPSD KQO KI
10:00 PM — Kansas City KPSD KQO KI
11:00 PM — Laughner-Harris Hotel St. Francis Dance Orchestra KQO KGW KECA
11:45 PM — The Vagabonds KGO KECA
12:15 AM — Collier's Radio Hour KQO KGW KQO KPSD
6:00 AM — Neapolitan Days KGO KPSD KECA
6:15 AM — Waterfront Hour KQO KGW KECA
6:45 AM — The Entertainers KGO KPSD KTAR
7:00 AM — The Olympians KGO KTAR
7:15 AM — Fingermist Laurels KQH KGW KECA
7:30 AM — Kansas City KFI KPSD KQO KI
7:45 AM — Sunday at Seth Parker's KGO KQO KGW KECA
8:15 AM — The Entertainers KGO KPSD KTAR
8:30 AM — The Newsmen KQH KGW KECA
9:00 AM — The Newsmen KQO KGW KTAR KSL KOA
9:30 AM — The Vagabonds KGO KECA
9:45 AM — The Reader's Guide KGO
10:15 AM — Concert Jewels KGO KECA KOA
11:00 PM — The Vagabonds KGO KECA KOA

M O N D A Y
7:30 AM — Sunrise Serenaders KGO
7:30 AM — Quaker Start Off the Day KQO KGW KQO KPSD KQO KI
8:00 AM — Shell Happynite KQO KGW KPSD KQO KI
8:00 AM — Financial Service Program KGO KQO KGW KECA
8:15 AM — Morning Melodies KGO KQO KGW KECA
8:30 AM — Cross-Cuts of the Day KGO KQO KGW KECA
9:00 AM — Portland Lumberjacks KGO KGW KECA
9:15 AM — Woman's Sercret KGO KQO KGW KECA
9:45 AM — Radio Ramblings KGO
10:15 AM — Josephine B. Gibson Food Talk KGO KPSD KTAR KQO KGW KECA
10:30 AM — Magazine of the Air KGO KGW KQO KGW KQO KPSD KSL KOA KTAR
11:30 AM — California Federation of Women's Clubs KGO KGW KECA KPSD KECA
12:00 PM — Luncheon Concert KGO KGW KPSD KECA
1:00 PM — Hotel Cosmopolitan Dance Orchestra KGO KPSD KTAR KECA
1:30 PM — Piano Caspers KGO KGW KPSD KTAR KECA
2:00 PM — Maitline Story Program KGO KPSD KECA
2:30 PM — NBC Matinee KQO KGW KECA
3:00 PM — What's In a Name? KGO KGW KGW KQO KGW KECA
3:15 PM — Mormon Tabernacle Choir and Organ KPSD KECA KGW KECA KPSD KTAR
3:45 PM — Parisian Quintet KGO KPSD KECA
3:45 PM — The Day by James G. McDonald. KGO KECA KGW KECA
4:30 PM — The Quaker Man KQH KOLO KECA KPSD KTAR
4:45 PM — How's Business? KGO KGW KECA
5:00 PM — How's Business? Merle Thorpe KGQ KOLO KOLO KGW KECA

5:15 PM — Fifteen Minutes in the Nation's Capital KGO KHQ KOMO KGW KECA KPSD KECA
5:30 PM — The Olympic Games KGW KQO KGW KQO KPSD KQO KI
6:00 PM — Maxtag Orchestra KGW KHQ KOMO KGW KECA KPSD KTAR
6:30 PM — General Motors Family Party KQO KGW KPSD KQO KI
7:00 PM — Pianissimo — Carlson Program KQO KGW KOMO KGW KECA KPSD KTAR
7:30 PM — Empire Builders KQH KQO KGW KECA KPSD KTAR
8:00 PM — Popular Tunes KGO
8:15 PM — Sports and KGO KGW KECA
8:45 PM — Rudy Seiger's Shell Symphonists KPSD KQO KGW KECA
8:45 PM — Southern Harmony Four KQO KGW KPSD KQO KI
9:00 PM — World Wanderings KQO KGW KPSD KQO KI
9:30 PM — Pacific National Singers KGO KQO KGW KECA KPSD KTAR
10:00 PM — Musical Echoes KGW KECA KQO KGW KECA KOA KSL KOA
10:30 PM — Vifn Frenn' Scotty KGO KSL KOA
10:45 PM — Walter Fermer, cellist KQO KGW KECA KOA
11:00 PM — Laughner-Harris Hotel St. Francisco Dance Orchestra KQO KGW KECA
11:45 PM — The Vagabonds KGO KECA KOA

T H U R S D A Y
7:30 AM — Sunrise Serenaders KGO
7:30 AM — Quaker Start Off the Day KQO KGW KQO KPSD KQO KI
8:00 AM — Shell Happynite KQO KGW KPSD KQO KI
8:00 AM — Financial Service Program KGO KQO KGW KECA
8:15 AM — Morning Melodies KGO KQO KGW KECA
8:30 AM — Cross-Cuts of the Day KGO KQO KGW KECA
9:00 AM — Vermont Lumberjacks KGW KGW KECA
9:15 AM — Meet the Folks KGO KGW KECA
9:30 AM — William Don KGO KGW KECA
10:45 AM — The Entertainers KGO KGW KECA
10:00 AM — Color Harmony Program KQO KGW KPSD KQO KI
10:00 AM — Woman's Sercret KQO KGW KPSD KQO KI
10:30 AM — NBC Matinee KGW KQO KGW KECA KPSD KTAR KOA KGW KECA
1:00 PM — Pacific Vagabonds KQO KGW KECA KPSD KTAR KOA KGW KECA
2:00 PM — NBC Matinee KGQ KQO KTAR KHQ KOMO KGW KQO KGW KECA
3:00 PM — Black and Gold Room Orchestra KQO KGW KECA
3:30 PM — Who's Behind the Name? Ed- win Alter KGO KGW
4:30 PM — Black and Gold Room Orches- trato KQO KGW KECA
4:30 PM — Organ Recital KGW KPSD KQO KGW KECA
4:30 PM — Laughter That Safeguard Society KQO KGW KECA KPSD KECA
4:30 PM — Phil Cook, the Quaker Man KGO KQO KGW KPSD KECA KPSD KTAR
4:45 PM — Sarah Kreindler, Violinist KGW
5:00 PM — Brazilian- American Program KQO KGW KECA KPSD KECA
5:30 PM — Bits of Melody KGW KGW
5:45 PM — News Service KGW KGW
6:30 PM — Happy Wunder Bakers KGW KHQ KOMO KGW KECA
7:00 PM — Westlinghouse Safety Program KGW KGW KECA KPSD KTAR
7:30 PM — KAI, Hoffe and His Lucky Strike Dance Orchestra KGW KQO KGW KECA KPSD KTAR
8:00 PM — Violae Ray Music Box KGW KQO KGW KPSD KECA KPSD KTAR
8:30 PM — Amos & Andy KGW KGW KPSD KQO KGW KECA
8:45 PM — Sperry Smiles KGW KQO KGW KGW KECA KPSD
9:00 PM — Florsheim Frolic KGW KGW KOMO KGW KECA KPSD KTAR
9:30 PM — Memory Lane KGW KGW KOA KPSD KECA KPSD KTAR
10:00 PM — National Concert Orchestra KGW KOA KGW KECA
11:00 PM — Laughner - Harris Hotel St. Francisco Dance Orchestra KGW KECA KOA

H A R R Y  A. E A R N S H A W & R A Y M O N D  R. M O R G A N
(EARNSHAW-YOUNG, lnc.)
producers of
Outstanding Radio Successes
including
Forest Lawn Memorial Park
Arrowhead Springs Beverages
"Adohr-Opera-of-the-Air"
"The Old Scrapbook"
"Folgeria"

Writers, arrangers, directors of Effective Advertising

EARNSHAW-YOUNG INC
2323 PETROLEUM SECURITIES BLDG.
714 West 7th Street
Westmore 3033
Los Angeles

January, 1931
R A D I O  D O I N G S
Page Thirty-five

for XMAS — WE SUGGEST BRUSSELLICK RADIO
Wednesday:
7:30 AM - Sunrise Serenaders KGO
7:30 AM - Quaker Start of the Day KHQ KGO KQO KPSD KFI
8:00 AM - Shell Happytime KHQ KOMO KGO KPSD KFSD
8:00 AM - American Heritage Program KGO
8:15 AM - Morning Melodies KGO
8:30 AM - Cross-Cuts of the Day KGO
9:00 AM - Vermont Lumberjacks KGO KOMO KFSD KFSD
9:15 AM - The Recitalists KGO
9:30 AM - Daily Crocker Gold Medal Home Service Talks KHQ KOMO KGW KPSD
9:45 AM - Morning Gloria's KGO
10:15 AM - Mary Halsey Martin's Household Period KHQ KOMO KGW KPSD KFSD
10:30 AM - Woman's Magazine of the Air KGO KHQ KOMO KGW KPSD KFSD KFSD
11:30 AM - Organ Recital KGO KECA
11:45 AM - Sisters of the Skillet KGO KECA
12:00 PM - Luncheon Concert KGO KECA
12:30 PM - Evening Stars KGO KECA
1:00 PM - Blue Aces KHQ KFSD KTAR KECA
2:30 PM - NHN Matinee KGO
2:00 PM - Series of Talks KTAR KECA
2:15 PM - Horace and De Rosse KTAR KECA
3:00 PM - Horace Heidt and His Hotel of the Day Orchestra KECA KGW KFSD
3:45 PM - Arion Trio KGO
4:00 PM - El Tampa Romance KGO
4:15 PM - Science KGO KOMO KFSD KFSD
4:30 PM - Daily Quaker, the Quaker Man KGO KHQ KOMO KGW KPSD
5:00 PM - Rodheaver Sing KGO
5:15 PM - Radiotone Varieties KGO KHQ KGW KFSD KFSD
5:30 PM - Hits of Melody KGO
6:00 PM - Woman's Magazine of the Air KGO KHQ KOMO KGW KPSD KFSD
6:30 PM - Halsey, Stuart Program KGO KHQ KOMO KGW KFSD
7:00 PM - Thalidomide Hour KGO KHQ KOMO KGW KPSD KFSD
8:00 PM - S and W Forum of the Air KGO KHQ KOMO KPSD
8:30 PM - Let's Get Associated KHQ KOMO KGW KPSD KFSD
8:30 PM - America the Beautiful KHQ KOMO KGW KECA KPSD
9:00 PM - Jolly Time Revere KGO KHQ KOMO KGW KFSD KTAR
9:30 PM - Gilmore Biography KECA KEC
10:30 PM - The James KGO KPSD KFSD KECA
11:00 PM - Laughner-Harris Hotel St. Francis Dance Orchestra KGO KGW KFSD
Thursday:
7:30 AM - Sunrise Serenaders KGO
7:30 AM - Quaker Start of the Day KHQ KGO KFSD KFSD
8:00 AM - Shell Happytime KHQ KOMO KGW KFSD
8:00 AM - American Heritage Program KGO
8:15 AM - Morning Melodies KGO
8:30 AM - Cross-Cuts of the Day KGO
9:00 AM - Sunrise Serenaders KGO
9:45 AM - Breakfast with the Nation's Food and Drug Supply KGO KHQ KOMO KGW KPSD KFSD
10:00 AM - Woman's Magazine of the Air KGO KHQ KOMO KGW KPSD KFSD
11:00 AM - Standard Day Broadcast KGO KHQ KOMO KGW KPSD KFSD
11:45 AM - Organ Recital KGO KECA
12:00 PM - Hotel Sir Francis Drake Orchestra KHQ KOMO KGW KPSD KFSD
2:00 PM - NHN Matinee KGO
2:00 PM - In the Spotlight KPSD KFSD KFSD
3:00 PM - All-Stars KECA KTAR
3:15 PM - At the Premier Hour KGW KPSD
3:45 PM - The Vagabonds KGO
4:15 PM - News Service KPSD KFSD
4:30 PM - Phil Cook, the Quaker Man KGO KHQ KOMO KGW KFSD
5:00 PM - Spizzico KGW KFSD KTAR
6:00 PM - Arco Birthday Party KHQ KGW KFSD KFSD
6:30 PM - Maxwell House Ensemble KHQ KOMO KGW KFSD KTAR
7:00 PM - B. A. Rolfe and His Lucky Strike Dance Orchestra KGO KHQ KGW KPSD KFSD
7:30 PM - Standard Symphony Hour KHQ KOMO KGW KPSD
8:00 PM - Amos 'N Andy KHQ KGW KFSD KFSD
8:15 PM - Sperry Smiles KHQ KGW KFSD KFSD
9:00 PM - The Storekeeper KGO
9:30 PM - Horace Heidt and His Hotel of the Day Orchestra KOMO
9:30 PM - The Vagabonds KGO KFI
10:00 PM - Dance KHQ KPSD
10:00 PM - Yir Frien' Scotty KGO KAO
10:15 PM - Horace Heidt and His Hotel of the Day Orchestra KOMO
11:00 PM - Laughner - Harris Hotel St. Francis Dance Orchestra KGO KGW KFSD
Friday:
7:30 AM - Sunrise Serenaders KGO
1:30 AM - Quaker Start of the Day KHQ KGO KFSD KFSD
8:00 AM - Shell Happytime KHQ KOMO KGW KPSD
8:00 AM - American Heritage Program KGO
8:15 AM - morning Melodies KGO
8:30 AM - Cross-Cuts of the Day KGO
9:00 AM - Financial Service Program KGO
9:15 AM - Morning Melodies KGO
9:30 AM - Jolly Time Revere KHQ KGW KFSD
9:45 AM - Embroidery Trio KGO KGW
10:15 AM - Josephine R. Gibson, Food Talks KHQ KOMO KGW KFSD
11:00 AM - Financial Service Program KGO
12:00 PM - The James KGO KPSD KFSD KECA
1:00 PM - Hotel of the Day KHQ KGW KPSD KFSD
2:00 PM - The Vagabonds KGO KPSD KFSD
3:00 PM - The James KGO KPSD KFSD
4:00 PM - Towel Van and His Orchestra KGO
5:00 PM - Rodheaver Sing KGO
5:30 PM - Radiotone Varieties KGO KHQ KGW KPSD KFSD KTAR
6:00 PM - Woman's Magazine of the Air KGO KHQ KGW KPSD KFSD
7:00 PM - The James KGO KPSD KFSD
7:30 PM - The James KGO KPSD KFSD
11:10 AM - Morning Concert KGO
12:00 PM - Black Gold Room Orchesta KGO KPSD KFSD KFSD
1:00 PM - Hotel of the Day KHQ KGW KPSD KFSD
January, 1931

R A D I O  D O I N G S

Page Thirty-seven

7:00 PM—B. A. Rolfe and His Lucky Male Orchestra. KQX, KQDX, KQX, KQDX, KQDX, KQDX

8:00 PM—Rainbow Harmonies. KGO, KQDX, KQDX, KQDX, KQDX

8:00 PM—Gilmore Circus. KQDX, KQDX, KQDX, KQDX, KQDX

8:30 PM—Amos ‘N Andy. KQX, KQDX, KQDX, KQDX, KQDX

4:45 PM—Sperry Smiles. KQO, KQDX, KQDX, KQDX

9:00 PM—El Sipelio Ministrel Show. KQX, KQDX, KQDX, KQDX

9:30 PM—KDKA Drama Hour. KQX, KQDX, KQDX

10:30 PM—Spotlight Review. KQX, KQDX, KQDX

Columbia Broadcasting System

SUNDAY

9:00 AM—Jewish Art Program. Talk, Script and Music. KVI, KQDX, KQDX, KQDX

9:30 AM—London Broadcast. KQY, KQDX, KQDX, KQDX

9:45 AM—H. M. Canadian Grenadier Guards. Broadcast from Montreal. KQX, KQDX, KQDX

10:30 AM—Conclave of Nations. Music. KQX, KQDX, KQDX, KQDX

11:00 AM—Cathedral Hour. All musical presentation of a Cathedral service. KQY, KQDX, KQDX

12:00 Noon—New York Philharmonic Orchestra. KQX, KQDX, KQDX

2:30 PM—The French Trio. KQY, KQDX, KQDX

5:00 PM—The World’s Business. KQX, KQDX, KQDX, KQDX

5:15 PM—U. S. School of Music. KQY, KQDX, KQDX

5:45 PM—The Gauchoes. Vincent Sorey and His Orchestra. WLAC, KQY, KQDX, KQDX

6:00 PM—Majestic Curiosity Shop. "A Pack of Cards." KQY, KQDX, KQDX

7:00 PM—Jesse Crawford, Royals’ Poet of the Organ. KQX, KQDX, KQDX

8:00 PM—Tone Pictures. Domenico Savino, Director. KQY, KQDX, KQDX

12:00 Noon—Columbia Ballad Hour. KQY, KQDX, KQDX

1:00 PM—Columbia Revue. KQX, KQDX, KQDX

1:30 PM—Annie Leaf at the Orman. KQY, KQDX, KQDX

1:00 PM—Illuminated Hour. KQY, KQDX, KQDX

1:30 PM—Woodrow Park Hotel Orchestra. KQX, KQDX, KQDX

TUESDAY

1:30 PM—Gypsy Music Makers. Emery Deutsch and His Orchestra. KQY, KQDX, KQDX

2:15 PM—Virginia Arnold, pianist. KQX, KQDX, KQDX

3:00 PM—WPNJ Commodores. KQY, KQDX, KQDX

3:15 PM—Tony’s Scrap Book. KQY, KQDX, KQDX

4:00 PM—Current Events. H. V. Kellenborn. KQX, KQDX, KQDX

4:15 PM—The Vagabonds. KQX, KQDX, KQDX

5:30 PM—Arabesque. KQY, KQDX, KQDX

7:00 PM—Bourjois. "An Evening in Paris." KQX, KQDY, KQDX, KQDX

7:00 PM—Guy Lombardo and His Orchestra. KQY, KQDX, KQDX

7:30 PM—Don Amato. KQY, KQDX, KQDX

8:15 PM—Columbia Radio Column. KQX, KQDX, KQDX

8:30 PM—Henderson. KQY, KQDX, KQDX

WEDNESDAY

1:30 PM—Something for Everyone. Music. KQX, KQDX, KQDX

9:15 AM—Paul Tremaine and His Yoeng’s Restaurant Orchestra. KQY, KQDX, KQDX

9:30 AM—Columbia Revue. KQX, KQDX, KQDX

10:30 AM—Pickle Packers Program. KQY, KQDX, KQDX

11:00 AM—Columbia Little Symphony and Frank Ruby. KQY, KQDX, KQDX

11:30 AM—American School of the Air. KQY, KQDX, KQDX

12:00 Noon—Columbia Saloon Orchestra. KQX, KQDX, KQDX

12:30 PM—Synchronized Silhouettes. Nat Brusiloff and His Orchestra. KQY, KQDX, KQDX

1:00 PM—Musical Album. KQX, KQDX, KQDX

1:45 PM—Asbury Park Casino Orchestra. KQY, KQDX, KQDX

2:45 PM—Eddie Connors. KQY, KQDX, KQDX

3:30 PM—"Bill Schwartz’s Go to Press." KQX, KQDX, KQDX

3:15 PM—Paul Tremaine’s Orchestra. KQX, KQDX, KQDX

4:30 PM—Tony’s KQX, KQDX, KQDX

5:00 PM—Musical Airs. KQX, KQDX, KQDX

5:15 PM—U. S. Marine Band. KQY, KQDX, KQDX

5:30 PM—Toscha Seidel and Concert Orchestra. KQY, KQDX, KQDX

6:00 PM—Gold Medal Freight. KQX, KQDX, KQDX

8:30 PM—California Melodies. KQX, KQDX, KQDX

THURSDAY

5:45 AM—Morning Minstrels. KQY, KQDX, KQDX

6:00 AM—Something for Everyone. KQX, KQDX, KQDX

9:00 AM—Paul Tremaine and His Yoeng’s Restaurant Orchestra. KQY, KQDX, KQDX

9:30 AM—Columbia Revue. KQY, KQDX, KQDX

10:00 AM—Ocean Spray Foods. KQY, KQDX, KQDX

EXPERT SERVICE

Any Make of Set at Reasonable Rates

SHORT WAVE SETS

Built and Balanced

JACK CHENEE

1729 W. 30th St., N. 6068

BEFORE you buy

BRUNSWICK RADIO

www.americanradiohistory.com
11:00 AM—Columbia Artists Recital, Ben Alley, tenor, and Marie Garard, soprano KVI KFPI KFPR
11:30 AM—American School of the Air, "Schubert" KLY KIVY KIVY KIVY KFPR
12:00 Noon—United States Navy Band KLY KIVY KIVY KIVY KFPR
1:00 PM—Asbury Park Casino Orchestra, dance music KLY KIVY KIVY KFPR
1:30 PM—The Crockett Mountainmen, Hillbilly Numbers KLY KIVY KIVY KFPR
2:00 PM—WSOD Commodores, dance music KLY KIVY
2:45 PM—Bert Lown and his Bilmore Orchestra KLY KIVY
3:00 PM—Columbia Educational Features KLY KIVY KFPR
3:15 PM—Ozzie Nelson and his Rambison Plaza Orchestra, dance music KLY KIVY KFPR
3:45 PM—Tony's Scrap Book KLY KIVY KFPR KFPI KIVY KFPR
7:00 PM—The Lutheran Hour—Dr. Walter A. Maier, large choir and orchestra KLVY KIVY KIVY KFPR
7:30 PM—Melody Moment KLY KIVY KFPR
8:00 PM—Ben Bernie and his Orchestra
8:30 PM—Ted Weems and his Orchestra KLY KLY
9:00 PM—Pologether comic opera of the air KLY KIVY KIVY KFPR KFPI KIVY KFPR

FRIDAY
6:00 AM—Something for Everyone KLY KIVY KFPR
6:30 AM—Morning Moods KIVY KFPI
9:15 AM—Paul Tremaine's Orch. KLY KIVY KIVY KFPR KIVY KFPR
11:00 AM—Columbia Artists Recital KLY KIVY KFPR
11:30 AM—American School of the Air, KLVY KIVY KIVY KFPR KFPR
12:00 Noon—United Marine Band Concert KLY KIVY KIVY KIVY KFPR
12:45 PM—Columbia Educational Features "Cold Light" KLY KIVY KIVY
1:00 PM—Columbia Salon Orch. KLY KIVY KIVY KFPR
1:45 PM—Thirty Minute Men, Nat Brulehoy and his orch. KIVY KIVY
2:00 PM—Light Opera Gems KLY KIVY KIVY
2:15 PM—Shanny Train and his piano duo KLY KIVY KFPR
3:00 PM—Paul Tremaine's Orchestra, dance music KLY KIVY KIVY KFPR

3:45 PM—Tony's Scrap Book
4:00 PM—Howard's Lamin's St. Moritza Orch. KLY KIVY KFPR
4:55 PM—National Employment Committee KFPR
5:15 PM—Grand Opera Miniatures KIVY KIVY KIVY KFPR KFPR
7:00 PM—Armenian National Art Chorus KLY KIVY KIVY KIVY KFPR
7:30 PM—Behind the Words KLY KIVY KIVY KIVY KFPR
8:00 PM—Musical Aviators Orchestra, dance music KLY KIVY KIVY KFPR
8:30 PM—Romannelli and his King Edward Orchestra from Toronto, dance music KLY KIVY

SATURDAY
6:00 AM—Something for Everyone, music, news, humor, poetry, etc KLY KIVY KFPR
6:30 AM—Morning Moods, Vincent Sorey, director KIVY KFPR
8:00 AM—Land O' Make Believe Children's Play KFPR
8:30 AM—Columbia Revue KIV Y KFPR
9:00 AM—Paul Tremaine's Orch. KLY KIVY KIVY KFPR
11:00 AM—Columbia Artists' Recital KLY KFPR
11:30 AM—Columbia Salon Orch. KLY KIVY KIVY KIVY KFPR
12:00 Noon—The Four Clubmen KLY KIVY KIVY KFPR
12:30 PM—Saturday Spotlighters KLY KIVY KIVY KFPR KIVY KFPR

SUNDAY
8:00 AM—Bill Sharpeles and His Gang KIVY KIVY KFPR (alternating) KTAH KORE KXL KMED KIVA KIVOS
7:00 PM—I'M Sunday Echoes (Liborius Hauptman and orchestra KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
7:30 PM—Daily News Digest KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
7:45 PM—Eveningsong (inspirational music) KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
8:15 PM—Staff Soloists' Recital KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
8:30 PM—Hotel Roosevelt Orch KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
9:00 PM—On Parade (Orch and Soloist) KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
9:30 PM—Traumerei (orchestra & vocalists) KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS

MONDAY
8:00 AM—Bill Sharpeles and His Gang KIVA KIVOS
7:00 PM—Composer's Hour (Liborius Hauptman's Orchestra) KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
7:30 PM—Daily News Digest KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
7:45 PM—Eveningsong (inspirational music) KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
8:15 PM—Staff Soloists' Recital KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
8:30 PM—National Employment Committee KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
9:00 PM—United Popular Ensemble KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS
9:30 PM—United Popular Ensemble KGB KFPH KTM (alternating) KTAH KORE KXL KMED KIVA KIVOS

United Broadcasting Co., Limited
TUESDAY
8:00 AM—Bill Sharples and His Gang
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
7:00 PM—Health Care of Terpinschore
KGB KFWB-KTM KTAH KORE
KXL KMED KXA KVOS
7:30 PM—Daily News Digest
KGB KFWB - KTM KTAH KORE
KXL KMED KXA KVOS
8:00 PM—Dramatic Program (G. Donald
Group)
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
8:30 PM—Phantoms of Broadway (studio
orchestra)
KGB KFWB-KTM KTAH
KORE KXL KMED KXA KVOS
9:30 PM—Land of Dreams (orchestra
and vocalists)
KGB KFWB-KTM
KTAH KORE KXL KMED KXA KVOS
WEDNESDAY
8:00 AM—Bill Sharples and His Gang
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
7:00 PM—Opera Sketches (orchestra)
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
7:30 PM—Daily News Digest
KGB KFWB-KTM
KTAH KORE KXL KMED KXA KVOS
8:00 PM—Musical Brevities
KGB KFWB-KTM KTAH KORE
KXL KMED KXA KVOS
8:00 PM—Ted Dahl and His Orchestra
(orchestration at the studios of
KFWB)
KGB KFWB-KTM KTAH
KORE KXL KMED KXA KVOS
9:00 PM—O’er Land and Sea (orchestra
and soloist)
KGB KFWB-KTM KTAH
KORE KXL KMED KXA KVOS
9:30 PM—Dancing Strings
KGB KFWB-KTM
KTAH KORE KXL KMED KXA KVOS
THURSDAY
8:00 AM—Bill Sharples and His Gang
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
7:00 PM—Klamarenko’s Russian
Orchestra and Tenor Soloist
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
7:30 PM—Daily News Digest
KGB KFWB-KTM KTAH
KORE KXL KMED KXA KVOS
8:00 PM—Venetian (Liborious
Hauptman and orchestra)
KGB KFWB - KTM KTAH
KORE KXL KMED KXA KVOS
SUNSET
AERIAL and GROUND
For Greater Pick-up and Selectivity
Ideal for DX Reception
The Selective Aerial.............$3.00
The Positive Ground.............$2.25
The Super-Ground..............$3.00
SUNSET MFG. CO.
1114 N. Sycamore
HE 4941
Licensed under U. S. Pat. 1,773,105
and Pats. Pend. and Canadian Pats.
241,172 and 246,774
Absolutely Quiet Control of Volume
with the ELECTRAD
Super-TONATROL
Super-Tonatrol is QUIET because it is
STEPLESS. A pure silver contact glides
over a resistance element permanently
fused to the SMOOTH surface of a vitre-
ous enameled steel plate. No make-
and-break controls. Dissipates a full 5 watts.
Resistance element is enclosed by dust
and moisture proof metal shield. 7 types
for all usual requirements. $2.40 to $3.50.
Better Resistors and Voltage
Controls for Every Radio
Requirement
The Electrad Line is complete—there is
a resistor and voltage control for every
radio purpose, including television. Cor-
rect engineering principles and rigidly
supervised manufacturing are the founda-
tions upon which ElecRad Supremacy has
been built. ElecRad also specializes in
Loftin-White DIRECTED Amplifiers.
Three kits, with ‘45, ‘50 and ‘50
push-pull output will handle all usual
power requirements. Write for circular.
Western Representatives
UNIVERSAL AGENCIES
905 Mission St., San Francisco
ELECTRAD
 Dept. RD-126, 175 Varick St., New York,
N. Y.
Please send circular on Super-Tonatrol.
☐ Check here for Loftin-White Circularity.
Name .............................................
Address ...........................................

Showg Mechanism

Page Thirty-nine
Announcing...

NEW

CROWE

ESCUTCHEONS and DIALS

DESIGNED ESPECIALLY TO MEET

THE REQUIREMENTS OF THE

PACIFIC COAST MANUFACTURERS

INFORMATION BULLETIN No. 41

CROWE NAME PLATE AND MANUFACTURING CO.

CHICAGO, ILLINOIS

WESTERN REPRESENTATIVE

W. BERT KNIGHT

1646 West Adams St. Phone EMpire 4440-4443 Los Angeles, Calif.
Western Electric 50 K.W. Transmitter
(Continued from Page 27)
vided in duplicate and are designed to give the proper fre-
quency at about 50 cent. The final adjustment is made
temperature control which gives a change of from
30 - 100 parts in a million per degree.
As long as music and entertainment continue to hold a
prominent place on broadcasting programs, fidelity of trans-
mission will probably remain the most sought-for character-
istic, not only for the radio transmitter itself, but for all of
the apparatus units in the system. A very high standard of performance has now been attained in this respect. The
overall frequency characteristic is substantially flat between
30 and 10,000 cycles—the greatest departure being less than
one DB—an amount that could not be detected in ordinary
listening tests by a skilled musician. The attainment of such
high standards for fidelity leaves little opportunity for pro-
gress and it is improbable that significant advances in this
direction will be made in the near future. Accordingly fu-
ture developments will be toward the elimination of noise
and other interference, which in the past has so seriously
impaired the artistic effect of programs, except in the imme-
diate vicinity of the transmitting stations.
The 50 K.W. transmitter will cover an area ten times
greater than a 5 K.W. At a distance of one mile there is a
field strength of 5 volts per meter. A study of 5 K.W. trans-
mitters compared with 50 K.W. sets indicated that the for-
er costs about $40 per square mile per year whereas the
latter costs only about $7 per square mile per year. A redu-
duction of about six to one. A coverage radius (night) of
about 500 miles is secured from a 50 K.W. transmitter de-
pending upon actual local conditions.
The improvement of quality for distant listeners is the
principal justification for the present movement toward high-
er power outputs. It has also resulted in increased emphasis
on the maintenance of a high average degree of modula-
tion, a development which is rapidly bringing about a very
perceptible improvement in general broadcasting conditions.

Racon Horns and Units are covered by U.S. Patents Nos. 1507711, 1501032, 1777276, 73217, 730218, 1722444, 1711014, 1781189.

Public Address Horns for Every Purpose—Are Superior in Tonal Quality.
TRUMPET HORN
RACON'S
Newest Development
The All Weather-Proof Horn
Bell 22 inches round, length 40 inches. Equipped with cast
aluminum ferrule and suspension ring.
For Public Address and all Outdoor use. This horn has been
perfected after years of exhaustive research in Racon Labora-
tories. Will withstand all weather conditions. Requires no repla-
ements or servicing after heavy rainstorms. Guaranteed for
one year. Prices slightly higher than regular horns.
Let Us Mail You Our Latest Catalog

RACON ELECTRIC CO., Inc.
Specialists in Acoustic Chambers
Factories: 18-24 Washington Place, New York

RADIO-SOUND-TELEVISION
Taught by Experts on Modern Apparatus
Day and Evening Classes

Radio Institute of California
921 W. Sixth St., Los Angeles

Mail Coupon for Further Information

Radio Institute of California
921 W. 6th St., Los Angeles, Calif.
Please send me Radio and Sound Information.

Name:__________________________
Address:_________________________
City and State:___________________

D-1 www.americanradiohistory.com
The Office Boy Sex:

Ye office boy was driving along La Brea the other morning and noticed a large billboard which carried this message:

BUSINESS IS GOOD
FOOL AND SAP
REAL ESTATE

"Is not this the height of asininity. Business is not good, so why "kid" ourselves. We are like a bunch of small boys passing a cemetery on a dark night, whistling so loud as possible so that fear will not get the best of them and start them running wildly for home.

The whole country is in the grip of fear. Pessimism is mounted on a big horse and riding rough shod over business. The well-known backbone has become jelly, the intestinal fortitude has faded like a spring snow in the sunshine.

The difference between good and bad times, between profits and losses is confidence.

Let's all get "old man confidence" back on our side. Use a few of the hoarded dollars for necessary purchases and before you know it Optimism will be in the saddle instead of fearsome Pessimism. Let's go!

Who would think that we had a real magician in our radio crowd. Of course some people think that the men who are doing a fair radio business these days are magicians, but then—that's getting away from the original subject.

Tom Churchill is not only an old-time radio fan, but an old trouper. He started playing around in radio back in 1907 when an amateur had to make nearly all his own equipment. He took a large house key, a salt box, a hammer, a couple of feet of bell wire, a few other odds and ends and presto-chango he had a wireless set. This remarkable metamorphosis caused Tom to change his vocation. He reasoned that if he was as good as that he should really let people see his wizardry and pay for the privilege.

For many years Tom toured the country demonstrating his skill to large audiences. He should have been contented and happy, but because the radio bug had entered his system years before he always harbored a desire to get back to his first love. Finally "Master Radio" won out and Tom started in pounding "brass." From there he went into retailing parts and sets for one of the big department stores, then into manufacturing radio receivers, then managing a wholesale house and now he is touring around Orange and San Bernardino Counties calling on dealers.

Radio now has the former magician firmly in his grasp and we doubt if Tom will ever get away again.

* * *

Jimmy Dean has the reputation of being a fast, clever salesman. He can make sales where others fail. Bringing in the distant stations through the locals, without interference and with just the right volume and clarity is easy for this master dial spinner.

He can carry around this reputation if he wants to, it's O.K. with us, but what we are interested in is his culinary expertise. This baby from Long Beach is the finest purveyor of trout in the world: bar none! Rainbow trout, done to a turn. Brown and crispy on the outside, virgin white on the inside—so tasty, sweet and tender that it fairly melts in your mouth. Delectable, oh boy; more, more.

A chef is good when he can cook a few trout this way, but when he can serve enough for twenty big, husky radio men and have some of them consume five apiece, he is a wizard.

Rest assured that in the future Master James Dean will be on every hunting and fishing trip with the gang.

* * *

Jerry King, the veteran sports announcer and chief impresario of KFWB. His vivid descriptions of football and baseball games have thrilled the radio audiences and partially compensated them for their absence and not seeing all the action. Jerry puts all the youthful enthusiasm of an undergraduate in to his portrayal and tries to have his unseen audience visualize the plays through his forceful description.

"He's off, he's away running fast around left end, with beautiful interference—the opponent's right end is cutting in on him forcing him between end and tackle—he's getting through—No, he didn't—the secondary defenses nailed him. Smith, right halfback, ran with the ball. Jones' fullback made the tackle. One yard—second down—nine yards to go. Ball is on State's forty-yard line. Now they are in a huddle," etc., until the final whistle.

Clear, precise and peppy. A joy to the football enthusiasts who have to stay at home.

Keep it up, Jerry. Let's have more.
RADIO GOINGS ON ABOUT TOWN

The Crowe Name Plate and Manufacturing Company of Chicago, manufacturers of escutcheons, dials and name plates, introduced several new types of escutcheon plates this last week. Even though Crowe products are being used by most of the local manufacturers Crowe artists continue to produce new designs so as to always keep ahead of their competitors. W. Bert Knight, Western representative, is kept busy supplying the Western market with these products. He just returned from San Francisco a few days ago and, as this is being written, he is on his way to Salt Lake and points north.

* * *

The Herbert H. Horn Manufacturing Company is now installed in its new factory on West 17th street, Los Angeles. All of the Tiffany Tone and Horn Midgets, consoles and radio-phonograph combinations will be assembled in this new plant and with the up-to-date machinery and production methods it has a capacity of 1,000 sets a day.

Mr. Horn reports that orders are still coming in from the Eastern and middle-Western territories and that the small type radio set is holding its popularity.

* * *

A new model of the Handi-Mike has been produced from the Inglewood Laboratories of Universal Microphone Company especially for use in home recording. Home recording has become a popular type of home entertainment, and various devices are now on the market for this purpose. The Handi-Mike can be used in conjunction with practically any of the devices.

* * *

A new small six-tube AC screen grid set in three styles of finish, to be known as the "Little General" and priced at $57.50, without tubes, has just been announced by General Motors Radio at Dayton, Ohio.

Four, type '224, screen grid tubes are employed, three being used in the radio frequency stages and one as a power detector. One type '245 tube is used in the power output stage, while the rectifier tube is of the '280 type. The new set uses four tuned circuits and dual volume control.

L. C. Warner, Western manager for the General Motors Radio Corp., stated that the factory was in production and that the sets would soon be in the hands of their dealers.

* * *

The ARRC, the club conducted by the radio amateurs of Southern California, gave a large get-together banquet on December 6th at which Dr. Lee DeForest was the guest of honor and principal speaker.

The Radio Supply Company of 912 South Broadway has just completed one of the finest radio parts catalogues ever compiled. Perry Demarest says that this catalogue is of great assistance to the amateur, experimenter and serviceman. Write to the Radio Supply Company and they will send you one of these catalogues free of charge.

* * *

The very active sales organization of Kierulf and Ravenscroft, Crosley distributors for California, welcomed two new faces this last month. George T. Vance, formerly of the General Motors Corporation, is now on the San Bernardino and Orange County territory. O. B. Scott, formerly of the General Electric Corporation, has been appointed specialty radio salesman and is doing a fine job.

K & R have also acquired two new lines of merchandise. The Chicago Electric Company, manufacturers of toasters, flat irons and other electrical appliances, and the Emerson-Brantingham Company, manufacturers of circulating air electric heat machines, have both announced the appointment of Kierulf and Ravenscroft as California distributors.

* * *

Bert Hassler, sales manager of the Advance Electric Company, with factory and offices at 1260 West Second street, Los Angeles, announces the appointment of C. O. Coblentz as special sales representative in the middle-Western territory.

Mr. Coblentz is unusually fitted for the position as he covered this territory for many years for the Steinite Radio Company. In his position as promotional sales manager for that company he came in contact with all the jobbers and most of the dealers in the East and middle-West.

The Falck receivers, manufactured by the Advance Electric Company, have been popular sellers on the Pacific Coast for many years. "We believe that they will be just as popular in the East," said Mr. Hassler.
LOOKING BACKWARD

With R. B. YALE

THE CHARGE OF THE LIGHT BRIGADE

Onward, still onward
Rode the six hundred.
Midgets to right of them,
Midgets to left of them.
Volleyed and thundered.

So might that old poem, "The Charge of the Light Brigade" be brought down to date and applied to the radio industry. One might almost say that with extreme bravery Western manufacturers have led the country in developing the so-called midget set. Many articles have been written concerning the phenomenal growth of this small set business and what it has accomplished in the radio industry as a whole, but the one thing that is puzzling most of us is how did it all start and what brought it about.

Looking backward five and one-half years ago or thereabouts, the Radio Communications Company, Ltd., in England saw the need of a small compact radio receiver that would operate a loud speaker. The company proceeded to develop a very small set approximately seven inches square in size, tuned with a single condenser, and using two one and one-half volt tubes. Tuning inductances were interexchangeable, and part of the set equipment was an assortment of small coils similar to the old style honeycomb. With this set and loud speaker and batteries, or as they called them over there, "high and low tension accumulators," it was possible to pick up most of the European stations regardless of wave length and play them on a loud speaker. The set was known as the "Polar Twin."

Here in America, you will remember, several manufacturers followed suit. Crosley, for example, brought out a small job called the "Crosley Pup," followed by the Radiola 3A, and still later a host of so-called portable sets using loop antenna with self-contained batteries and speaker. It seems that this might be taken as the background or forerunners of the present day mantel type radio—manufacturers ever striving to reduce cost to satisfy a market that could not be reached with large expensive sets and to present a complete radio receiver as small in size as possible. Those in the West who were early in the midget game were building two and three tube compact sets of the Harkness variety, using a crystal detector and eliminating the usual batteries with one or two doorbell transformers. True they did hum and they were not very selective, and if a door slammed in the house the cat whisker had an annoying habit of losing the sensitive spot on the crystal detector and one's ears were assaulted by a series of howls and squeals that would have done credit to a steam shovel. These early manufacturers came to be known among the trade as "bologna" manufacturers.

No doubt this appellation was swiped from the meat trade as in the packing business it is customary for small sausage manufacturers to buy from the packing house the needed meat, from another source cereal, from still other sources spice, sausage casing, and in a small store put the whole together—the result being bologna.

After the advent of the so-called midget set a new name was given to the set and to the manufacturer. As radio along with practically all other industries has acquired a slang all its own, the sets were called "Jal oppes" and the manufacturer a "Jaloppe Manufacturer." To trace down the source of this new name one must go back to the Ziegfeld Follies of 1925 or 1924. At that time W. C. Fields, the comedian, was putting on a Field act in the Follies of that year in which he drove a very dilapidated Ford out on the stage. During the progress of the comedy skit Henry's pride was made to fall apart, blow up, etc., and also the car was referred to by the comedian as a "Jaloppe." The use of this name spread among second-hand automobile dealers in referring to cars of the small type that, perhaps, were none too good in appearance. And some wags appropriated the name and in a joking way tackled it on to the midget set. This, to say the least, is rather unfair as many very fine midget or mantel type sets have been developed by the Western manufacturer. So much for background and history.

While it is impossible to give with any degree of accuracy facts and figures, a recent estimate indicated that there are more than ninety-five concerns manufacturing midget sets; approximately two-thirds of them are located in California, and until recently Southern California produced for local and national consumption 90 per cent of all the midget sets being sold throughout the country. As many manufacturers make from one to five or different brand sets, it is reasonable to assume that there are upwards of 125 different midgets sold under various names.

Due to a better knowledge of the game as a whole, costs have come down, appearance has improved along with an added improvement in tone quality and performance. Sixteen national manufacturers have now added midget sets to their line, several of them are featuring it over and above even their large standard type consoles. A number of manufacturers here in Southern California intend to release midget model superheterodyne sets around the first of the year. The tendency on the part of these local manufacturers is to increase the number of tubes, but on the other hand the Eastern concerns are working in the other direction and endeavoring to obtain maximum performance and tone with a fewer number of tubes. Estimates vary as to the proportion of midget sets sold to the total number of radio sets now being sold. The most conservative place it at 50 per cent of the total volume, and some as high as 80 per cent of the total volume of sales.

One can only say that the midget set has forced the radio industry to develop an entire new technique of production and merchandising. Whether the industry likes it or not, the midget has undoubtedly come to stay as it provides radio entertainment at the smallest possible cost and has opened a hitherto untouched market composed of thousands of purchasers who are simply financially unable to buy radio sets retailing for one hundred and twenty-five dollars and up.

It will be interesting in a year or two to again look backward and see in retrospect just what eventually happens in the radio industry on account of the introduction of the so-called midget clock or mantel type radio. In the meantime, large radio manufacturers secure in their position a year or so ago, have, we will wager, lost a few sleepless nights because of a desire on the part of the public for radio entertainment in a compact form at a low price.

A Merry Christmas Everybody
W. Bert Knight
AS I WAS SAYING

The Modern Radio Receiver
By L. E. TAUFENBACH*

Until this year, broadcasting has not aided true appreciation of music. Reproduction of music in the home via the radio receiver of the past decade bore little or no resemblance to the concert hall original.

True perhaps, the melody was there, but as heard after being sent through the old carbon type microphone and telephone land lines and distorted by limited range circuits abetted by horn and magnetic cone type speakers, it was practically a caricature of the original, a black and white photograph taken with a poorly focused camera, losing not only color, but its lines and movement as well.

Not only did the radio receiver of yesterday fail to build up an understanding of fine music, but it had a far more teaching effect, for it broke down true tone appreciation to such an extent that an owner of a receiver of perhaps the 1927 vintage has to have his ear re-educated before he is able to truly hear the full range of the reproduction brought to him by a radio receiver of today, such as the Brunswick. The man about to buy a 1930 receiver feels much the same as a man attending the concert of an orchestra that he has been hearing broadcast for several years. He feels as though an augmented group of musicians has been rung on him. The kettle drums become echoes, the bull fiddles, rasps and French horns, diabolical blasts, all calculated to destroy the ear that has become adapted to hearing blurs and hisses instead of true low and high notes.

Musicians all over the world are hailing the new 1930 radio receivers, not in the form of "paid endorsements," but by word of mouth. Through them, they feel they can bring to the great masses real appreciation of fine music. The appreciation which is necessary before music lovers can be developed in any country.

*—President Western Radio, Inc., Southern California Brunswick Distributors.

The Need of a Super-Heterodyne Midget
By F. W. FALCK*

Many people have questioned me as to why I went into production on a super-heterodyne midget. To me this is a very easy question to answer for I have several very definite reasons which to me seem important.

As a radio engineer and experimenter I have always felt that the super-heterodyne principle was the ultimate in radio receiving circuits from the standpoint of selectivity, sensitivity and tone quality. As a manufacturer I am, of course vitally interested in consumer trends and changes in broadcasting conditions. I am also aware of the fact that the receivers of 1931 to meet competition and to meet the demands of the discriminating fans must be vastly superior to those made in the past.

The prospective radio purchaser today demands a compact, powerful sensitive, selective receiver housed in a beautifully finished cabinet and at a reasonable price. Using the super-heterodyne principle we can give them a small radio set that will do all that the large receivers will do and still be able to house the complete chassis and speaker in a midget cabinet.

The Federal Radio Commission has under advisement the request of some twenty-eight new 50,000 watt broadcasting stations. If the commission authorizes the erection of these stations the radio fan will need a super-selective receiver to be able to cut through these powerful transmitters and pick stations which they wish to hear.

I have spent many months working on the super-heterodyne and the final result is a receiver which I firmly believe will meet the new era of radio reception which is unquestionably being ushered in.

*—President of Advance Electric Company.

Shall I Handle Refrigeration?
By GEORGE G. LANE*

Ninety per cent of the radio business of Southern California is done in the fall, winter and spring months.

And the coasting period, of fewer sales, and lesser activity, comes during summer.

The high point of sales in some other businesses is during the summer months. Among them is electrical refrigeration.

These two assorted bits of information ought to spell something of keen interest to every radio dealer. If they can somehow be brought together, they should mean profits.

The idea is no new one. There are several companies doing a good deal of talking about the possibilities, and I suspect that practically every radio dealer has been approached on the idea.

The strange thing to me is that I occasionally hear of a dealer who has not seen the possibilities, who believes that "maybe in the spring" he'll consider electrical refrigeration.

Perhaps it's too cruel to suggest that "maybe in the spring" he'll find himself without the opportunity of considering the matter, either through not having the chance to get the representation that he wants, or, perhaps even through his not being in the business by that time.

What I mean by that is simply this: the live and alert radio dealers, good merchants, have seen the possibilities of this hook-up between radio and refrigeration, and they are actively on the job making it work for them.

There is, however, something to be said for the cautious. Naturally, with the fast thinkers catching the significance of the idea, there have been some fast workers developing. There is a good reason for the radio dealer, approached on electrical refrigeration, to tread cautiously, even though he be firmly convinced that the idea is a sound one.

There are three things which mean the difference between profitable electrical refrigeration and an unprofitable mistake. These are: a sound and reputable manufacturer with experience and ability in the refrigeration field; aggressive manufacturer and jobber support of dealer activity, and a competitive price which assures ability to do a job in a field which will soon be crowded with dealers for various boxes now being manufactured and new ones coming into the field.

In fact, I'm convinced that a favorable answer to the question, "should I install electrical refrigeration as a supplement to my radio business?" should be answered largely on the basis of these three points which I have just outlined. They are the real measure of success.

*—Collins-Lane Co., Southern California Distributors of Leonard Refrigerators.
Happy New Year
EVERYBODY

A Prosperous Resolution
is to
Demand, Buy and Use

OHIOHM
CARBON
RESISTORS
Quality Always

A Product of THE OHIO CARBON CO., of Cleveland

W. BERT KNIGHT
WESTERN REPRESENTATIVE
1646 West Adams St.
Phone EMpire 4440—4443
Los Angeles, Calif.
Amazing Radio Bargain

Just in Time for Christmas

Small Down Payment

Delivers any time up to Christmas Day
Pay No More Till 1931!

HERE'S WHAT YOU GET:

1. A remarkable Philco 7 tube screen grid radio with the amazing power, distance ability, selectivity and sensitivity that has made Philco the world's largest selling radio.

2. Equipped with the genuine new Philco Electrodynamic Speaker.

3. Contains the famous Philco Balanced Units... precise balancing of all electrical units, bringing you wonderful, life-like undistorted Philco Tone.

4. Station Recording Dial... clear-vision, illuminated, on which you can permanently log favorite stations.

5. Exquisite walnut console cabinet, made by Philco master craftsmen.

$89.50

COMPLETE
Nothing Else to Buy

FREE Home Trial
Installation Free

TELEPHONE OR CALL AT ONCE

PHILCO

WORLD'S LARGEST SELLING RADIO

H. R. CURTISS CO., So. California Philco Distributors, 1145 South Wall St., Los Angeles. 51. WESTmore 7194
APEX Announces...
The Brand New Gloritone

A QUALITY SMALL SET BUILT AND ENGINEERED BY ONE OF THE LARGEST RADIO MANUFACTURERS IN THE COUNTRY.

The Apex Gloritone is the last word in a compact, small table type set. It is built and engineered by the U. S. Radio & Television Corp., manufacturers of the famous Apex. It is licensed under the patents of the Radio Corp. of America, Westinghouse, General Electric; Hazeltine, Lektophone, La Tour and others.

Three screen grid chassis, new type Dynamic Speaker, attractive walnut finished cabinet equipped with new type screen grid tubes especially designed by National Union Co. to give fifty per cent better tone quality and sensitivity than has heretofore been thought possible in small sets. Nothing like it in entire field of so-called midget and mantel type sets.

Make this a Merry Christmas with the Apex Gloritone

Priced Unbelievably $49.95 Complete with Tubes

Exclusive Wholesale Distributor

YALE RADIO ELECTRIC CO.
1111 Wall St. WEstmore 3351
Los Angeles