

RADIO DOINGS



THE PACIFIC COAST PROGRAM
AND TECHNICAL MONTHLY

Sprague, Miss 4-25-31
Natl Broadcast & Co
711 Fifth Ave



The Eddie Bush
Ambassador Trio
KNX

National Broadcasting Company
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December, 1930

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Westmore 1317

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Or it may be really modern radio, with modern performance, sound value, and lasting satisfaction.

It's easy to tell the difference. If it is modern radio it will have these features:

It will hold the volume even either on local or distance stations. You will have no more annoyance from fading on distance, and no "Booming" of stations when dialing from one perfect program to another.

Static racket, fizz and sputter will be cut way down below the level of the music, and much of it will be completely eliminated.

Control of tone will be complete and easy.

Program after program will come in, clear and clean, as you turn the dial. You should be able to get a new program every ten kilocycles if the programs are there.

Ten kilocycles is measured by one of the small black lines on the tuning dial. On a Bosch Radio dial they are about one-eighth of an inch apart, and your radio should be able to tune as finely as that.

And your modern radio will bear the name of a manufacturer of integrity, stability, reputation and experience.

These are the things we claim for Bosch Radio. We ask no more than that you prove them for yourself. Bosch Radio will meet any test you choose to make, because Bosch Radio has all these features, plus several more.

Investment in B O S C H R A D I O Is Protected 3 Ways

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2. Because it is built for years of lasting satisfaction.
3. Because Bosch Radio value is fairly represented by Bosch Radio price.

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

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

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Largest Radio Parts Jobber West of Chicago

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RADIO DOINGS

CLOYD MARSHALL, JR. Editor
 G. W. MARSHALL Business Manager
 K. G. ORMISTON Technical Editor
 DOROTHY HUMMEL Studio Editor

Editorial

THE time seems well chosen, indeed, for the changing of RADIO DOINGS to a monthly magazine. From practically every quarter this new policy has been viewed with a congratulatory attitude. It has long been felt by the listener that weekly radio information is superfluous in consideration of the very infrequent changes of schedules in broadcasting studios. In lieu of paying ten cents a week, amounting to forty or fifty cents a month for RADIO DOINGS the same programs plus much other entertaining and useful radio information can now be obtained for only twenty-five cents a month in the new monthly magazine.

The truth is that hours on the air have varied so imperceptibly during any one month that many of RADIO DOINGS' friends have impressed us with the fact that for a year's time and longer they have purchased their copy only once a month and the advance broadcasting information has retained its reliability and value for the entire next thirty days! This only serves as an indication that the period is past wherein presentations must be preceded by published notices daily or weekly. There is little more reason for this than to constantly print new theatre programs for the same show.

However, to the great advantage of those who use RADIO DOINGS is the addition of more quality, accuracy and volume of contents permitted by the extra time between publication dates now in effect. This carries added importance since the magazine in the past could not be printed weeks ahead of time such as all weeklies of a general nature, because of the last-minute programs coming in for publication. Now there will be a whole month in which to compile every last detail of helpful material that will be of most value and interest to you.

Patience and indulgence on your part will be most gratefully acknowledged while it is being proven that the new monthly RADIO DOINGS offers the very things you most want in the full enjoyment of your radio entertainment.

Cloyd Marshall Jr.

December, 1930

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VOLUME XVIII

NUMBER ONE

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ISSUED MONTHLY AT 314 E. 12TH STREET LOS ANGELES, CALIF. SUBSCRIPTION \$3.00 A YEAR. ENTERED AS SECOND CLASS MATTER, NOVEMBER 25, 1922, LOS ANGELES, CALIF., POST OFFICE, UNDER ACT OF MARCH 3, 1879.

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the Sensational

ELECTRIC

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\$189⁵⁰

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1. Chillometer — visible certified refrigeration.
2. Daylight base—off the floor for easy sweeping.
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4. Satin Chrome Hardware, new, modern, rich.
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6. Leonard approved insullation, 2½ inches, much more than ordinary.
7. Air tight seal, one door, easy access, no cold seepage.
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10. More storage space.
11. More shelf room.
12. Easy cleaning.
13. Factory finance company with offices in Los Angeles makes budget plan purchase easy and economical.
14. MODERATE PRICE — This model is built to sell at \$189.50.

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An Achievement In Radio Construction

The announcement of the Angelus new Super Screen Grid Radio brings thrilling news to radio enthusiasts! Now! A radio that embodies every fine point of radio engineering — that achieves the perfection, and gives the superior performance that everyone is looking for.

Sensitivity brings distant stations as clearly as local ones; knife edge selectivity cuts out any interference; entirely silent operation makes it a joy to own this model.

Because it was designed from the beginning for screen grid tubes, the new Angelus Radio is outstanding in performance. An improved dynamic speaker brings a clarity of tone and perfection of reproduction that will be a joy to listeners.

This Super Radio is built through and through to uphold the long-established reputation of Angelus Radios for superior performance, dependability and value, and should not be confused with the many cheap small sets now on the market.



**COMPACT—
YET COMPLETE**
The Eighteen
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Below Guarantee
You Superior
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- TONE CONTROL
- Phonograph Plug
- Antenna Binding Post
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Shielded
- THREE '24 SHIELDED
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- FULL POWERED
MAGNAVOX
DYNAMIC SPEAKER
- Heavy Four Gang Con-
denser . . . Plates Slot-
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and Ball Bearing
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- '80 Rectifier Tube
- '45 Type Power Tube
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Low Line Voltage
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\$89.50 Complete } Complete With Tubes } graph Combination
\$139.50 Complete

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ARDON RADIO TUBES

Cunningham
RADIO TUBES
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HYVAC

ARCTURUS
ECO RADIO TUBES

de Forest
PILOTRON
STANTON

LABORATORY TESTED *before* YOUR *very* eyes!

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RADIO MANUFACTURERS SUPPLY CO.

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CORNER 10TH ST., "THE FAMOUS RADIO CORNER"
LOS ANGELES

INSIDE PARKING
FREE
TO OUR PATRONS

INSIDE PARKING
FREE
TO OUR PATRONS

SPARTON PRESENTS

a rich new combination

RADIO-PHONOGRAPH

in a **NEW PRICE FIELD**

The Combination

MODEL 235

Here, at a truly amazing price, is a 12-record, fully automatic radio-phonograph combination that represents a real achievement. The cabinet is of rich walnut, beautifully ornamented with genuine carving. The radio is a standard Sparton 10-tube model, and you who know Sparton know what that means. The phonograph is also Sparton built, accommodating a dozen records (either 10 or 12-inch), and changes them automatically, requiring only 4 seconds



to do this. Whether played as a radio or as a phonograph, the magnificent tonal qualities that have established Sparton as Radio's Richest Voice are supremely evident. When you see it and hear it, you will be astonished that such an instrument, genuinely Sparton, can be offered at such a price.

\$325

COMPLETE WITH TUBES

and TWO NEW SPARTONS *within the means of all*

The Jewel

MODEL 420

When you see this beautiful little console, you will agree that the name has been well chosen. When you hear it, you will recognize Radio's Richest Voice as it exists in all Spartons. This splendid little set has 2 screen-grid tubes type 224, 1 type 280 and 1 type 427 tube, and 2 type 183 tubes for push-pull amplification. Ask about this Sparton

\$118⁵⁰

COMPLETE WITH TUBES



THE presentation of these remarkable new Spartons is probably the biggest event of the radio year. You naturally expect something extraordinary when Sparton announces new models — and you will not be disappointed. You will be delighted with the instruments themselves, and you will be truly amazed that such sets could be presented at such prices with Sparton quality so outstandingly evident. Call and hear them.



The Junior

MODEL 410

It is only natural that Sparton should do something unusual in the miniature radio field... and here it is. In the beautiful little cabinet there is a chassis on which Sparton is proud to place its name. It has a dynamic speaker and the unusual Spartoo circuit that has made Sparton tone a tradition. It will be worth a visit for you to see and hear this extraordinary set.

\$77⁵⁰

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Only SPARTON has the MUSICAL BEAUTY of

SPARTON RADIO

PACIFIC WHOLESALE, Ltd. *Walter W. Fagan*, President. Southern California Distributors
Westmore 0111

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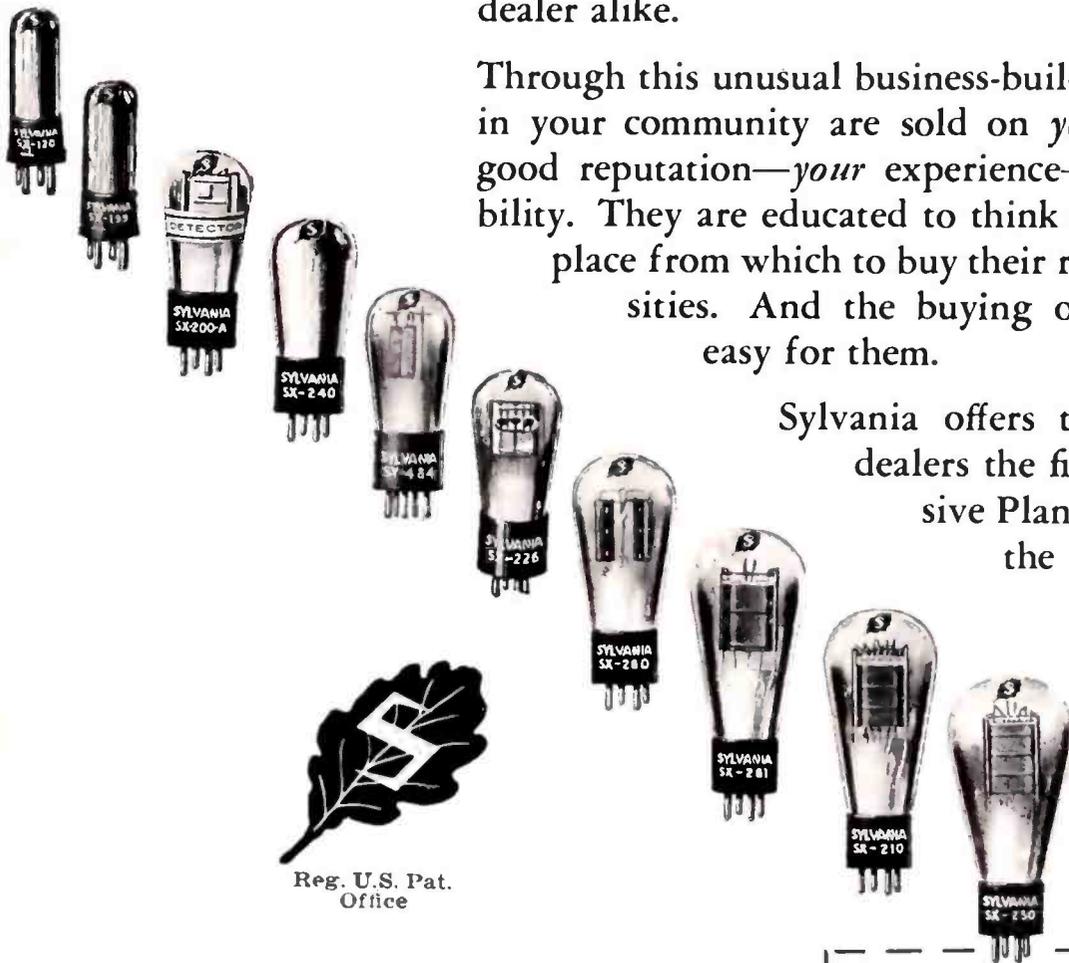
A new idea that never before has been applied to the tube replacement business.

A reliable sales booster that not only increases your tube turnover but also multiplies your prospects for the sale of other radio merchandise and electrical appliances.

Here is a profitable Merchandising Plan for jobber and dealer alike.

Through this unusual business-building Plan your prospects in your community are sold on *you—your business—your good reputation—your experience—and your service reliability*. They are educated to think of *your store* as the only place from which to buy their radio and electrical necessities. And the buying of these articles is made easy for them.

Sylvania offers to a limited number of dealers the first sound, flexible, intensive Plan for sales cultivation that the radio tube business has known.



Reg. U.S. Pat. Office

Clip the Coupon That Brings You the Details

Sylvania
RADIO TUBES
Licensed Under RCA Patents

It's the tube that makes the radio

RD-12-30

Sylvania Products Co.,
 Emporium, Pennsylvania.

I'd like to have more details about your new Sales Plan.

Name

Address

City.....State.....

START NOW



to buy
your principal
Christmas gift



Model 22
Screen-grid radio receiver with Completely Armored Chassis, Uni-Selector, Rigid Tuning Scale, and Tone Control. Cabinet of butt Walnut with French doors. Instrument electrically operated throughout.

Price, \$170.00
less tubes

Other models as low as
\$139.50 less tubes

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provides down payment on the
finest gift of all " " " " " "

BRUNSWICK RADIO

A small deposit made weekly provides the down payment on this super-entertainer at Christmas. Balance on terms to suit your convenience.

The **BEST** Dealer
in your community
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The **TUBE with the LIFE-LIKE TONE**

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Quick Heating Tube



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for years the standard



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Cunningham RADIO TUBES

New Tubes Add Sparkle to Yuletide Reception

WITH the air filled with joyous, rollicking holiday fun, you can't afford to be handicapped with old or inferior tubes in your radio.

Ask your local dealer to inspect your set and test the tubes now in use.

You'll be delighted with the improvement when you install a complete new set of Cunningham Radio Tubes.



Any radio is no better than the tubes in its sockets. Protect the nerve-center of your radio with Cunninghams.

E. T. CUNNINGHAM, INC.

NEW YORK

CHICAGO

SAN FRANCISCO

DALLAS

ATLANTA



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.

Radio chassis, — Our new Super-Selective Circuit — Tone Control — Four screen grid — Electro Dynamic Speaker — Illuminated Dial — Complete with tubes (6).

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

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



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THE BIGGEST VALUE EVER OFFERED

We also call attention to our amazing value in our

**MANTEL TYPE
TIFFANY=TONE RADIO**

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1625-29 80. HILL ST.
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U. S. A.

\$59.50

COMPLETE WITH TUBES

TONE CONTROL
4 SCREEN GRID

Electro
DYNAMIC SPEAKER





Handsome period cabinets of lasting value



The cabinets of the new General Motors Radio are among the most distinctive examples of attractive design and fine craftsmanship found in radio cabinetwork today. They have been patterned after authentic period furniture—designs preferred by people of good taste for centuries.

Radio buyers can invest in these cabinets as they would in any fine furniture—with the prospect of years of ownership—for if, at some future time, another radio chassis or speaker is developed, it will be so designed as to permit installation in the cabinets now being offered.

The General Motors Radio dealer-franchise offers many unusual features which dealers have found attractive. This franchise is based upon sound, profitable business practice. We suggest that you wire or write at once for complete information.

GENERAL MOTORS RADIO CORPORATION, DAYTON, OHIO



The Sheraton A highboy of MODEL 130 butt walnut beautifully finished. Serpentine front. Chaste, delicate lines. An effect of restraint and simplicity. Eight-tube, screen-grid chassis. Price \$152, less tubes.

The New
GENERAL MOTORS
RADIO
with Visual
TONE SELECTOR

The Late Italian An unusually handsome highboy of butt walnut. Note the serpentine front—a distinguishing mark of fine cabinetwork, new in radio design. Eight-tube, screen-grid chassis. Price \$172, less tubes.



The Queen Anne An extremely attractive radio-phonograph of very desirable proportions, adaptable to practically any size room. A handsome, complete instrument at an unusually moderate price—\$198, less tubes.



The Hepplewhite A beautiful walnut-finished lowboy. Simple, graceful and in harmony with practically any setting. Eight-tube, screen-grid chassis. Price \$136, less tubes.



The Georgian A radio-phonograph of impressive character, finely made and beautifully finished. Completely equipped for both radio reception and the electrical reproduction of phonograph records. Price \$270, less tubes.

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 embodies 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 less tubes

**For World-Wide
 Radio Reception**

Short and Long Waves, 14 to 500 Meters

PILOT Super-Wasp

Rev. J. W. Nilsen, Bolonque, Congo-Belge Africa says: "Here in the heart of Africa I have received 9LO, JB, 2BL, 5SW, AFK, PCJ, WGY (W2XAF), WRNY (W2XAL) 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 W2XAF (Schenectady, U. S. A.) and VK2ME (Sydney NSW), Aero, ICT Holland, GSSW England and Sydney—London phone service."

Austin R. Baldwin, St. Raphael (Var.) France, says: "I heard from KDKA 25.4 meters, 'We will 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 battery-operated Super-Wasp. Batteries and Tubes extra.

A. C. SET KIT

\$34.50

Kit K-115: The A.C. Super-Wasp. Use your own ABC pack or Pilot K-111, specially designed for the Super-Wasp. Power Pack and Tubes extra.

**PILOTRON
 RADIO
 TUBES**

ENDORSED BY
 PROFESSIONALS



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At Dealers Everywhere or Write to

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Three pickups that are leaders in their field



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.

All prices slightly higher West of the Rockies and in Canada

Pacent Electric Co., Inc., 91 Seventh Ave., New York, N. Y.

Pioneers in Radio and Electric Reproduction for over 20 Years. Licensee for Canada: White Radio Ltd., Hamilton, Ont.

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. 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

P A C E N T



The Keller Sisters . . . KMPC

What Price Television?

IT really isn't fair to be both beautiful and talented, but nevertheless it goes right on happening as witness this page of fair harmonizers. The Boswell Sisters, with their soft Louisiana accent, began showing promise with Connie, who at seven, played the 'cello in the New Orleans Philharmonic Orchestra. After making Victor records, appearing in vaudeville and moving pictures, the girls have more or less settled down to radio broadcasting from the San Francisco studios of the National Broadcasting Company. Connie shines as a "blues" singer; Martha plays all the accompaniments and sings her part and Vet harmonizes, plays several instruments and doubles for the "plunk" of a banjo in an amazing manner.

The Keller Sisters, comely, vivacious, harmonious, are rightly billed as a "Peach of a Pair." Their work is facile, soft and exceedingly melodious, the result of intensive professional training. Their calling cards read Betty and Jean Keller, and KMPC in Beverly Hills is the scene of their broadcasting activities.



The Boswell Sisters . . . NBC

WE APPLAUD . . .



BECAUSE: Rita Bell, protege of Anna Calve and principal of many Broadway musical comedy successes including *The Gingham Girl* and *Spice of Life*, is one of the few Americans to broadcast from the great studios in Cape Town, South Africa; because she made a world tour singing in the capitols of many nations where she was greeted with much enthusiasm; and finally because from the radio studios of London, Berlin and Amsterdam, Miss Bell brings her lovely voice and personality to our own KHJ, where she will remain indefinitely.

Rita Bell . . . KHJ

RADIO NEWS FLASHES

Movies Prepare for Television

When television reaches the commercial stage, the movies may be transferred from the theatre to the home. Just now the film producers are strengthening their hold on the radio chains and marking time until visual broadcasting leaves the laboratory.

An inter-change of stars between the radio and the screen has been disappointing to both the broadcasting and the motion picture industries, to say nothing of the public. Only occasionally has an entertainer been found with enough of a variety of talents to please both visual and auditory audiences.

Even such outstanding radio stars as Rudy Vallee and Amos 'n' Andy could hardly be called successes on the screen despite the large box office receipts of the first pictures, an interest bolstered by a desire of listeners to see the men they had been only hearing.

Likewise there has been no movie actor or actress who has achieved any signal success on the air. The nearest approach has come from the ranks of the musical revue, which was in turn taken from the legitimate stage.

Just as the talkies revolutionized the motion picture industry, so will visual broadcasting likely change the radio for the two will of necessity be linked.

Radio Commissioner Harold A. Lafount realized the potentiality of the movies with regard to television when he said:

"It is only natural that the motion picture interests, with their vast reservoirs of talent, should be interested in television. The 'movies of the air,' for that is what television is destined to be, will require the acme of showmanship, and there is no group better qualified to supply than the motion picture producers."

* * *

Half of Stations Making Money

Only half of the larger broadcasting stations are making profits, while the other half are losing money, according to a survey of 20 of the leading broadcasters by the Federal Radio Commission. All of those questioned operate on a cleared channel with 5,000 watts or more power.

The average profit for ten of the stations was found to be \$29,000 annually, while the losses of the other ten average \$54,000 a year.

The average investment in a 5000 watt station is \$189,000, while the cost of installing a 50,000 watt transmitter is \$250,000. Yet 26 stations have applied for such permission.

Only 30 per cent of the programs carried over the 20 stations was paid for by advertising sponsors, the analysis showed, the other 70 per cent being free entertainment.

The advertising rate per hour averages \$310 for night broadcasts. The monthly income from advertising averages \$21,500, while the aggregate total income is \$23,500 for the same period.

Operating costs amount to about \$22,000 a month. Of this \$12,500 goes to talent, while the other employees get \$6,400.

With 5000 watts the average service area of a station is 35 miles, the survey revealed, and all applicants estimated that they could more than double this with the maximum power.

These tabulations grew out of questions asked at the recent super-power hearings.

Sees "Million Watt" Radio Stations

The million watt broadcasting station is just ahead in the rapid development of powerful radio transmitters, O. H. Caldwell, former Radio Commissioner and now an editor of radio publications, predicted here this week in an address before the Institute of Radio Engineers at the Franklin Institute.

"Already experimentation has been successfully carried out with 250,000 watts, and now a 400,000 watt experimental station is under construction," he said. "And this is not the end. The next step ahead will be the million watt broadcaster—the 1000 kilowatt unit.

"One thousand kilowatts or 1300 horsepower does not seem like a prodigious amount of power in ordinary everyday life. Among engineers today such power is quite commonplace. Soon, also the million watt broadcaster will be a regular thing. Already we have a single radio tube capable of delivering 200,000 watts; so it is not a far cry to grouping the necessary number of these to develop 1,000,000 watts."

The former Radio Commissioner took a rap at the present Commission for "delays and dallies with the applications of 27 leading independent broadcasters seeking to increase their station powers even to 50 kilowatts in order to serve better the people in their regions.

"The Commission apparently is collectively afraid to make up its mind about granting 50 kilowatt licenses, as the engineers all recommend, until it learns what the political masters in the Senate want it to do," he concluded.

* * *

Supreme Court to Rule Upon Ether Property Rights

The question of "vested rights" in the ether is almost as old as the radio art itself. A case involving all the arguments pro and con will be heard by the United States Supreme Court in the week of December 1, the outcome of which will help determine future radio legislation. The eyes of the whole industry will be focused upon this hearing, the first involving this question to reach the high court.

Should the Supreme Court decide that there is such a thing as "vested rights" in the air, the powers of the Federal Radio Commission would be curbed and the existing legislature would require re-writing.

Station WCRW, operated by Clinton R. White, in the city of Chicago, is the broadcaster involved. The station was on the air before the law of 1927 was passed, and bases its claim to the wave length it then occupied upon this fact.

WCRW argues that a radio broadcasting station established prior to the enactment of the Radio Act of 1927 acquired a property right, within the meaning of the Fifth Amendment, in the continued operation of the station with power sufficient to reach the territory it has served.

The station further charges that if Congress has any authority over radio broadcasting, it is the power to regulate broadcasting as interstate commerce. Such authority must be exercised under constitutional limitations. The power to regulate does not include the power to destroy or confiscate private property. Depriving an owner of the use of his property (in this instance, the wave length) is a taking of that property as much as if the actual physical property were taken.

On Your Right, Ladies and Gentlemen

By JOSE RODRIGUEZ

Dear, and I hope gentle reader, RADIO DOINGS has asked me to write a story about artists as they appear to press agents.

Press agents, you know, are supposed to be very diplomatic and discreet people. Their craft consists as much in staying out of print as in getting into print. And, like all people who are expected to be discreet, their burning desire is to be indiscreet with abandon and joy.

You must, therefore, regard these lines as confidential between you and me. I am going to tell you about KFI-KECA artists just as they appear to me in the daily routine of work.

Remember that if you breathe a word of this, I shall very probably lose my job and be compelled to leave town through a window. And we must not let this misfortune descend upon our community, must we?

No, of course not. Let us, then, get down to this business of speaking out of turn, of being the Town Snitch. Let's take all these delightful people at KFI-KECA and jot them down in what are called "prose portraits" by people whose kindness exceeds their judgment.

We begin with:



Robert Hurd
Tenor and Program Director

Young enough to be saucy, old enough to be sensible. Five feet eight, brown eyes, easy smile, dresses with careful indifference. He is most partial to recondite classic songs, is fine pianist and a marvelous arranger. He's a swell cook. He positively loathes Paul Roberts, but don't tell Paul.

Old Dr. Muck of the Boston symphony used to say, when in temper, "Are there no opera sopranos who are also musicians and ladies, all at the same time?" Virginia Flohri is the answer to that desperate prayer. There is a rumor that Virginia is inordinately fond of Carl Haverlin, sales manager of the Anthony stations.



Virginia Flohri
Soprano



Eva Olivotti
Comic Opera Soprano

Crackling black eyes, aquiline as a Roman, saucy as a Neapolitan, fanciful as a Piedmontese. (We hope you know your Italy, we looked this up in a book.) Calls everybody "darling," and cooks divine spaghetti. Knows every comic opera since Rossini.

Stockily-built, horn-rimmed glasses, unruly hair, nervous gestures. In love with old editions, Japanese poetry, detective stories, Virginia Flohri, chess, obsolete adjectives, surgical gadgets, sales statistics, modern music and generous cookery.



Carl Haverlin
Sports Announcer



Jeanne Dunn
Blues Singer

In the days of Petrarch, men wrote sonnets about eyes like hers. Nowadays men merely pinch themselves and mutter "steady, old boy." A veritable pitfall and snare, this gal, (heaven protect us.)

Girls, when you were still at school, did you ever dream of a brown-eyed cavalier who would come up on a big white horse and snatch you up and ride far, far away to east of the sun and west of the moon, where there are no grocery bills and where the party never ends? Well . . .



Felipe Delgado
Baritone

FOR YOUR ENTERTAINMENT

The Eddie Bush Ambassador Trio adorns the cover this month. These lads are dispensing some of the most unusual arrangements in the musical world. From left to right the boys are Craig Leach, Billy White and Eddie Bush, and listeners may hear them nightly, except Sunday, over KNX, where they do their stuff with Gus Arnheim and his neat music-makers of the Ambassador Hotel. So don't retire before 10 o'clock. Midnight is soon enough.

—o—

Many plans are being completed for some unusually fine programs to be released during the month of December, according to Dick Creedon, KHJ's publicity director. Here are a few of the features which Dick assures us are well worth lending an ear. Knute Rockne, inspiration of the unbeaten Notre Dame football team, will talk over the CBS December 5th, 7:30 to 7:45 p. m. This is especially timely, being on the eve of the Notre Dame-U.S.C. football classic on the 6th. The second Curtis Symphony Orchestra of Philadelphia concert will be released on December 7th from 7:00 to 8:00 p. m. This splendid orchestra is directed by Emil Mlynarski, Russian conductor. Sundays bring Jesse Crawford back to ardent organ enthusiasts at 7:00 p. m. each week. This new series features ten solo instrumentalists and a large group of guest stars in addition to the "Poet of the Organ."

—o—

KNX, Hollywood, recently had the honor of being chosen by the 17,000 odd citrus growers of Southern California as the station from which they preferred to receive the nightly frost warnings broadcast by the United States Department of Agriculture from Pomona, Calif. The frost warnings are the only insurance the citrus growers have, as it enables them to protect their trees in the event of a frost coming on during the night. It is vital to them that they be able to tune in the broadcast, which is given nightly at 8 o'clock, and it was paramount that a station be used whose signals were uniformly clear and received throughout the citrus belt. A remote control has been established by the station at Pomona which is approximately 45 miles from the main studios of KNX on the Paramount lot in Hollywood.

—o—

Arthur "Bugs" Baer, noted humorist, will be the master of ceremonies during a 15-minute broadcast over a nationwide NBC network Saturday, December 13th, beginning at 5:15 o'clock. He will introduce Welcome Lewis, contralto; Harold Van Emburgh, tenor; Sam Herman, xylophonist, and a dance orchestra playing under the baton of William Merrigan Daly. KHQ, KOMO, KGW, KECA and KFSD will release the program.

—o—

The entire coast-to-coast network of the Columbia System will broadcast the Army-Navy football game to be played in the Yankee Stadium, New York, Saturday, December 13, for the Salvation Army's unemployment fund. Ted Husing, Columbia sports announcer, will describe the game play-by-play and the preliminary ceremonies, starting at 9:15 a. m. (E.S.T.) At this hour the cadets from West

Point and midshipmen from Annapolis will march on the field in formation, and these colorful maneuvers will be graphically relayed to radio listeners by Husing. The game starts at 10:00 a. m.

—o—

So many devotees to Major Mott's popular Sport-o-Logues that he gave over KHJ have been wondering why they came to a sudden stop. We regret to say that the major had a serious breakdown after his long and hard fight on the air, and in other ways, for the passage of Fish and Game Proposition Eleven on the November ballot. An affection of the throat and tongue became distressingly apparent and he has been under the care of specialists ever since. The latest reports are, however, that he is getting on nicely and will soon be on the air again from the Don Lee station with his unique chats on shooting and fishing—that have delighted listeners everywhere. Major Mott is grateful for the magnificent support given Proposition Eleven by those that listened to his urgent pleas for it from Southland microphones.

—o—

Stephen F. Merrill, of San Jose, tenor, and Esther B. Coombs of Long Beach, coloratura soprano, were selected as winners in the National Atwater Kent radio audition. These two youthful artists will go to New York on December 14th to represent the West in the final audition. Miss Coombs was identified as No. 17 and Merrill as No. 8.

—o—

A good many husbands are feeling that the new feature "Mary" on the air over KJR and stations affiliated with the Northwest Broadcasting System is championing their cause as she informally chats over the breakfast table every Sunday morning between 9 and 10 o'clock. Her confidential talks with the wife (while she asks John, the husband, to tune out) cover a wide range of subjects dear to a man's heart, such as: the legitimate fondness a man has for that battered-up hat or greasy old suit he goes fishing in.

—o—

KFWB will release the Knute Rockne program on Friday night, December 5th, at 9 o'clock, and on the same program it is planned to present Douglas Fairbanks as an added attraction. Mark Kelley will act as interlocutor of Rockne, who will make some ad lib remarks in regard to the U.S.C. Notre Dame classic on December 6th.

—o—

The United Broadcasting Company, Ltd., the precocious baby chain of the Pacific Coast, is stepping right out and signing up some excellent talent and as a consequence, their broadcasts are of high quality. A recent addition to the chain's offering is a series of radio dramas produced by Stuart Buchanan, who will be remembered for his outstanding dramas over KHJ, KFWB and KECA. Mr. Buchanan is putting on two plays a week at the present time, Tuesday at 8 p. m. and Saturday at 7:45 p. m., and in a few weeks he plans to produce three a week to be released over the entire chain of the UBC.

—o—

RADIO DOINGS' NEW PHONE NUMBER IS WESTMORE 3024
ADDRESS: 314 E. 12th STREET

JUST A FEW RAMBLING THOUGHTS

By TED OSBORNE . . . KHJ

Poverty brings out th' best in a man, but th' trouble is that it usually brings it out by th' roots.

When a feller is climbin', he sometimes has t' step down so's he can get a better foothold.



If you're in deep water, it's always a durned good policy t' keep yer mouth shut.

Some folks keep their friends by treatin' 'em kindly, an' others keep theirs by treatin' 'em often.

Th' trouble with love knots is that too many folks leave out th' "k."

Th' feller who spends most of his time lookin' backwards nat'rally can't look ahead very much.

It's a durn sight easier t' get th' key t' success than it is t' find th' keyhole.

Some thoughts are like hothouse vegetables—they are pretty t' look at, but they're tasteless.

Most o' th' fellers who brag about bein' self-made men are just about like any other amateur production.

Perseverance has won a lot o' hard-fought battles that really weren't worth th' effort.

There's a lot o' strange an' wonderful things in th' world, but th' greatest curiosity of 'em all is a woman's.

* * *

A Sad Story

(To Be Read Aloud Rapidly)

One sup pawn nay thyme their was say made,
Whose wore she die beef oar she wood agree
Toot ache aim an two beer wed dead spouse;
Sheath ought she was well offal loan, use sea.

But cheek hood knot bee leave know man wood come,
An dinner hart she new she'd like too wed,
If sheik hood own lea get take cave-man bowled,
Who'd rag herb eye thee hare up honor head.

Sheik kept tin cider mine day pick sure of
Thee fell low hoo wood sum day command get her.
Her he roe mussed bee bray van dare ring two,
And riches wood make hymn a hole lot better.

But cheese awe watt ale lot of joy she mist
Wench he aloud sum good men two get pastor,
And she maid upper mined she'd better take
A chance and merry thief first mail hoo aster.

She wed a home lea guy with hard lea dough
Enough too buyer clothes, an chews and lids.
Sheet aches inn washing four thee neigh burrs now,
And awl sew is thee mother of sick skids.

Them oral love mice tory is just this:
"Don't waist ewer thyme on silly, cents less rot.
You've dun ale lot of work too reed this poem,
And now that ewe are threw, watt have ewe Gott?"

SHORT WAVE AND AMATEUR NOTES

Stannard Smith, Los Angeles, reports that he has received a verification card from the Argentine station which so many of the Club members have been hearing. The call is LSX and not LSH as previously reported. Power 20 kilowatts, frequency 10,350 Kc., wavelength 28.98 meters. This is apparently the most powerful station in the Southern Hemisphere, and VK2ME must relinquish their claim. Mr. Smith also reports hearing KIO, Honolulu (about 26 meters) and PCK, Kootwijk, Holland. W3XAU is back on the air in the 49 meter band, and also VE-9CL, Winnipeg. W2XE, W9XF, W8XAL, HRB, W9XAA, W8XK and W3XAL complete the list of stations grouped in the 49 meter band.

—o—

The Amateur Radio Research Club meets on the first and third Wednesday of each month at 8:15 p. m. in the Odd Fellows Temple, Washington and Oak streets, Los Angeles. This is the building which houses the transmitter of KGFJ. And incidentally, the Club is planning a series of Sunday night programs over KGFJ for the purpose of familiarizing the broadcast listeners with the activities of the amateurs, to convert some of them into the "Ham" fraternity and to generally bring about mutual goodwill. The president of this organization is Everett J. Trout, 1239 Royal Court, Los Angeles. Visitors are welcome to the club meetings, and we would suggest that fans who are becoming interested in this mighty interesting hobby would do well to attend these meetings.

—o—

The Department of Commerce radio monitoring station, located at Point Firmin, San Pedro, will be in operation about January 1st according to James M. Chapple, radio inspector for the Southern California district. The work of installation was commenced December 1st under the direction of Engineer Jensen. Bernard Linden, radio supervisor



of the Sixth District accompanied Mr. Jensen to Los Angeles, after the completion of the San Francisco monitoring station. The new monitoring station will be under the direction of Mr. Chapple and will afford a very accurate check on the frequency of all stations, broadcast, commercial and amateur.

—o—

The Federal Radio Commission has amended the amateur regulations in the matter of issuing and renewing amateur station licenses. Hereafter all station licenses will be issued directly by the Federal Radio Commission. Procedure for obtaining licenses will not be changed, and applications for renewal of station licenses should still be made through the Department of Commerce radio inspector's office.

Platt Music Co.—The West



Model 130—Sheraton Period in walnut with matched Butt Walnut with arched overlay molding and recessed speaker grill. Contains the famous Super Screen-Grid chassis and famous Colotna Speaker. \$143.50 Complete with matched tubes. \$10 Down—A year for the balance.



Model 131—Heppelwhite period cabinet. Center and curved corner panels in matched butt walnut. Reeded legs, fluted pilasters and recessed center panel are touches of master craftsmen. Contains the great Super Screen-Grid chassis with Super Colotna Speaker. \$163.50 Complete. \$10 Down—A year for the balance.

Trade in your
old Radio —
on a new Screen-Grid

Majestic RADIO

HERE'S your Christmas problem solved! Replace your old radio with a brand new "Mighty Monarch of the Air" with all the latest improvements.

Naturally, you will want to buy it from Platt Music Company. Here is an organization which has grown with radio. *More* people buy *more* radios from this company than from any other dealer in the entire West. And the reason—expert installation by an expert from the finest technical department in the West, *plus* the integrity and financial stability which safeguards your radio investment. You cannot *afford* to disregard these factors.

Terms, too, are the lowest. \$10 Down will place your Majestic in your home now or on Christmas morning—a whole year to pay the balance. Liberal allowance for your old set.

A new department—organized to bring to you Majestic Electric Refrigerators. Organized by experts in the refrigeration business, manned by experts. Here for your convenience and assistance.

GLENDALE
301 N. Brand Blvd.

ALHAMBRA
28 E. Main St.

PLATT M

MAIN STORE—832 S. BRAND

6614 Hollywood Blvd. 231 S. Wern
2200 Brooklyn Ave.

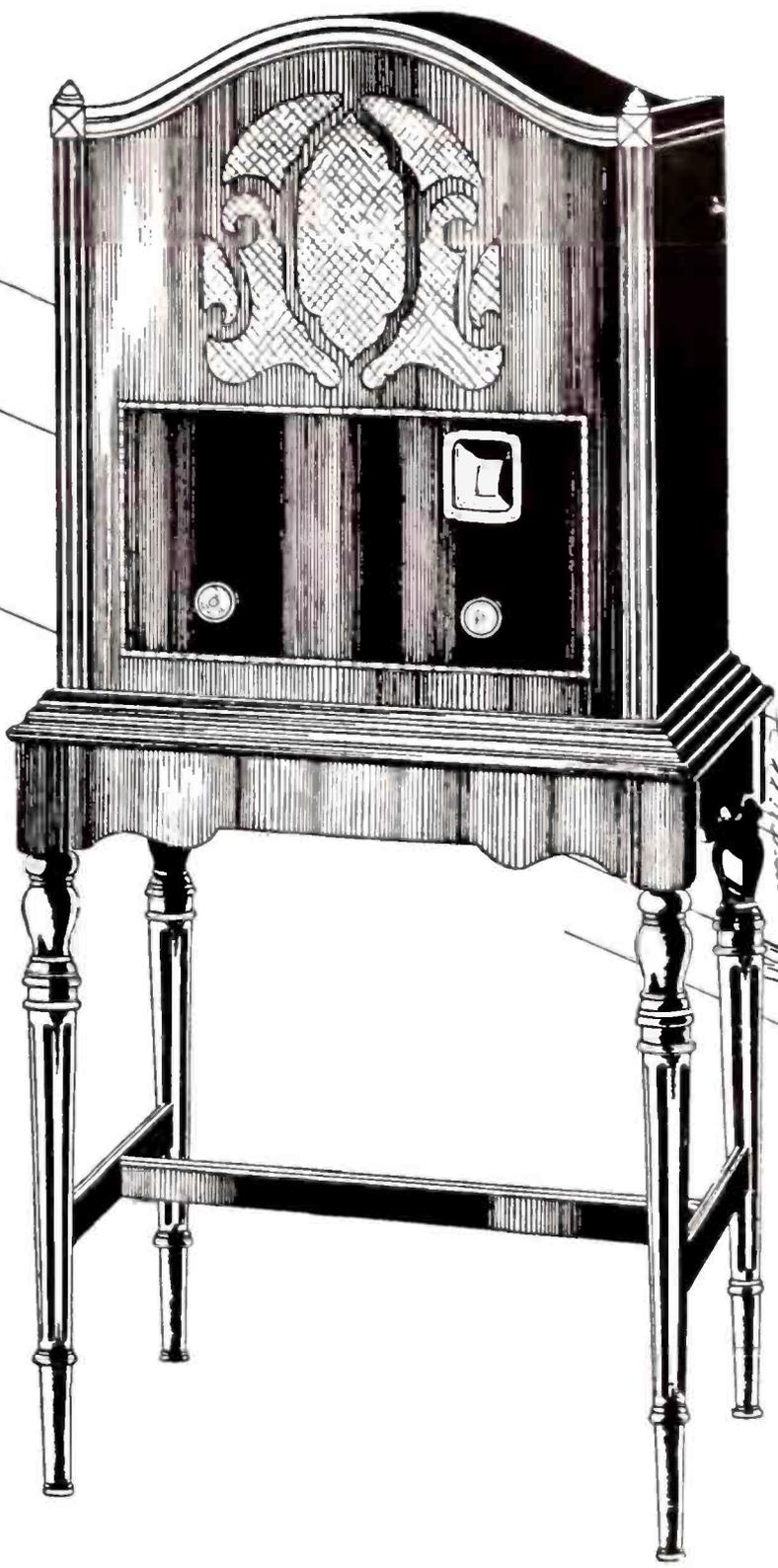
(All Ten Stores Open)

's Largest Radio Dealer

...ured at the right, the brilliant new
...er-Heterodyne. Here's power for
... wallop ... punch ... perform-
... beautiful colorful tone.

...bining features hitherto called
...ossible" — super-heterodyne per-
...formance, plus glorious tone, com-
...d in small space.

...ll want this new radio the moment
...hear it and watch its perform-
... And at a price that shouts
...UE—\$112.50 Complete with 8
...estic matched tubes.



MUSIC CO.
ADWAY—PLATT BLDG.
...rn Ave. 4357 S. Vermont Ave.
4588 Whittier Blvd.
(Evenings Until 9)

LONG BEACH
312 Pine Ave.
•
HUNTINGTON PARK
6533 S. Pacific Blvd.

\$10 Down—then \$10 a Month will
place a new Majestic Electric Re-
frigerator in your home. It IS im-
portant where you buy it. Platt
Music Company is the logical place.

DX RECEPTION SCORE CARD

The call letters of all stations heard may be listed opposite the frequency and under the geographical time division. List your dial setting for each channel in the "Dial" column. Thus the score card affords a complete perspective of your DX accomplishments at a glance, and answers such questions as: "How many eastern stations have I heard? How many channels have I logged and how many are still vacant on my log?" Use this score card in connection with the special DX Contest announced on Page 29.

Freq.	Pacific	Mountain	Central	Eastern	Dial	Freq.	Pacific	Mountain	Central	Eastern	Dial
550						1030					
560						1040					
570						1050					
580						1060					
590						1070					
600						1080					
610						1090					
620						1100					
630						1110					
640						1120					
650						1130					
660						1140					
670						1150					
680						1160					
690						1170					
700						1180					
710						1190					
720						1200					
730						1210					
740						1220					
750						1230					
760						1240					
770						1250					
780						1260					
790						1270					
800						1280					
810						1290					
820						1300					
830						1310					
840						1320					
850						1330					
860						1340					
870						1350					
880						1360					
890						1370					
900						1380					
910						1390					
920						1400					
930						1410					
940						1420					
950						1430					
960						1440					
970						1450					
980						1460					
990						1470					
1000						1480					
1010						1490					
1020						1500					

TUBES ARE VALVES

By K. G. ORMISTON

When the English radio fan exclaims, "My jolly old valves have expired!" he really means that his tubes have gone blooey. We must admit that the Englishman's word for it is the more accurately descriptive, and that for once our so-expressive lingo fails.

When Dr. Lee de Forest first put a filament, plate and grid into a glass bottle and pumped out the air, he named his brain child "Audion." Divers and sundry imitations soon sprang into being and their unlicensed bootleggers called them "Audiotrons," "Thermotrons," "Electron Relays" and what not. Most of them were tubular in shape, being about four inches long and an inch in diameter. The radio amateurs and experimenters of those days dubbed them "tubes" for short, and "tubes" they have remained, regardless of shape, size, color or creed. Dr. de Forest still insists they are "Audions" and a certain large manufacturer is equally insistent that such devices bearing their trade mark must be known as "Radiotrons," but through it all John Public swears that tubes are tubes, and sometimes at 'em.

A movement was started to popularize the cognomen

is called the "amplification factor," which, together with the "plate resistance" determines the "mutual conductance" of the tube. These are the three vital factors. They have unfortunately remained somewhat of a mystery to the majority of radio service men who believe that they have completely tested a tube when they have measured its plate current! These important characteristics of a tube may readily be determined from readings taken with a plate milliammeter, a plate voltmeter and a grid voltmeter.

Mutual conductance is in itself an excellent indication of the ability of a tube as an amplifier, since it takes into account the other two factors—plate resistance and amplification factor. Mutual conductance is expressed in mhos (conductance being the opposite of resistance, the unit of measurement is the ohm of resistance, spelled backwards) and is designated by the symbol "Gm." It is equal to the amplification factor (symbol "Mu") divided by the plate resistance (symbol "Rp") or Gm equals Mu divided by Rp. Thus a Cunningham C-327 tube has an amplification factor of 9, a plate resistance of 9000 ohms, and a mutual conductance of .001 mhos or 1000 micromhos (1 mho is 1,000,000 micromhos.)

It is obvious from the above relationship that the most desirable condition exists when a tube has a high amplification factor and a low plate resistance as this will result in the greatest mutual conductance. A tube having a high Mu, but also a high Rp will show no increase in mutual conductance since one offsets the other. The mutual conductance of receiving tubes ranges from 400 to 2000 micromhos.

The mutual inductance of a tube may be determined by the following method:

Set the grid voltage at a value near the normal operating value, noting the voltage and calling it Eg-1. Set the plate voltage near the normal value, and then read the plate current resulting from these two adjustments, and call it Ip-1.

Now increase the negative grid voltage and call this new value Eg-2. Read the plate current, calling it Ip-2. The plate voltage must remain constant during this test.

Subtract the smaller plate current Ip-2 from the larger plate current Ip-1, calling the difference Ip-3. Then subtract the smaller grid voltage Eg-1 from the larger value Eg-2, calling the difference Eg-3. Divide the difference in the plate current values Ip-3 (this must first be converted from milliamperes to amperes) by the difference in the grid voltage values Eg-3, and the result will be the mutual conductance in mhos. To express in micromhos, multiply by 1,000,000. To illustrate as a formula:

$$\text{Mutual conductance (Gm)} = \frac{\text{Change in plate current}}{\text{Change in grid voltage}}$$

For example: Assume that a grid voltage of -2.5 gives a plate current of 8 milliamperes. Increasing the grid voltage to -7.5 causes the plate current to drop to 4 milliamperes. The plate current change is then .004 amperes, and the grid voltage change 5.0 volts. The above formula then gives the Gm as .0008 mhos or 800 micromhos.

Determining the Gm of any tube and comparing the value obtained with the manufacturer's rating affords an accurate indication of the condition of the tube. All service men and experimenters should have a copy of the Cunningham manual or engineering bulletins, for this purpose.



The elaborate and very complete tube testing equipment of Radio Manufacturers' Supply Company, 1000 South Broadway, Los Angeles

"Bulbs," but the horticulturalists protested when it was found that a Cunningham, even if grounded, would not grow dahlias!

But to get back to the English of it, the thing really is a valve—an electrical valve. It is a device wherein a very small force is made to control a greater amount of energy. A slight variation in voltage applied to the grid, results in a large change in the plate current. Hence comes the tube's ability to amplify. By means of several such tubes, connected consecutively, the original feeble impulse picked up by the antenna may be amplified millions of times, but the tube action is solely that of a valve, releasing more and more of the energy furnished by the power supply unit of the set toward the ultimate goal of producing audible sounds from the loud speaker.

* * *

The measure of a tube's merit obviously must be based upon the relation between the plate changes corresponding to grid changes. A figure which expresses this relationship

AROUND THE DIAL

Radio station KCRC in Enid, Oklahoma, is now on the air with their special DX program every Saturday morning from 12:01 a. m. until 8:30 a. m. (C.S.T.) This program is a regular feature over this station and it is a very good station to catch and verify. KCRC broadcasts on 1370 Kc. with 100 W. nighttime power and 250 W. daytime.

I have a verified report on having picked up KIDO while KFOX was on and in said verification they state that KIDO has a Saturday night midnight frolic. This program is called the "Idaho Spuds;" starts at 12 midnight (M.S.T.) and stops when the crowd goes home.

Radio station XEJ in Jaurez, Chihuahua, Mexico, has the following schedule: 12 p. m. (M.S.T.) and 7 to 11 p. m. (M.S.T.) They are on the air seven days a week. Their slogan is "The Voice of the Frontier" or "La Voz de la Frontera." They have 100 W. power and operate on 857 Kc.

I have quite a complete set of Mexican station information and to anyone who will write for it I will gladly pass it on. The information is the latest obtainable and proves to be very helpful in logging the harder Mexico stations.

I find from exhaustive tries that CMK is definitely on 730 Kc. and not on 1095 Kc. I have had CMK very loud and clear on 730 Kc. and have never logged them on 1095 Kc., although I have a clear field around there. Speaking of Cuba, I find that CMC is very loud and clear in the early evening hours.—George Schmidt, 1642 West 82nd street, Los Angeles, Calif.

* * *

In reply to a recent inquiry from one of our readers as to how it is possible to hear KGHL in this vicinity when the station operates on the same frequency as KFWB, a reception which was reported by A. E. Armstrong in a recent prize-winning log, we point out that Mr. Armstrong logged KGHL at 11:44 p. m., after KFWB had signed off at 11:04 p. m. Many stations may be logged under similar conditions, as the middle western and eastern stations assigned to the same channels as our locals, often are on the air after the locals shut down for the night.

* * *

Many of us have been mistaken in regard to KTAR's power. They do not use their entire 1000 watts of power during the evening, but instead, they use only 500. The 1000 W. are used during the day.

According to a verification from CMK, Havana, they are broadcasting on 411 M., 730 Kc. only. I believe this will clear up A. E. Armstrong's question as to whether CMK is broadcasting on both 1095 and 730 Kc.

Here is something that may be of some interest:

KIDO puts on a late program every Saturday beginning at 12 p. m. (M.S.T.), and continuing until "the crowd goes home . . . in the mornin'."

CKWX has a late program every Wednesday and Saturday from 11:30 p. m. to 1 a. m. To anyone who wishes the complete program schedule of CKWX, I will be glad to send it to him if he will drop me a line.

WKBW, Buffalo, came in roaring early Saturday evening. This is a new one to me. Also, I played a new station in Mexico, XED, in Reynosa, on KFWB's wave length about 2:35 o'clock Sunday morning. They were broadcasting an all-night program for DX listeners and came in as clear as a bell.—Stuart Walmsley, 1641 West 60th street, Los Angeles, Calif.

* * *

I suppose every one has picked up XED at Reynosa, Mexico. This station had their official opening on Saturday, November 8. I picked them up early Saturday evening, and they announced at that time that they would broadcast for one hundred consecutive hours. For those who have not yet heard this station, it comes in on approximately 960 Kc., just one channel from KFWB. Announcements are in English, and are very clear.

Another station that may be new to a good many is CMX at Havana, Cuba. I played CMX on Saturday night between 9 and 10 on 890 Kc., just one channel from KHJ. It was a test program, and announcements were also in English, very clear.

For those who have not yet had KMBC at Kansas City. This station can usually be heard on Sunday nights on KFWB's wave length after this station signs off, which is anywhere from 10 to 10:30.—A. E. Armstrong, 2021 Bonita Drive, Glendale, Calif.

Will the fans please note that 3YA, Christchurch, N. Z., was listed on 399.8 M., 750 Kc., instead of 305.6 M., 980 Kc. (KDKA.)

In part I quote you A. R. Harris' letter regarding 3YA's correct allocation. Mr. Harris is general manager of The Radio Broadcasting Company of New Zealand, Ltd.:

"It would appear that the United States listing of the wave length of 3YA is incorrect as the actual wave is 306 M. (980 Kc.)"

Here is more important information regarding your verifications from 1YA, 2YA, 3YA and 4YA. To avoid a delay in receiving your communications, by all means direct your request for same to Mr. Harris, P. O. Box 1079, Christchurch, N. Z., instead of directly to the station you have played.—Homer G. Gosney, 431 So. Elena avenue, Redondo Beach, Calif.

* * *

I have some information which I believe will be of interest to your readers of this column. XED went on the air Nov. 8, operating on a frequency of 960 Kc. and using a power of 10,000 W. It maintains studios and offices in Hidalgo, Texas and Reynosa, Tamps., Mexico. Their station manager stated in his letter that programs will be truly international, broadcasting in both English and Spanish. This station will be operated by the International Broadcasting Company, Inc. XEW is the station received on 770 Kc. and not XED. I was quite surprised to see that XEW was not listed in your recent edition of the Call Book, but I take it to be true, as this information was sent me from XED itself.

* * *

WJR, 750 Kc., is on the air from 6:00 a. m. until 1:00 a. m. (E.S.T.)

CMK broadcasts on 730 Kc.

XEN broadcasts on 720 Kc.

KGIR, 1360 Kc., is on the air from 7 a. m. to 12 midnight.

KGNF comes on the air at 4 a. m. and is on for the rest of the day 'til sundown.

KFYR, Bismark, N. D., 550 Kc., is on at 4 a. m. and is on until midnight.

CKWX, 410.7 M., 730 Kc., broadcasts two weekly DX programs on Wednesday and Saturday from 11:30 to 1 a. m.

KFXF, 920 Kc., is on the air after 6:30 p. m. (P.S.T.), at which time KFEL comes on.

KTBS, 1450 Kc., in Shreveport, is on the air from 6 p. m. 'til 11 p. m. and sometimes until 12 midnight (C.S.T.)

KCU (Fresno airport), can be heard on 600, 900 and 1040 Kc., at 2, 5, 8 and 11 a. m. and p. m.

KFPL, 1310 Kc., broadcasts each morning at 4 a. m. except Sunday.

KIDO, Boise, Idaho, can be heard at 11 a. m. and is on until the crowd goes home.

WDAY, Fargo, N. D., 940 Kc., is on the air at 4 a. m.

CKCK, 960 Kc., somewhere in Saskatchewan, can be heard very well at and after 5 a. m. (P.S.T.), every morning except Sunday. This station is not listed in your recent Call Book. Can any one tell me who it is? Say, where's that new Canadian that was scheduled this fall?

I've been successful enough to log JOJK in Kanazawa, Japan, one morning. It came in on about 710 Kc.

JOAK, Tokio, Japan, 870 Kc., can be heard on the Pacific Coast well after 4 a. m. After 5 the announcer gives the call letters twice in English and plays recordings of classical music. I've had JOAK until 6:00 a. m., at which time they signed off.

WBBM, 389.4 M., is on the air daily from 9 a. m. to 1 a. m. (C.S.T.)

KFJF, Oklahoma City, 1480 Kc., can be heard on Sundays at 7 p. m. (P.S.T.)

WSUI, Iowa City, 880 Kc., can be logged at 12 to 3 a. m. (C.S.T.)

Can any one furnish me with some information regarding stations broadcasting on 910 and 990 Kc.? These are the only two channels on my Philco that are blank. On 1370 Kc. I logged eight stations, while on 1310 Kc. and 1420 Kc. I've logged seven stations on each one. All in all, my log consists of 234 broadcasting stations.

Hoping that the above listed information will meet with the approval and interest of your readers and thanking you for the interest shown me in the past, I am

Constantino Stefani,

Route 1, Box 65, Merced, Calif.

(Continued on Page 29)

DX PRIZE CONTEST!

Here is good news for every DX fan—the opportunity to again enter into friendly competition with other fans. All combing the ether on the same evening, searching the 96 channels for DX stations, identifying them, logging them and sending in your letter, and finally reading the prize winning letters in RADIO DOINGS, and comparing the winning log with your own. This is real sport for the DX enthusiast.

And the prize is something worth working for. The winner will receive an Avalon Screen-Grid Midget Radio, complete with tubes and ready to operate. This set is a highly efficient Midget—humless, selective and possessing wonderful tonal qualities. It is manufactured by the Avalon Radio Manufacturing Company of Los Angeles, and retails for \$59.50. It will be given absolutely free to the winner of the DX Contest, through the courtesy of the manufacturer.

This contest will be held on the night of Saturday, December 13th from 6 p. m. until 12 midnight. Radio fans everywhere, regardless of the make or type of radio, are eligible. It is not necessary that you belong to our DX Club, or that you are a subscriber to RADIO DOINGS.

For the six hours of the contest, log as many stations as you possibly can, listing the actual time a station is heard and the name of the musical selection or actual words of the announcer for identification purposes. Do not list stations heard at any other time except during the specified hours of the contest.

The logs submitted will be judged by a committee of three who will be appointed by Mr. Roth, president of the "Round the World DX Club."

All logs and letters must reach RADIO DOINGS not later than December 17th, and the winner will be announced and several of the best logs published in our January issue.

Remember the date, Saturday, December 13th. The time is from 6 p. m. until 12 midnight. The first prize—Avalon Midget Radio, complete with tubes. **GOOD LUCK!**

AROUND THE DIAL—(Continued from Page 28)

Dear Sirs: I am glad to contribute the following to your most interesting page. Here are some Mexican stations as I have heard them:

XFG, Mexico City, 638 Kc.	XEW, Mexico City, 780 Kc.
XEZ, Mexico City, 700 Kc.	XEJ, Juarez, 857 Kc.
XEN, Mexico City, 721 Kc.	XES, Tampico, 900 Kc.
XEM, Tampico, 768 Kc.	XEI, Morelia, 995 Kc.

Also, in addition to the big seven in Japan, JOJK may be picked up on 710 Kc. They come in clearly, but with less volume than the others, and usually sign off between 5:45 and 6 a. m. (M.S.T.), although I heard them sign off one morning at 6:05 o'clock.

I am wondering how many have heard the English lecture over the Japanese network coming in here between 2:30 and 3 a. m. This does not seem to be a regular feature, but I have heard a lady talking on etiquette different times. On one night in particular they were coming in so clearly that I would turn back and forth from one station to another, much as I would on N.B.C. programs, and not until the Japanese announcer came to the microphone would one have guessed he was listening to far-away Japan.

Have had two good programs from 3AR, Melbourne, Australia, recently. They are on 620 Kc. and sign off about 5:30 a. m. My set picks up two other stations from that same direction on 665 and 760 Kc. The announcers speak with a broad English accent, but I have not been able to identify either one yet.—Paul Love, Mission Ranch, Phoenix, Ariz.

'Round the World DX Club

Each year since 1926, RADIO DOINGS has conducted a more or less mythical DX Club, wherein everyone who sent in a log of DX reception automatically became a member. Valuable prizes were awarded weekly and interest in the Club and DX activities grew tremendously. The published letters proved of great interest and assistance to other fans in aiding them in finding and logging the prized DX stations.

This year, several DX enthusiasts suggested that a real club would provide a more concrete and satisfactory fellowship, and accordingly RADIO DOINGS decided to sponsor such a movement. A number of charter members were signed up at the last Radio Show, and on October 27th last, fourteen of these enthusiasts, all well known through their DX activities, held a meeting in the offices of RADIO DOINGS to further the work of organization.

A chairman was selected and on his order the meeting was officially opened. The chairman outlined the purpose of the meeting, the objects and benefits of such an organization. Mrs. Dora Newcomb of Oxnard, who is an Ace in the Newark News DX Club, was appointed temporary secretary. Upon motion of one of the members, election of officers was next in order. Edward C. Roth was nominated for president and was unanimously elected. W. W. Sharp was elected first vice-president, S. E. Korb second vice-president, and A. E. Armstrong secretary-treasurer. The office of technical advisor was not filled. K. G. Ormiston was nominated, but due to the fact that he was in the East, this office was ordered held open until his return and acceptance.

A committee was appointed to draw up a Constitution, by-laws, and rules of order. This committee was instructed to report at the next regular meeting of the club.

The "Round the World DX Club," as it is now known, is enrolling charter members, and when fifty have signed the charter it will be ordered closed. The club has been organized to bring together DX fans from all parts of the world, to promote interest in DX activities in both the broadcast and short-wave bands, to assist its members in DX problems and generally improve DX reception conditions wherever possible. All DX fans are invited to become members.

Special DX contests will be held throughout the season. A beautiful cup has generously been donated by a member well known to all fans in this part of the country. This cup is to be awarded to the contestant who is declared the winner of three consecutive contests. These contests will be announced at a future meeting of the club. Other prizes will also be awarded for the best logs submitted during each of the months of the season.

The club has a busy year planned ahead and we feel confident that a thriving organization will develop with a large membership. The entrance fee for charter members is one dollar with monthly dues set at fifty cents per month. The club invites all who are interested in DX work, of either sex, to make application at once, addressing all communications to the secretary, A. E. Armstrong, Box 86, Glendale, Calif. Applications are to be voted upon by the members at regular meetings of the club, and applicants will be notified of action taken.

EDWARD C. ROTH, President.

Chain Programs for December

National Broadcasting Co.

SUNDAY

8:30 AM—NBC Organ Recital KGO
 8:30 AM—Breakfast with Sperry KHQ
 KOMO KGW KPO KFI KFSD
 9:00 AM—Miniature Recital KGO
 9:15 AM—National Oratorio Society KGO
 KOMO KGW
 10:15 AM—Piano Capers KGO
 10:30 AM—Neapolitan Nights KGO KFSD
 11:00 AM—Grace Cathedral Service KGO
 12:00 PM—National Youth Conference
 KGO KHQ KOMO KGW KPO
 1:00 PM—Dr. S. Parkes Cadman KGO
 KHQ KOMO KGW
 2:00 PM—National Vespers KGO KHQ
 KOMO KGW KPO KTAR
 3:00 PM—Catholic Hour KGO KHQ
 KOMO KGW KTAR
 4:00 PM—Sunday Concert KGO KOMO
 KGW KFSD
 5:00 PM—Enna Jettick Melodies KHQ
 KOMO KGW KPO KFI KFSD
 KTAR
 5:00 PM—The Vagabonds KGO KECA
 5:15 PM—Collier's Radio Hour KHQ
 KOMO KGW KPO KFI
 6:00 PM—News Service KGO
 6:15 PM—Atwater Kent Hour KOMO
 KGW KPO KFI KHQ
 6:15 PM—Evening Reveries KGO
 6:45 PM—The Olympians KGO KTAR
 7:15 PM—Studebaker Champions KGO
 KHQ KOMO KGW KFI
 7:45 PM—Sunday at Seth Parker's KGO
 KGW KFSD KTAR
 8:15 PM—The Entertainers KGO KFSD
 KTAR
 8:30 PM—Gunnar Johansen, Pianist KGO
 KFSD KTAR KGW
 9:00 PM—Borden Program KGO KHQ
 KOMO KGW KFI KTAR KSL
 KOA
 9:30 PM—Enna Jettick Melodies KGO
 KOMO KGW KECA KTAR
 KHQ
 9:45 PM—The Reader's Guide KGO
 10:15 PM—Concert Jewels KGO KECA
 KOA
 11:00 PM—The Vagabonds KGO KFI KSL

MONDAY

7:30 AM—Sunrise Serenaders KGO
 7:30 AM—Quaker Start O' the Day KHQ
 KOMO KGW KPO KFSD KFI
 8:00 AM—Shell Happytime KHQ KOMO
 KGW KPO KFI KSL
 8:00 AM—Financial Service Program KGO
 8:15 AM—Morning Melodies KGO
 8:30 AM—Cross-Cuts of the Day KGO
 9:00 AM—Vermont Lumberjacks KGO
 KHQ KOMO KGW KECA
 9:15 AM—Morning Glories KGO
 9:45 AM—Radio Ramblings KGO
 10:15 AM—Josephine B. Gihson Food Talk
 KGO KHQ KOMO
 10:30 AM—Woman's Magazine of the Air
 KGO KHQ KOMO KGW KPO
 KFI KFSD KSL KOA KTAR
 11:30 AM—California Federation of Women's
 Clubs KGO KECA KFSD
 12:00 PM—Luncheon Concert KGO KGW
 KFSD
 1:00 PM—Hotel Cosmopolitan Dance Orchestra
 KGO KFSD KTAR
 1:30 PM—Piano Capers KGO KGW KFSD
 KTAR
 2:00 PM—Maltine Story Program KGO
 KOMO KFI KFSD KGW
 2:30 PM—NBC Matinee KGO KTAR
 3:00 PM—What's in a Name? KGO KGW
 KPO
 3:15 PM—Mormon Tabernacle Choir and
 Organ KGO KOMO KGW KPO
 KFSD KTAR
 3:45 PM—Parisian Quintet KGO KPO
 4:15 PM—The World Today KGO KECA
 KFSD
 4:30 PM—Phil Cook, the Quaker Man
 KGO KHQ KOMO KGW KECA
 KFSD KTAR
 4:45 PM—News Service KGO
 5:00 PM—How's Business? Merle Thorpe
 KGO KHQ KOMO KGW KECA
 5:15 PM—Fifteen Minutes in the Nation's
 Capital KGO KHQ KOMO
 KECA KFSD
 5:30 PM—The Olympians KGO KGW
 6:00 PM—Maytag Orchestra KGO KHQ
 KOMO KGW KECA
 6:30 PM—General Motors Family Party
 KGO KHQ KOMO KGW KFI

7:00 PM—Stromberg - Carlson Program
 KGO KHQ KOMO KGW KFI
 KFSD KTAR
 7:30 PM—Empire Builders KGO KHQ
 KOMO KGW KECA KFSD
 KTAR
 8:00 PM—Popular Tunes KGO
 8:15 PM—Sportshots KGO
 8:00 PM—Rudy Seiger's Shell Symphonists
 KPO KFI KHQ KOMO
 KGW
 8:30 PM—Amos 'N Andy KGO KHQ
 KOMO KGW KECA KFSD
 8:45 PM—Southern Harmony Four KGO
 9:00 PM—World Wanderings KGO KTAR
 9:30 PM—Pacific National Singers KGO
 KSL KOA
 10:00 PM—Musical Echoes KGO KECA
 KOA KSL
 10:30 PM—Yir Frier' Scotty KGO KSL
 KOA
 10:45 PM—Walter Ferner KGO KSL KOA
 11:00 PM—Laughner-Harris Hotel St.
 Francis Dance Orchestra KGO
 KGW KFI

TUESDAY

7:30 AM—Sunrise Serenaders KGO
 7:30 AM—Quaker Start O' the Day KHQ
 KOMO KGW KPO KFSD KFI
 8:00 AM—Shell Happytime KHQ KOMO
 KPO KFI KSL
 8:00 AM—Financial Service Program
 KGO
 8:15 AM—Morning Melodies KGO
 8:30 AM—Cross-Cuts of the Day KGO
 9:00 AM—Vermont Lumberjacks KGO
 KHQ KOMO KGW KECA
 9:15 AM—Meet the Folks KGO
 9:30 AM—William Don KGO
 9:45 AM—The Entertainers KGO
 10:00 AM—Color Harmony Program KGO
 KHQ KOMO KGW KFI
 10:30 AM—Woman's Magazine of the Air
 KGO KHQ KOMO KGW KPO
 KFI KFSD KTAR KSL KOA
 11:30 AM—NBC Philharmonic Organ Recital
 KGO
 12:00 PM—Hotel Sir Francis Drake Orchestra
 KGO KFSD
 1:00 PM—Pacific Vagabonds KGO KFSD
 KTAR KOA KGW
 2:00 PM—NBC Matinee KGO KTAR
 3:00 PM—Black and Gold Room Orchestra
 KGO KGW
 3:30 PM—Who's Behind the Name? Edwin
 Alger KGO KOMO
 3:45 PM—Black and Gold Room Orchestra
 KGO KGW
 4:00 PM—Organ Recital KGO
 4:15 PM—Laws That Safeguard Society
 KGO KHQ KOMO KECA
 4:30 PM—Phil Cook, the Quaker Man
 KGO KHQ KOMO KGW KECA
 KFSD KTAR
 4:45 PM—Sarah Kreindler, Violinist KGO
 5:00 PM—Brazilian - American Program
 KGO KHQ KOMO KGW KECA
 5:30 PM—Bits of Melody KGO KGW
 5:45 PM—News Service KGO KGW
 6:00 PM—Eveready Program KGO KHQ
 KOMO KGW
 6:30—Happy Wonder Bakers KGO
 KHQ KOMO KGW KECA
 7:00 PM—Westinghouse Salute KGO
 KHQ KOMO KGW KECA
 KFSD KTAR
 7:30 PM—B. A. Rolfe and His Lucky
 Strike Dance Orchestra KGO
 KHQ KOMO KGW KECA
 KFSD KTAR
 8:00 PM—Violet Ray Music Box KGO
 KHQ KOMO KGW KFI KFSD
 KTAR
 8:30 PM—Amos 'N Andy KGO KHQ
 KOMO KGW KECA KFSD
 8:45 PM—Sperry Smiles KGO KHQ
 KOMO KGW KECA KFSD
 9:00 PM—Florsheim Frolic KGO KHQ
 KOMO KGW KECA KFSD
 KTAR
 9:30 PM—Memory Lane KGO KGW
 KECA KFSD KTAR KOA
 10:00 PM—National Concert Orchestra
 KGO KOA KGW
 11:00 PM—Laughner - Harris Hotel St.
 Francis Dance Orchestra KGO
 KFI KSL

WEDNESDAY

7:30 AM—Sunrise Serenaders KGO
 7:30 AM—Quaker Start O' the Day KHQ
 KOMO KGW KPO KFSD KFI

8:00 AM—Shell Happytime KHQ KOMO
 KGW KPO KFI KSL
 8:00 AM—Financial Service Program
 KGO
 8:15 AM—Morning Melodies KGO
 8:30 AM—Cross-Cuts of the Day KGO
 9:00 AM—Vermont Lumberjacks KGO
 KHQ KOMO KGW KECA
 9:15 AM—The Recitalists KGO
 9:30 AM—Betty Crocker Gold Medal
 Home Service Talks KGO KHQ
 KOMO KGW KFI KFSD
 9:45 AM—Morning Glories KGO
 10:15 AM—Mary Hale Martin's Household
 Period KGO KHQ KOMO KGW
 KFI KSL KOA
 10:30 AM—Woman's Magazine of the Air
 KGO KHQ KOMO KGW KPO
 KFI KFSD KTAR
 11:30 AM—Organ Recital KGO
 12:00 PM—Luncheon Concert KGO
 12:30 PM—Evening Stars KGO
 1:00 PM—Blue Aces KGO KTAR
 2:00 PM—NBC Matinee KGO
 2:00 PM—Series of Talks KTAR
 2:15 PM—Breen and De Rose KTAR
 3:00 PM—Horace Heidt and His Hotel
 New Yorker Orchestra KGO
 KGW KTAR
 3:25 PM—John B. Kennedy Talk KGO
 KGW KTAR
 3:30 PM—Horace Heidt and His Hotel
 New Yorker Orchestra KGO
 3:45 PM—Arion Trio KGO
 KFI KOA KGW KFSD
 4:15 PM—Science KGO KOMO KPO KFI
 KFSD KTAR
 4:45 PM—Back of the News in Washing-
 ton, William Hard KGO KOMO
 KECA KFSD
 5:00 PM—El Tango Romantico KGO
 KFSD KTAR
 5:15 PM—RCA Program KGO KHQ
 KOMO KECA KFSD KTAR
 5:30 PM—Bits of Melody KGO
 5:45 PM—News Service KGO
 6:00 PM—Halsey, Stuart Program KGO
 KHQ KOMO KGW KFI
 6:30 PM—Palmolive Hour KGO KHQ
 KOMO KGW KFI
 7:30 PM—Coca Cola Program KGO KHQ
 KOMO KGW KECA KFSD
 8:00 PM—S and W Forum of the Air KGO
 KECA KFSD KTAR
 8:00 PM—Let's Get Associated KHQ
 KOMO KGW KPO KFI
 8:30 PM—Amos 'N Andy KGO KHQ
 KOMO KGW KECA KFSD
 8:45 PM—Jolly Time Revue KGO KHQ
 KOMO KGW KFI KTAR
 9:00 PM—Miniature Biographies KGO
 KECA
 9:30 PM—Camel Pleasure Hour KGO
 KHQ KOMO KGW KECA
 KFSD KTAR KSL KOA
 10:30 PM—Parisian Quintet KGO KOA
 11:00 PM—Laughner-Harris Hotel St.
 Francis Dance Orchestra KGO
 KGW KFI

THURSDAY

7:30 AM—Sunrise Serenaders KGO
 7:30 AM—Quaker Start O' the Day KHQ
 KOMO KGW KPO KFSD KFI
 8:00 AM—Shell Happytime KHQ KOMO
 KGW KPO KFI KSL
 8:00 AM—Financial Service Program
 KGO
 8:15 AM—Morning Melodies KGO
 8:30 AM—Cross-Cuts of the Day KGO
 9:00 AM—Vermont Lumberjacks KGO
 KHQ KOMO KGW KECA
 9:15 AM—The Entertainers KGO
 9:45 AM—Safeguarding the Nation's Food
 and Drug Supply KGO
 10:00 AM—Woman's Magazine of the Air
 KGO KHQ KOMO KGW KPO
 KFI KTAR KSL KOA KFSD
 11:00 AM—Standard School Broadcast
 KGO KHQ KOMO KGW KPO
 KFI KFSD
 11:45 AM—Organ Recital KGO
 12:00 PM—Hotel Sir Francis Drake Orchestra
 KGO KSL KFSD
 1:00 PM—Magic of Speech KGO KFSD
 KTAR
 1:30 PM—The Lady Next Door KGO KGW
 KFSD KTAR
 2:00 PM—NBC Matinee KGO
 2:00 PM—In the Spotlight KFSD KTAR
 3:00 PM—Black and Gold Room Orchestra
 KGO KGW
 3:45 PM—The Vagabonds KGO

4:15 PM—News Service KGO KFSD
 4:30 PM—Phil Cook, the Quaker Man
 KGO KHQ KOMO KGW KECA
 KFSD KTAR
 4:45 PM—Friendly Five Footnotes KGO
 KHQ KOMO KECA KFSD
 KTAR
 5:00 PM—Fleischmann Hour KGO KHQ
 KOMO KGW KECA KTAR
 6:00 PM—Arco Birthday Party KGO
 KHR KOMO KGW KECA
 6:30 PM—Maxwell House Ensemble KGO
 KHQ KOMO KGW KECA
 7:00 PM—B. A. Rolfe and His Lucky
 Strike Dance Orchestra KGO
 KHQ KOMO KGW KFI KFSD
 KTAR
 7:30 PM—Standard Symphony Hour KGO
 KHQ KOMO KGW KFI
 8:30 PM—Amos 'N' Andy KGO KHQ
 KOMO KGW KECA KFSD
 8:45 PM—Sperry Smiles KGO KHQ
 KOMO KGW KECA KFSD
 9:00 PM—The Story Teller KGO
 9:00 PM—Horace Heidt and His Hotel
 New Yorker Orchestra KHQ
 KGW KPO KECA KFSD
 KTAR
 9:30 PM—The Vagabonds KGO KFI
 10:00 PM—Piano Paintings KGO
 10:30 PM—Yir Frier' Scotty KGO KOA
 10:45 PM—Sarah Kreindler, violinist KGO
 KOA
 11:00 PM—Laughner - Harris Hotel St.
 Francis Dance Orchestra KGO
 KGW KFI KSL

FRIDAY

7:30 AM—Sunrise Serenaders KGO
 7:30 AM—Quaker Start O' the Day KHQ
 KOMO KGW KPO KFSD KFI
 8:00 AM—Shell Happytime KHQ KOMO
 KGW KPO KFI
 8:00 AM—Financial Service Program
 KGO
 8:15 AM—Morning Melodies KGO
 8:30 AM—Cross-Cuts of the Day KGO
 9:00 AM—Vermont Lumberjacks KGO
 KHQ KOMO KGW KECA
 9:15 AM—Morning Glories KGO
 9:30 AM—Betty Crocker Gold Medal
 Home Service Talks KGO KHQ
 KOMO KGW KFI KFSD
 9:45 AM—Rembrandt Trio KGO KGW
 10:15 AM—Josephine B. Gibson, Food
 Talk KGO KHQ KOMO KGW
 KFI
 10:30 AM—Woman's Magazine of the Air
 KGO KHQ KOMO KGW KPO
 KFI KFSD KTAR
 11:30 AM—NBC Philharmonic Organ Recital
 KGO
 12:00 PM—Luncheon Concert KGO
 12:30 PM—Chicago Serenade KGO KGW
 KFSD
 1:00 PM—Radio Guild KGO KOMO KECA
 KFSD KTAR
 2:00 PM—NBC Matinee KGO
 3:00 PM—The World in Music KGO KGW
 KTAR
 3:15 PM—Black and Gold Room Orchestra
 KGO KGW KTAR
 3:45 PM—William Don KGO
 4:00 PM—Spotlights in Drama and Literature,
 Montrose J. Moses KGO
 KOMO KFSD
 4:15 PM—College Memories KGO KHQ
 KOMO KECA KFSD KTAR
 4:30 PM—Phil Cook, the Quaker Man
 KGO KHQ KOMO KGW KECA
 KFSD KTAR
 4:45 PM—News Service KGO
 5:00 PM—Cities Service Concert Orchestra
 KGO KHQ KOMO KGW
 KECA
 6:00 PM—Interwoven Pair KGO KHQ
 KOMO KGW KFI KFSD KTAR
 6:30 PM—Armour Program KGO KHQ
 KOMO KGW KFI
 7:00 PM—Armstrong Quakers KGO KHQ
 KOMO KGW KFI
 7:30 PM—Radio-Keith-Orpheum Program
 KGO KHQ KOMO KGW KFSD
 KTAR KFI
 8:00 PM—TheIma Brown KGO KFSD
 8:15 PM—Brownbilt Footlites KGO KHQ
 KOMO KGW KFI KFSD KTAR
 8:30 PM—Amos 'N' Andy KGO KHQ
 KOMO KGW KECA KFSD
 8:45 PM—Tone Pictures KGO KHQ
 KOMO KGW KFI
 9:15 PM—Longines Correct Time KGO
 KHQ KOMO KGW KFSD
 9:15 PM—Hill Billy Boys KGO
 9:30 PM—Metropolitans KGO KFSD KOA
 10:00 PM—National Players KGO KSL
 KOA
 10:30 PM—Pacific Nomads KGO KOA KSL
 11:00 PM—Laughner - Harris Hotel St.
 Francis Dance Orchestra KGO
 KFI KSL

SATURDAY

7:30 AM—Sunrise Serenaders KGO
 7:30 AM—Quaker Start O' the Day KHQ
 KOMO KGW KPO KFSD KFI
 8:00 AM—Shell Happytime KHQ KOMO
 KGW KPO KFI KSL
 8:00 AM—Financial Service Program
 KGO
 8:15 AM—Morning Melodies KGO
 8:30 AM—Cross-Cuts of the Day KGO
 9:00 AM—Vermont Lumberjacks KGO
 KHQ KOMO KGW KECA
 9:15 AM—Meet the Folks KGO
 9:30 AM—National Farm and Home Hour
 KGO KHQ KOMO KFI KFSD
 KGW KPO
 10:30 AM—Woman's Magazine of the Air
 KHQ KOMO KGW KPO KFI
 KFSD KTAR KGO
 11:30 AM—Organ Recital KGO
 12:00 PM—Hotel Sir Francis Drake Orchestra
 KGO KTAR
 12:30 PM—Chicago Serenade KGO KTAR
 1:00 PM—Merry Makers KGO KTAR
 1:15 PM—Pacific Feature Hour KGO
 KTAR
 2:00 PM—The Lady Next Door KGO
 KTAR
 2:30 PM—Tea Timers KGO
 3:00 PM—The Jameses KGO KGW KTAR
 3:15 PM—Black and Gold Room Orchestra
 KGO KGW
 3:45 PM—Bits of Melody KGO
 4:00 PM—Whyte's Orchestra KGO
 4:30 PM—The Silver Flute KGO KGW
 KFSD
 5:00 PM—Salon Singers KGO KGW
 5:15 PM—RCA Program KGO KHQ
 KOMO KGW KECA KFSD
 KTAR
 5:30 PM—The Fuller Man KGO KHQ
 KOMO KGW KECA
 6:00 PM—General Electric Symphony
 KGO KHQ KOMO KGW KFI
 KFSD KTAR
 7:00 PM—B. A. Rolfe and His Lucky
 Strike Dance Orchestra KGO
 KHQ KOMO KGW KFI KFSD
 KTAR
 8:00 PM—Rainbow Harmonies KGO
 KECA KTAR
 8:00 PM—Gilmore Circus—KOMO KGW
 KPO KFI
 8:30 PM—Amos 'N' Andy KGO KHQ

KOMO KGW KECA KFSD
 8:45 PM—Sperry Smiles KGO KHQ KOMO
 KGW KECA KFSD
 9:00 PM—El Sidelo Ministrels KGO KHQ
 KOMO KGW
 9:30 PM—NBC Drama Hour KGO KFSD
 KOA
 10:30 PM—Spotlight Review KGO KOMO
 KFI KOA KGW KFSD

Columbia Broadcasting System

SUNDAY

9:00 AM—Jewish Art Program, Talks,
 Script and Music KVI
 9:30 AM—London Broadcast KLZ KDYL
 KVI
 9:45 AM—H. M. Canadian Grenadier
 Guards Band from Montreal
 KLZ KVI KFPY
 10:30 AM—Conclave of Nations, music directed
 by Channon Collinge
 KFJF KLZ KVI
 11:00 AM—Cathedral Hour. All musical
 presentation of a cathedral
 service KLZ KVI
 12:00 Noon—The Curtis Symphony Orchestra,
 Emil Meynarski, Dir.
 KLZ KDYL KVI KHJ KFRC
 2:30 PM—The French Trio KLZ KDYL
 KVI KFRC
 5:00 PM—The World's Business KLZ
 KDYL KOL KHJ KFRC
 5:45 PM—The Gauchos, Vincent Sorey
 and his Orch. WANC WLAC
 WBRC KLZ KDYL KOL
 6:00 PM—Majestic Curiosity Shop. "A
 Pack of Cards" KLZ KDYL
 KVI KOL KFPY KOIN KHJ
 KFRC
 6:30 PM—Tone Pictures, Domenico Savino,
 Director KLZ KDYL KFPY
 7:00 PM—Jesse Crawford, Royals' Poet
 of the Organ KLZ KDYL KOL
 KOIN KHJ KFRC

MONDAY

5:45 AM—The Old Dutch Girl, Newsy
 Jingles in Rhyme and Song
 KLZ KDYL
 6:00 AM—Something for Everyone, Music,
 News, Humor, Poetry, etc.
 KDYL
 6:30 AM—Blue Monday Gloom Chasers
 KDYL
 7:45 AM—Mirrors of Beauty, "Protective
 Make-up" KDYL
 8:45 AM—Mr. Fix it, "Wringing His
 Heart" KDYL
 9:00 AM—Paul Tremaine and His Yoeng's
 Restaurant Orchestra KLZ KVI
 KOL
 9:30 AM—Columbia Revue, Emery
 Deutsch and his Orchestra,
 KDYL
 11:00 AM—Columbia Artists Recital KLZ
 KVI KOL KFPY
 11:30 AM—American School of the Air
 KLZ KDYL KVI KOL KFPY
 KOIN KHJ KFRC
 12:00 Noon—Columbia Salon Orchestra,
 Emery Deutsch, director KDYL
 KVI
 12:30 AM—Ann Leaf at the Organ KLZ
 KDYL KVI
 1:00 PM—Ballad Hour KDYL KVI KHJ
 KFRC
 1:30 PM—Wardman Park Hotel Orchestra,
 dance music KRUD KDYL
 KVI KOL KFPY KFRC
 2:00 PM—Gypsy Music Makers, Emery
 Deutsch and his Orchestra
 KDYL
 2:45 PM—Virginia Arnold, pianist KLZ
 KDYL
 3:00 PM—WSPD Commodores, dance music
 KDYL KOL KFRC
 3:45 PM—Janssen Hofbrau Orchestra,
 dance music KLZ KOL KFRC
 4:00 PM—Current Events, H. V. Kaltensborn
 KVI KOL KFRC
 4:15 PM—The Crockett Mountaineers,
 Hill-billy Numbers KVI KFRC
 5:30 PM—Arabesque, Desert Play KLZ
 KDYL
 6:30 PM—Bourgeois, An Evening in Paris
 KLZ KFPY KOL KDYL KOIN
 KHJ KFRC
 6:45 AM—Morning Moods KDYL
 7:00 PM—Guy Lombardo and his Orchestra
 KLZ KDYL KVI KOL
 KFPY KOIN KHJ KFRC
 7:30 PM—Don Amazo KLZ KDYL KOL
 KOIN KHJ KFRC KXX

TUESDAY

6:15 AM—Something for Everyone, Music,
 News, Humor, Poetry
 KDYL

(Continued on Page 34)

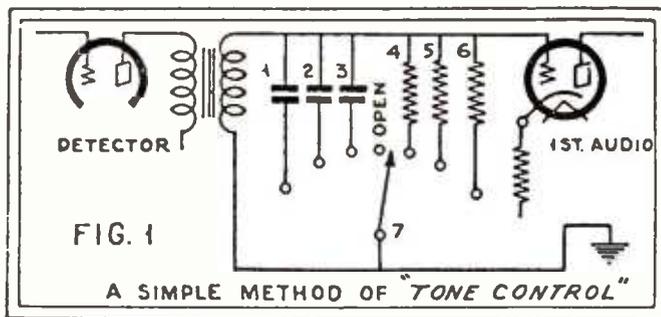
HARRY A. EARNSHAW &
 RAYMOND R. MORGAN
 (EARNSHAW-YOUNG, Inc.)
producers of
**Outstanding
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 LOS ANGELES

THE EXPERIMENTER'S PAGE

The fan who is experimentally inclined can readily improve the performance of the average radio receiver by employing one or more of the simple additions here suggested.

Methods of Tone Control

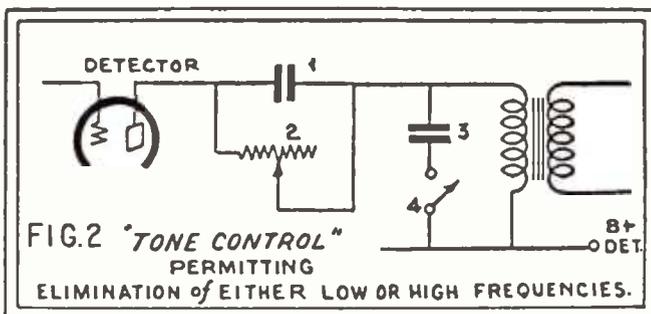
A suitable tone control device can be constructed and applied quite readily. In principle, it involves the suppression of certain audio frequencies, which can be selected at the will of the listener. The fact is utilized that a fixed condenser offers an easier path to high frequency currents than to low frequency ones, whereas the metallized resistor tends to obstruct the higher frequencies. In the diagram a portion of the current may be shunted through any one of six paths. With the switch at the left, the .05 mfd. condenser is in the circuit. The high frequencies will find a ready path through this condenser and hence will be by-passed to ground. As a



result, background noises will disappear, the effects of static will be lessened and a deep mellow response will be attained. As the switch is turned toward the right, condenser capacities are reduced, with a consequent increase in reactive impedance. Hence, less of the high frequencies are shorted out, until finally the switch reaches the open point and all frequencies will be reproduced.

Parts Required—One .05 mfd. Condenser (1); one .01 mfd. Condenser (2); one .00025 mfd. Condenser (3); one .5 meg. Resistor (4); one .2 meg. Resistor (5); one .1 meg. Resistor (6); one seven-Point Switch.

If it is desired to eliminate a greater proportion of the low frequencies, a tone control such as that shown in Figure 2 should be assembled. With the 100,000 ohm resistance in the circuit, the high frequencies will pass through the .1 mfd. condenser, but the low frequencies will be blocked to a great extent. With more and more of the resistance cut out of the circuit, all frequencies will avoid the fixed condenser and will pass through the shunted portion, so that with the resistance entirely out, the fixed condenser

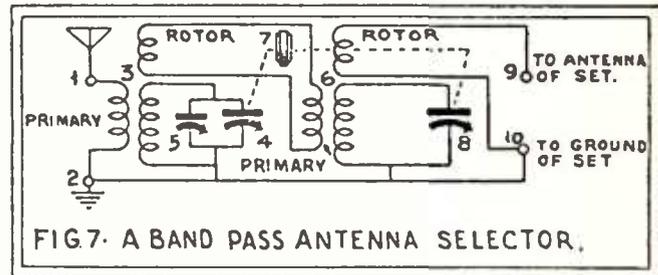


will have no action whatsoever. The .01 mfd. condenser may be switched into the circuit, if it is desired to eliminate a portion of the high frequencies.

Parts Required—One .1 mfd. By-Pass Condenser (1); one .01 mfd. Midget Condenser (3); one Electrad Switch (4); one Electrad Royalty Variable Resistance, type "B" (2).

A Band Pass Antenna Selector

The Band Pass Selector shown constitutes an extremely useful addition to the radio receiver which tunes broadly. The selector will give greatly increased selectivity. Two identical Silver-Marshall r.f. coils are used, tuned by .00035



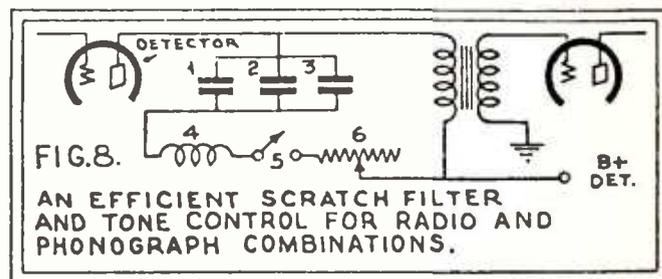
mfd. variable condensers. Both of these condensers are turned by the same drum dial. A small trimming condenser is included in the circuit to bring the two tuned circuits into exact resonance. Varying the positions of the coil rotors results in tight or loose coupling. Loose coupling gives great selectivity and it is possible to obtain 10 Kc. separation or any other conditions desired, by proper setting of the rotors.

Parts Required—Two Silver-Marshall Plug-in type R.F. Coils, No. 111A with coil sockets No. 515 (3, 6); one Silver-Marshall Midget Condenser, No. 340 (5); four Binding Posts (1, 2, 9, 10); two .00035 mfd. Silver-Marshall Variable Condensers, type 320-R (4, 8); one Silver-Marshall Drum Dial, 810 R (7).

* * *

An Efficient Scratch Filter

Those who have radio and phonograph combinations will be interested in the construction of a combination scratch filter and tone control. The circuit shown can be connected readily in the audio frequency amplifier and will be ex-



tremely useful in reducing surface noises from the records and also in eliminating other undesirable higher audio frequencies. In the radio receiver, the filter tends to modify the effects of static and to give a more mellow tone to the music reproduction. This device removes practically all scratch and static noises above 4900 cycles. It consists essentially of a Silver-Marshall r.f. scratch filter choke, an Electrad Royalty variable resistance and small Flechthem fixed condensers.

List of Parts Required—One Electrad Royalty Variable Resistance, type "H" (6); one .005 mfd. Flechthem Midget Condenser, type M-H (1); one .002 mfd. Flechthem Midget Condenser, type M-F (2); one .0005 mfd. Flechthem Midget Condenser, type M-D (3); one Silver-Marshall R. F. Choke, type 278 (4); one Electrad Switch; one Roll Corwico Braided Hook-up Wire.

(Continued on Page 43)

Directory of Western Stations

- KBPS**—Portland, Ore.—1420 Kc., 211.1 mtrs., 100 w.—Benson Polytechnic School.
- KDB**—Santa Barbara, Calif.—1550 Kc., 199.9 mtrs., 100 w.—Dwight Fandling, owner; Eddie Conners, Studio-Mgr.
- KDYL**—Salt Lake City, Utah—1290 Kc., 235.5 mtrs., 1000 w.—Intermountain Broadcasting Corp., S. S. Fox, Gen. Mgr.
- KECA**—Los Angeles, Calif.—1430 Kc., 209.7 mtrs., 1000 w. Tel. WE 0331. Earl C. Anthony, Inc., Carl Haverlin, Mgr.
- KELW**—Burbank, Calif.—780 Kc., 384.4 mtrs., 500 w.—Union Bank & Trust Co. Tel. 1603 and GR 3193.
- KEX**—Portland, Ore.—1180 Kc., 254.1 mtrs., 5000 w.—Western Brdcastg Co., William Norvell, Mgr. Tel. At 3111.
- KFBK**—Sacramento, Calif.—1310 Kc., 228.9 mtrs., 100 W.—James McClatchy Company.
- KFI**—Los Angeles, Calif.—640 Kc., 468.5 mtrs., 5000 w.—Earl C. Anthony, Inc., Carl Haverlin, Mgr. Tel. WE 0331.
- KFIO**—Spokane, Wash.—1120 Kc., 267.7 mtrs., 100 w. Spokane Broadcasting Company.
- KFJI**—Astoria, Ore.—1370 Kc., 318.8 mtrs., 100 w.—KFJI Broadcasters, Inc.
- KFOX**—Long Beach, Calif.—1250 Kc., 239.9 mtrs., 1000 w.—Nichols & Warriner, Inc., H. G. Nichols, Mgr. Tel. 672-81.
- KFJR**—Portland, Ore.—1300 Kc., 230.6 mtrs., 500 w.—Ashley C. Dixon and Son.
- KFQU**—Holy City, Calif.—1420 Kc., 211.1 mtrs., 100 w.—W. E. Riker, owner.
- KFPY**—Spokane, Wash.—1340 Kc., 223.7 mtrs., 1000 w.—Symons Broadcasting Company.
- KFRC**—San Francisco, Calif.—610 Kc., 491.5 mtrs., 1000 w.—Don Lee, Inc., Harrison Holliday, Mgr. Tel. Prospect 0100.
- KFSD**—San Diego, Calif.—600 Kc., 499.7 mtrs., 1000 w. Airfan Radio Corp., Leslie Adams, Mgr. Tel. Franklin 6353.
- KFSG**—Los Angeles, Calif.—1120 Kc., 267.7 mtrs., 500 w.—Echo Park Evan. Asso., Aimee McPherson, Pres. EX 1141.
- KFVD**—Culver City, Calif.—1000 Kc., 299.8 mtrs., 250 w.—Auburn-Fuller Co., J. W. Swallow, Mgr. Tel. Empire 1171.
- KFWB**—Hollywood, Calif.—950 Kc., 315.6 mtrs., 1000 w.—Warner Bros. Brdcastg Corp., Gerald King, Mgr. HO 0315.
- KFWI**—San Francisco, Calif.—930 Kc., 322.4 mtrs., 500 w.—Radio Entertainment, Inc., J. B. Geisen, Mgr. Franklin 0200.
- KFXM**—San Bernardino Calif.—1210 Kc., 247.8 mtrs., 100 w.—J. C. and E. W. Lee, owners. Tel. 4761.
- KGA**—Spokane, Wash.—1470 Kc., 204.1 mtrs., 5000 w.—Northwest Broadcasting System Inc. H. E. Studebaker, Mgr.
- KGB**—San Diego, Calif.—1330 Kc., 225.4 mtrs., 250 w.—Pickwick Broadcasting Corp. Tel. Franklin 61512.
- KGDM**—Stockton, Calif.—1100 Kc., 272.6 mtrs., 250 w.—E. F. Pepper.
- KGEF**—Los Angeles Calif.—1300 Kc., 230.6 mtrs., 1000 w.—Trinity Methodist Church. Bob Schuler, Pres. WE 8887.
- KGCC**—San Francisco, Calif.—1420 Kc., 211.1 mtrs., 100 w.—The Golden Gate Broadcasting Company.
- KGER**—Long Beach, Calif.—1360 Kc., 220.4 mtrs., 1000 w.—C. Merwyn Dohyans, owner; Bill Ray, Mgr. Tel. 632-75.
- KGfJ**—Los Angeles, Calif.—1200 Kc., 249.9 mtrs., 100 w.—Ben S. McGlashan, owner and manager. Tel. WE 7788.
- KGO**—San Francisco, Calif.—790 Kc., 379.5 mtrs., 7500 w.—National Brdcastg. Co., Inc. Tel. Sutter 1920.
- KGW**—Portland, Oregon—620 Kc., 483.6 mtrs., 1000 w.—The Morning Oregonian, Paul R. Heitmyer, Mgr.
- KHJ**—Los Angeles, Calif.—900 Kc., 333.1 mtrs., 1000 w.—Don Lee, Inc., Lewis A. Weiss, Mgr. Tel. VAndyke 7111.
- KHQ**—Spokane, Wash.—590 Kc., 508.2 mtrs., 2000 w.—Lonis Wasmer, Inc. Tel. Main 5383.
- KJBS**—San Francisco, Calif.—1070 Kc., 280.2 mtrs., 100 w.—Julius Brunton and Sons Co. Tel. Ordway 4148.
- KJR**—Seattle, Wash.—970 Kc., 309.1 mtrs., 5000 w.—Northwest Brdcastg Systems, Inc., T. F. Smart, Mgr. Main 2495.
- KLX**—Oakland, Calif.—880 Kc., 340.7 mtrs., 500 w.—The Tribune Publishing Company.
- KLS**—Oakland, Calif.—1140 Kc., 208.2 mtrs., 250 w.—Warner Brothers. Tel. Lakeside 6223.
- KMIC**—Inglewood, Calif.—1120 Kc., 267.7 mtrs., 500 w.—Dalton Inc., Monroe Manning, Mgr. Tel. EX 1331.
- KMPC**—Beverly Hills, Calif.—710 Kc., 422.3 mtrs., 500 w. Macmillan Petroleum Co., Glenn Rice, Mgr. CRestview 3101.
- KMO**—Tacoma, Wash. 1340 Kc., 223.1 mtrs., 500 w.—KMO, Inc., owner: Carl E. Hammond, Mgr. Main 4144.
- KMTR**—Hollywood, Calif.—570 Kc., 526 mtrs., 500 w. KMTR Radio Corp., V. G. Freitag, Mgr. Tel. Hollywood 3026.
- KNX**—Hollywood, Calif.—1050 Kc., 285.5 mtrs., 5000 w.—Western Broadcasting Co., Naylor Rogers, Mgr. Tel. HE 4101.
- KOA**—Denver, Colo.—830 Kc., 361.2 mtrs., 12,500 w. General Electric Co., Freeman H. Talbot, Mgr. Tel. York 5090.
- KOAC**—Corvallis, Ore. 550 Kc., 545.1 mtrs., 1000 w. Oregon State Agricultural College.
- KOIN**—Portland, Ore. 940 Kc., 319.0 mtrs., 1000 w. KOIN Inc. Tel. Atwater 4151.
- KOL**—Seattle, Wash.—1270 Kc., 236.1 mtrs., 1000 watts. Seattle Brdcastg. Corp., L. F. Van Schnek, Mgr. Main 2312.
- KOMO**—Seattle, Wash.—920 Kc., 325.9 mtrs., 1000 w.—Fisher's Blend Sta., Inc., O. D. Fisher, Pres. Tel. Elliot 5809.
- KOOS**—Marshfield, Ore.—1370 Kc., 318.8 mtrs., 100 w.—H. H. Haunseith, Inc.
- KORE**—Eugene, Ore.—1420 Kc., 211.1 mtrs., 100 w.—Eugene Broadcasting Station.
- KPCB**—Seattle, Wash.—650 Kc., 461.3 mtrs., 100 watts.—West Coast Broadcasting Co. Tel. Main 7997.
- KPO**—San Francisco—680 Kc., 440.9 mtrs., 5000 w.—Hale Bros. and The Chronicle, J. W. Laughlin, Mgr. Garfield 8300.
- KPPC**—Pasadena, Calif.—1210 Kc., 247.8 mtrs., 50 w. Pasadena Presbyterian Church. Tel. Terrace 1163.
- KPSN**—Pasadena, Calif.—1360 Kc., 220.4 mtrs., 1000 w.—Pasadena Star-News Publ. Co. Tel. Wakefield 3111.
- KQW**—San Jose, Calif.—1010 Kc., 296.6 mtrs., 500 w.—Calif. Farm Bureau, F. J. Hart, Mgr. Tel. Columbia 777.
- KRE**—Berkeley, Calif.—1370 Kc., 218.8 mtrs., 100 w.—First Congregational Church of Berkeley.
- KREG**—Santa Ana, Calif.—1500 Kc., 199.9 mtrs., 100 w.—Pacific-Western Broadcasting Federation, Ltd.
- KROW**—Oakland, Calif.—930 Kc., 322.4 mtrs., 1000 w.—Educational Brdcastg. Corp. Tel. Glencort 6774.
- KSMR**—Santa Maria, Calif.—1220 Kc., 249.9 mtrs., 100 w.—Santa Maria Valley R. R. Co.
- KSL**—Salt Lake City, Utah—1130 Kc., 265.3 mtrs., 5000 w.—Radio Serv. Corp. of Utah., E. Glade, Mgr. Wasatch 3901.
- KTAB**—San Francisco, Calif.—560 Kc., 535.4 mtrs., 1000 w.—Associated Brdcasters, Inc., Bob Roberts, Mgr. Garfield 4700.
- KTAR**—Phoenix, Arizona—620 Kc., 483.6 mtrs., 1000 w.—KTAR Brdcastg Corp., Richard O. Lewis, Mgr.
- KTBI**—Los Angeles, Calif.—1300 Kc., 230.6 mtrs., 1000 w.—Bible Institute of L. A., Christian M. Books, Dir. MA 1641.
- KTBR**—Portland, Ore.—1300 Kc., 230.6 mtrs., 500 w.—M. E. Brown, owner.
- KTM**—Los Angeles, Calif.—780 Kc., 384.4 mtrs., 1000 w.—Pickwick Brdcastg Corp., Glenhall Taylor, Mgr. Tel. EX 1341.
- KTW**—Seattle, Wash.—1270 Kc., 236.1 mtrs., 1000 w.—First Presbyterian Church of Seattle.
- KVI**—Tacoma, Wash.—760 Kc., 394.5 mtrs., 1000 w.—Puget Sound Brdcastg Co., Inc., E. M. Dorenbecker, Brdwy 42111.
- KVOS**—Bellingham, Wash.—1120 Kc., 267.7 mtrs., 100 w.—KVOS, Inc. owner.
- KWG**—Stockton, Calif. 1220 Kc., 249.9 mtrs., 100 w.—Portable Wireless Telephone Company, Inc.
- KWJJ**—Portland, Ore.—1060 Kc., 282.8 mtrs., 500 w.
- KWSC**—Pullman Wash.—1220 Kc., 245.8 mtrs., 2000 w.—State College of Washington.
- KXA**—Seattle, Washington—570 Kc., 526.0 mtrs., 500 w.
- KXL**—Portland, Ore.—1420 Kc., 211.1 mtrs., 100 w.—KXL Broadcasters.
- KYA**—San Francisco, Calif.—1230 Kc., 243.8 mtrs., 1000 w.—Pac. Brdcastg Corp., Lewis Lacey, Mgr. Prospect 3456.
- KZM**—Hayward, Calif.—1370 Kc., 218.8 mtrs., 100 w.—Universal Brdcastg Co., Leon A. Fry, Mgr. Tel. 1185.

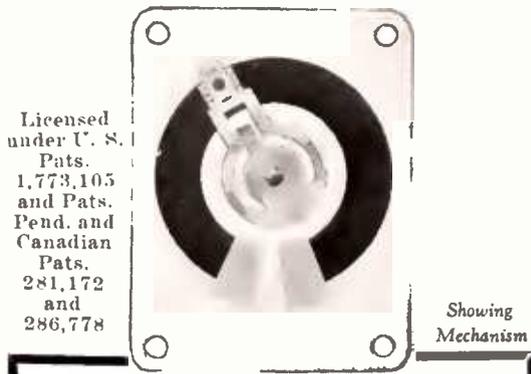
CBS Program—(Continued from Page 31)
 6:30 AM—Morning Moods, Nat Brusiloff and his Orchestra KDYL
 6:45 AM—Morning Moods KDYL
 7:00 AM—Ocean Spray Foods, "Cape Cod Dumplings" KVI KOL KFPY KHJ KFRC
 8:30 AM—Party House, "Only a Duchess" KDYL
 9:00 AM—Paul Tremaine and his Yoeng's Restaurant Orchestra, dance music KLZ KDYL KVI KOL KFPY KHJ KFRC
 9:30 AM—Columbia Revue KDYL
 11:00 AM—The Strollers, male quartet KLZ KVI KFPY KHJ KFRC
 11:30 AM—American School of the Air, "Music and Works" KLZ KDYL KVI KFRC
 12:00 Noon—Columbia Salon Orchestra, Emery Deutsch, director KLZ KDYL KVI
 12:30 PM—Pancho and his Orchestra, dance music KLZ KDYL KVI
 1:00 PM—Fighters of Fate KLZ KDYL KVI
 1:15 PM—Italian Idyl, Vincent Sorey and his Orchestra KLZ KDYL KVI KFRC
 1:30 PM—Columbia Artists' Recital KLZ KDYL KOL KFPY KFRC WORC KVI
 2:00 PM—Rhythm Kings, Nat Brusiloff and his Orchestra KLZ
 2:15 PM—Adventures in Words, Dr. Frank H. Vizatelly KDYL
 2:30 PM—Bert Lown and his Biltmore Orchestra, dance music KDYL KLZ
 3:00 PM—Harry Tucker and his Barclay Orchestra, concert music KDYL KOL KFPY KHJ KFRC
 3:30 PM—The Crockett Mountaineers, Hill-billy Numbers KFRC
 3:45 PM—The Vagabonds, Every Deutsch and his Orchestra KLZ KOL KFRC
 4:00 PM—Columbia Educational Features The Political Situation in Washington KFRC
 4:15 PM—Musical Aviators Orchestra, Tom Truesdale, director KFRC
 4:45 PM—The Early Book Worm, Alexander Woolcott KLZ KDYL KFRC
 5:45 PM—Premier Salad Dressers, Colin O'More, tenor and Premier Chef KLZ KDYL KVI KOL KFPY KOIN KHJ KFRC
 7:00 PM—Graybar's Mr. and Mrs. KLZ KDYL KVI KOL KFPY KOIN KHJ KFRC
 7:30 PM—Paramount Publix Radio Playhouse, Guest Screen Stars KLZ KDYL KVI KOL KFPY KOIN KHJ KFRC KNX
 8:00 PM—Emergency Employment Committee Speaker KLZ KOL
 8:00 PM—Johns Manville Program KHJ KOIN KFRC KOL KFPY
 8:30 PM—Mickel Alpert and his Orchestra, dance music KLZ KDYL
WEDNESDAY
 6:00 AM—Something for Everyone, music, news, humor, poetry KDYL KHJ
 6:30 AM—Morning Moods, Vincent Sorey and his Orchestra KDYL
 8:00 AM—Five Minute Meals, "Cold Platters," Ida Bailey Allen, Radio Home Makers KLZ KVI KOL KFPY KOIN KHJ KFRC
 9:00 AM—Paul Tremaine and his Yoeng's Restaurant Orchestra, dance music KDYL KOL KFRC
 9:30 AM—Columbia Revue, E m e r y Deutsch's Orchestra with Harriet Lee KLZ
 10:30 AM—Pickle Packers Program KVI KOL KHJ KFRC
 11:00 AM—Columbia Little Symphony and Frank Ruhf, tenor KLZ KVI KOL KFPY CFRB
 11:30 AM—American School of the Air, "Robinson Crusoe" KLZ KDYL KVI KOL KOIN KHJ KFRC
 12:00 Noon—Columbia Salon Orchestra, Emery Deutsch, director KLZ KDYL KVI
 12:30 PM—Syncopated Silhouettes, Nat Brusiloff and his Orchestra KLZ KDYL KVI
 1:00 PM—Musical Album, Columbia Salon Orchestra KLZ KDYL KVI KOL KFPY CFRB
 2:00 PM—Asbury Park Casino Orchestra, dance music KLZ KDYL
 3:00 PM—"Bill Schudt's Going to Press," special program KLZ KDYL KOL

3:15 PM—MacDougall Restaurant Orchestra, dance music KDYL KOL KFRC
 3:45 PM—MacDougall Restaurant Orchestra, dance music KLZ KOL KFRC
 4:00 PM—The Crockett Mountaineers, Hill-billy Numbers KVI KOL KFRC
 4:15 PM—Rhythm Ramblers, Nat Brusiloff and his Orchestra KVI KFPY KFRC
 5:15 PM—Burbig's Syncopated History KDYL KFRC
 5:30 PM—Toscha Seidel and Concert Orchestra KDYL KFRC
 6:00 PM—Gold Medal Fast Freight KLZ KDYL KOL KOIN KHJ KFRC KFBK KMJ
 7:00 PM—The Caribbeans Spanish Orchestra WORC
 8:00 PM—MJB Coffee Program, George Olsen's music KLZ KDYL KVI KOL KFPY KOIN KHJ KFRC
 8:30 PM—California Melodies, orchestra, Biltmore Trio, soloists, and guest stars KLZ KDYL
THURSDAY
 9:00 AM—Paul Tremaine and his Yoeng's Restaurant Orchestra KHJ KFRC KLJ KDYL KOL

10:00 AM—Ocean Spray Foods KVI KOL KFPY KHJ KFRC
 11:00 AM—Columbia Artists Recital, Ben Alley, tenor, and Marie Garard, soprano KVI KFPY KFRC
 11:30 AM—American School of the Air, "Schubert" KLZ KDYL KVI KHJ KFRC
 12:00 Noon—Columbia Salon Orchestra, Emery Deutsch, director KLZ KDYL KVI KOL
 12:30 PM—Ann Leaf at the organ KLZ KDYL KVI
 1:00 PM—Asbury Park Casino Orchestra, dance music KLZ KDYL KVI KFRC
 1:30 PM—The Crockett Mountaineers, Hill-billy Numbers KLZ KDYL KVI KOL KFPY KFRC
 2:00 PM—WSPD Commodores, dance music KLZ KDYL
 2:45 PM—Bert Lown and his Biltmore Orchestra KLZ KDYL
 3:00 PM—Columbia Educational Features KLZ KVI KOL KFRC
 3:15 PM—Ozzie Nelson and his Barbizon Plaza Orchestra, dance music KLZ KDYL KFRC
 3:45 PM—Ozzie Nelson and his Barbizon Plaza Orchestra, dance music KLZ KOL KFRC
 7:00 PM—The Lutheran Hour—Dr. Walter A. Maier, large choir and organist KLZ KDYL KOL KOIN KHJ KFRC
 7:30 PM—Boston Entertains KLZ KDYL
 8:00 PM—Ben Bernie and his Orchestra
 8:30 PM—Ted Fiorito and His Orchestra from St. Paul, dance music KLZ KOL
 dance music KLZ KOL
 9:00 PM—Folgeria comic opera of the air KDYL KVI KOL KFPY KOIN KHJ KFRC

FRIDAY

11:00 AM—Columbia Artists Recital KLZ KVI KFRC
 11:30 AM—American School of the Air KLZ KDYL KVI KOL KOIN KHJ KFRC
 12:00 Noon—U. S. Marine Band Concert KLZ KDYL KVI KOL
 12:45 PM—Columbia Educational Features "Cold Light" KLZ KDYL KVI
 1:00 PM—Curtis Institute of Music KLZ KDYL KVI KOL KFRC
 1:45 PM—Thirty Minute Men, Nat Brusiloff and his orchestra KDYL KVI KFRC KLZ
 2:00 PM—Light Opera Gems KLZ KDYL
 2:45 PM—Ebony Twins, piano duo KDYL
 3:00 PM—MacDougall Restaurant Orchestra, dance music KLZ KDYL KOL KHJ KFRC
 3:45 PM—Howard's Lanin's St. Moritz Orchestra KLZ KOL KFPY KFRC
 4:00 PM—The Crockett Mountaineers, Hill-billy numbers played and sung by family of Six Crocketts KVI KOL KFRC
 4:15 PM—Ozzie Nelson and his Barbizon Plaza Orchestra, dance music KVI KFRC
 4:45 PM—The Vagabonds, E m e r y Deutsch and his Orchestra KFRC
 5:15 PM—Grand Opera Miniatures KDYL KFPY KOIN KHJ KFRC
 7:00 PM—The Radio Follies, Norman Brokenshire KDYL KVI KOL KFPY KOIN KHJ KFRC
 7:30 PM—Wrigley Football Program, "Prediction Interviews" KLZ KDYL KVI KOL KOIN KHJ KFRC
 7:45 PM—Rhythm Kings, Freddie Rich and his Orchestra KLZ KDYL KOL
 8:00 PM—Musical Aviators Orchestra, dance music KLZ KDYL KOL
 8:30 PM—Romanelli and his King Edward Orchestra from Toronto, dance music KLZ KDYL
SATURDAY
 6:00 AM—Something for Everyone, music, news, humor, poetry, etc KDYL
 6:30 AM—Morning Moods, Vincent Sorey, director KDYL
 7:30 AM—New World Salon Orchestra, Vincent Sorey, director KDYL KOIN
 8:00 AM—New York Philharmonic Symphony Society Children Concert, Ernest Schelling, conductor KDYL KVI KOL KHJ KFRC
 10:45 AM—Football game KDYL KVI KHJ KFRC



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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 vitreous 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.

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 Please send circular on Super-Tonatrol.
 Check here for Loftin-White Circulars.
 Name.....
 Address.....

- 1:30 PM—Spanish Serenade, Vincent Sorey and his Orchestra KLZ KDYL KVI KOL
- 2:00 PM—Warwick Hotel Orchestra, dance music KLZ KDYL KVI KOL
- 2:45 PM—Columbia Educational Features, Dr. Thatcher Clark's French Lesson KLZ KVI KOL
- 3:00 PM—Tom, Dick and Harry KLZ KDYL KVI KOL
- 3:15 PM—Ozzie Nelson and his Barbizon Plaza Orchestra KLZ KDYL KVI KOL
- 3:45 PM—Ozzie Nelson and his Barbizon Plaza Orchestra, dance music KLZ KVI KOL
- 4:00 PM—Football scores KVI KOL
- 4:05 PM—The Crockett Mountaineers, Hill-billy numbers played and sung by family of Six Crocketts KVI KOL
- 5:15 PM—Dixie Echoes KFHC KDYL KFRC
- 5:30 PM—Dancing Yesterdays, Freddie Rich and his Orchestra KLZ KDYL KHJ KFRC
- 7:00 PM—Hank Simmons' Show Boat KLZ KDYL KHJ KFRC KOL
- 8:00 PM—Jack Denny and his Mt. Royal Orchestra from Montreal, dance music KLZ KDYL KOL
- 8:30—Guy Lombardo and his Royal Canadians, dance music KLZ KOL

United Broadcasting Co., Limited

SUNDAY

- 8:00 AM—Bill Sharples and His Gang KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 7:00 PM—Sunday Echoes (Liberious Hauptman and orchestra) KGB KFWB - KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Evensong (inspirational music) KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 8:15 PM—Staff Soloists' Recital KGB KFWB - KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 8:30 PM—Alfred Newman and his Hotel Roosevelt Orchestra KGB KFWB - KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 9:00 PM—O'er Land and Sea (music from all lands) KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 9:30 PM—Traumerei (orchestra & vocalists) KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS

MONDAY

- 8:00 AM—Bill Sharples and His Gang KXA KVOS
- 7:00 PM—Composer's Hour (Liberious Hauptman's Orchestra) KGB KFWB - KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Lyre and Mask KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 8:00 PM—International Adventures KGB KFWB - KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 8:30 PM—Hour of Musical Gems KGB KFWB - KTM (alternating) KTAB KORE KXL KMED KXA KVOS
- 9:30 PM—Screen Snapshots KGB KFWB-KTM (alternating) KTAB KORE KXL KMED KXA KVOS

TUESDAY

- 8:00 AM—Bill Sharples and His Gang KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Novelty (string trio) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS

- 8:00 PM—Dramatic Program (G. Donald Gray) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 8:30 PM—Phantoms of Broadway (studio orchestra) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 9:30 PM—Land of Dreams (orchestra and vocalists) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS

WEDNESDAY

- 8:00 AM—Bill Sharples and His Gang KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:00 PM—Opera Sketches (orchestra) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Musical Previews KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 8:00 PM—Ted Dahl and His Orchestra (originating at the studios of KFWB) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 9:00 PM—On Parade (Orchestra and soloist) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 9:30 PM—Dancing Strings KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS

THURSDAY

- 8:00 AM—Bill Sharples and His Gang KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:00 PM—Boris Kramarenko's Russian Orchestra and Tenor Soloist KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Artists' Recital (staff vocalists) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 8:00 PM—Detective Stories (Edward Murphy) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 8:30 PM—Alfred Newman and His Hotel Roosevelt Orchestra, Hollywood KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 9:00 PM—Modernistic (program originating at KFWB, Hollywood) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 9:30 PM—Radio Periscope (light comedy) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS

FRIDAY

- 8:00 AM—Bill Sharples and His Gang KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:00 PM—Children's Hour (orchestra and child features) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Novelty Program KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 8:00 PM—Venetian (Liberious Hauptman and orchestra) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 8:30 PM—United Popular Ensemble KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 9:00 PM—Musical Paintings KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 9:30 PM—Sleepy Time (small orchestra and vocalists) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS

SATURDAY

- 8:00 AM—Bill Sharples and His Gang KGB KFWB - KTM KTAB KORE KMED KXA KVOS
- 7:00 PM—Reflections (Liberious Hauptman and small orchestra)

- KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:30 PM—Daily News Digest KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 7:45 PM—Dramatic Sketch (G. Donald Gray) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS
- 8:00 PM—Footlights (Instrumental and vocal) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 8:30 PM—Musical Memories (orchestra) KGB KFWB - KTM KTAB KORE KXL KMED KXA KVOS
- 9:00 PM—Weekly Review (staff orchestra and vocalists) KGB KFWB-KTM KTAB KORE KXL KMED KXA KVOS



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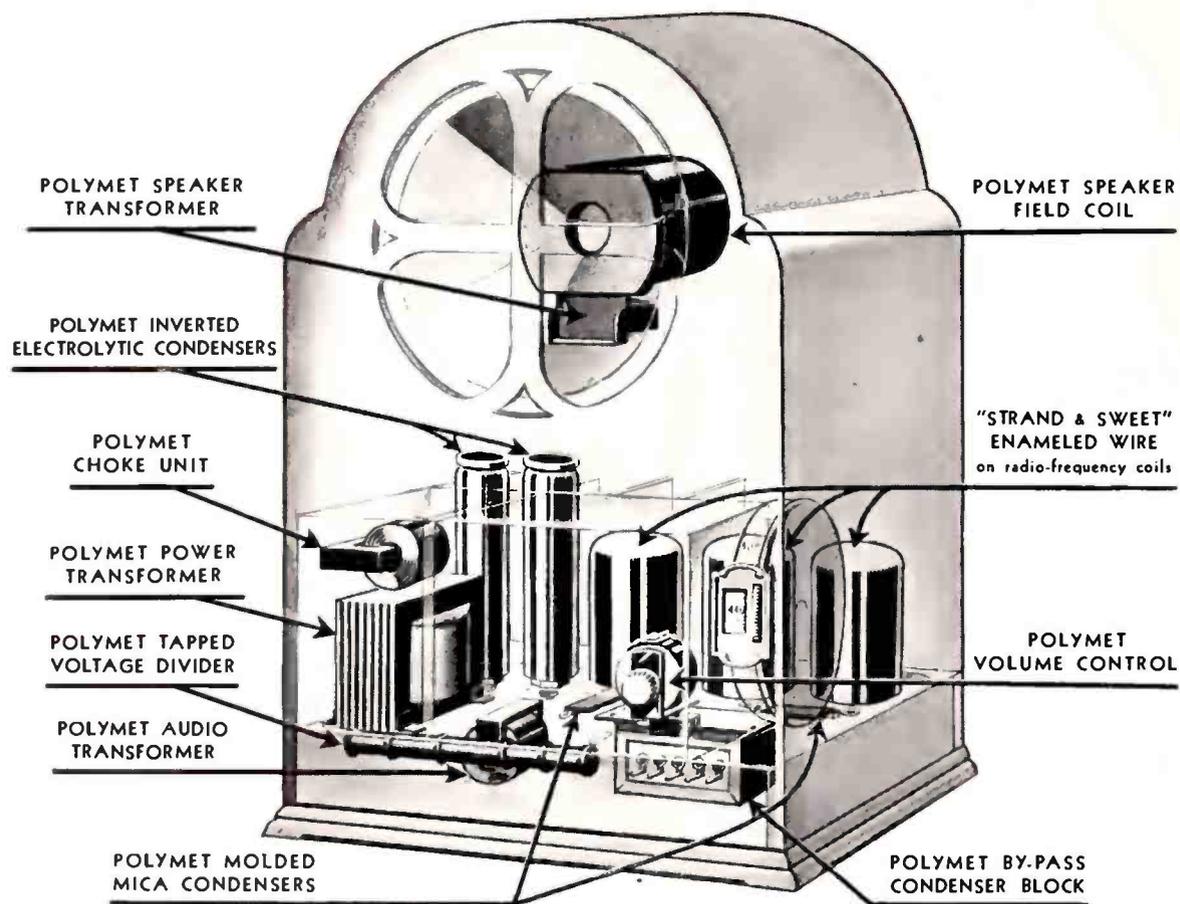
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SELLS BRUNSWICK

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Out in Front . . . As Usual Midget Sets Powered by **POLYMET**



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.

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Polymet Manufacturing Corporation

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The NEW DEMAND in RADIO

LIFE-LIKE TONE

Read How You Can Have it in Your Present Radio Set

Clear, realistic, satisfying music! That's the kind of reproduction you hoped for when you bought your radio set—that's radio at its best.

Are you getting that kind of reception today? If not, it's time you switched to Arcturus Blue Tubes, the tubes with the *Life-Like Tone*.

With Arcturus Tubes in every socket you'll get more pleasure from every program. These tubes bring in programs in 7 seconds; they give new pep to your old set. Try them; judge their superior performance yourself. Your dealer has Arcturus Tubes, or can easily get them for you. See him today.



ARCTURUS

TUBES for every RADIO

The TUBE with the LIFE-LIKE TONE



Christmas Buying Made Easy—

Your Principal Christmas Gift

BRUNSWICK RADIO

A gift the entire family will enjoy. Provides a world of entertainment the year 'round. A receiver that includes all the new features in a cabinet that is a joy forever. A gift decidedly worth while.

Model 15
Screen-grid radio receiver with completely Armored Chassis, Uni-Selector, Rigid Tuning Scale, and Tone Control



Model 15
Cabinet of selected hutt Walnut 43 inches high, 23 3/4 inches wide, and 16 1/2 inches deep. Electrically operated throughout. Price, \$139.50 less tubes

The BRUNSWICK CHRISTMAS GIFT CLUB provides a way

A small deposit made weekly provides the down payment on this super-entertainer at Christmas. Balance on terms to suit your convenience.



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in your community
SELLS BRUNSWICK

WESTERN RADIO, Inc. . . . Wholesale Distributor

Rockford Radio

The newest in midget sets

ROCKFORD ARISTOCRAT

\$59.50

Complete
with
Tubes



ARISTOCRAT FEATURES

Three screen-grid chassis. Tone Control.
Magnavox Speaker. Phonograph Input Jacks.
Beautiful cabinet of select butt walnut, striped walnut and
satinwood veneer.
Truly the Aristocrat of midget sets.

ROCKFORD JUNIOR



\$39.50

Complete
with
Tubes

JUNIOR FEATURES

Three screen-grid chassis. Lansing Speaker.
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Attractive walnut finish cabinet with satinwood overlay.
Biggest value ever offered in midget sets.

Distributor

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TUBES will
deliver the most
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maximum efficiency,
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Used as standard
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radio sets including
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1145 Wall St.

Los Angeles

ON RADIO ROW

The Office Boy Sez:

When Dr. Lee De Forest got a brain storm and decided to strain the electrons in the valve instead of letting them run wild, he started something that has effected the entire world. The old valve wasn't so hot but with the addition of a little piece of screen placed between the filament and the plate the two element valve became a three element tube and its usefulness began.

How versatile is the little radio tube! A Chinaman speaks into the microphone in Canton and several thousand miles away out of the loudspeaker comes a lot of Chinese words.

This tube's twin brother placed in a transmitter in Tokio is passing out into the ether an earful of that weird Japanese music so that the DX fans of California can brag to their friends that they heard a Japanese program last night.

Yes, sir, the little improved valve is some linguist. It carries the President's message to the people of America, the propoganda of the Russian Communists to all who want to listen, the mighty utterances of that modern Caesar, Mussolini, and the snave speeches of the French diplomats.

Dr. De Forest's invention has done as much or more to change the habits of the people than any other invention brought out in the last twenty-five years. Because of the advent of the tube these three men were drawn to radio and are now very successful in their chosen branches of this great industry.



Naylor Rogers the canny Scotch-Canadian one of the few who have ever made a broadcasting station pay cash dividends.

Way back in the far, dim past, Naylor was a specialist in classified newspaper advertising and it is quite likely that the training he received in this work fitted him to become the exceptionally brilliant station manager that he is today.

Starting out with a little 1/2 kw. transmitter, Naylor Rogers made it pay enough so that the bosses could buy themselves a 5 kw. station and then Naylor set to work with true Scotch tenacity to acquire

a 50 kw. transmitter, which is now just about to be installed, the ground having been ceremoniously broken and what-not. Whither now, Naylor, will your ambition carry you? It is rumored that there is to be a million watt station, and perhaps that's what he has cast his eye upon. Here's How to the "Mighty little man of KNX."

—o—

Ted Bowles is a mighty busy man, for he takes care of the radio departments of a hundred and fifty or more stores. Most men think, and rightly, that they have a real job on their hands if they take care of the radio section of one store, so you can see what a tremendous task has this genial pipe smoker.

Ted is an inveterate pipe smoker, but he has the grace to change pipes frequently enough so that no one of them will get so odoriferous that it will run you out of the room. This is a marked difference

from some of the other members of our good industry who haven't changed their pipes for a decade or more.

A miracle happened to Ted about two years ago. He was thin, anemic looking and was not enjoying good health. He took a trip to Chicago to the R.M.A. convention. Something happened. No one seems to know what, and Ted will not tell, but immediately upon returning he showed a marked increase in weight, the color came back to his face, his cheeks filled out, and today he may be seen dancing gay jigs about town. What's it all about, Ted? There are several of the thin boys who would like to follow your plan and Ye Editor, along with several of his 200-pound cohorts, would like to reverse the process and take off some avoirdupois.



The radio champion of the Great Southwest—"the fightenest fighter that ever fought a fight." Nick's pugnacity might be caused by a little Tartar blood in him, or possibly because he is a Zenith dealer, but we are inclined to believe that it is just a natural aggressive spirit within him. This aggressiveness of Nick's has caused him to go a long way in his chosen industry, so we should laud rather than disparage his fighting capacity.

You will probably never see George Nicholson in this costume, but this is the way we visualized him when we last saw him in action.

—o—

OUR NEW PHONE NUMBER IS Westmore 3024
ADDRESS: 314 E. 12th STREET

RADIO GOINGS ON ABOUT TOWN

The different branches of the Radio and Music Trades Association of Southern California held meetings last month and selected their representatives to the board of directors.

The new directors for 1930-31 are: Jobbers—Harry A. Ungar and Fred Prentice; Music—E. A. Geissler and E. Palmer Tucker; Manufacturers' Agents—R. J. McNeely and Charles Weinberg; Radio Retailers—Mort Stuart and Frank W. Thomas; Broadcasters—Lewis Allen Weiss and Gerald L. King.

Most of these men have been indefatigable workers in the Trades Association. They are thoroughly familiar with the activities and are going into their new work with great enthusiasm. We wish them all the luck in the world for the directors carry a tremendous burden on their shoulders.

* * *

The Collins-Lane Company, Southern California distributors for Bosch receivers, who were just appointed in this capacity during this season, are making headway steadily in their dealer organization.



Mr. Lane (left), Mgr. of the company, states that Bosch is now being retailed by most of the large music and radio merchants in Los Angeles and Southern California and that they have been able to sell an unusually large volume of sets during this last season in spite of the general conditions.

Mr. Collins (right), head of the company, is very pleased with the progress made so far and is looking forward to a bigger turn-over next year.

* * *

The Davison-Haynes Manufacturing Company of Los Angeles are now established in their new factory at 721 Mateo street. The factory is equipped with the latest machinery and is capable of a production schedule of 2,000 sets per day.

Mr. Lyon, the production engineer, states that they have some new ideas about midget receivers in the process of development and that these new developments will continue to keep them in the front ranks as radio manufacturers.



Frank Davison just returned from the East a couple of weeks ago after making a complete survey of the Eastern and Middle Western markets and he reports that the Midgets are just coming into their own in these territories and they are looking forward to a greater distribution in this territory during the coming season.

Charles Walter is the Southern California representative for the company. He has just appointed several large accounts which have added considerably to the production schedule. Robert Haynes, head of the company, is now on a trip North and will visit all the principal cities in the West.

* * *

A. B. Ayers, general sales manager, and R. U. Clark, sales engineer, of the Sprague Specialties Company, spent the first ten days of November in Los Angeles visiting the general trade and set manufacturers with Dave Marshank, their Southern California representative.

Mr. Ayers reports that due to the activity of the East-



ern manufacturers and especially the Los Angeles Midget manufacturers, they have had to double their force in order to supply the demand for their products. He believes that the radio industry has passed over the hard spots and can now look forward to another era of prosperity.

Mr. Eby* Remarks:—

I have been asked by our mutual friend, Cloyd Marshall, Jr., editor of this magazine, not only to give my impressions of the U.S.A. from the air, enroute here from Philadelphia, but to give my impression of your rapidly growing city, your industries and other subjects of interest. I first wish to discuss my airplane trip from the East.

As this was the longest airplane trip I had ever taken and, particularly as it was the first time I had ever seen the Western states from the air, I can truthfully say the trip was the most thrilling and most picturesque, as well as educational, I had ever taken.



Wm. Hitt Hugh H. Eby

Having used three different makes of planes en route here, it is quite easy to understand why the western part of the U.S.A. and, particularly California, has become so "air-minded" in recent years. The planes used in the East or east of Kansas, known as the Tri-Motored Ford planes, can not compare with the Fokker F10 and the Fokker F32 planes used on the West Coast. However, I have been advised that the Western Air Service contemplates extending the service of their F32 plane, or 32-passenger type, and I, for one, will hail with keen delight the day that this service is extended to the Eastern Coast. I wish to take this opportunity to pay a deserved tribute to the officials of the Western Air Service for their fore-sightedness in not only providing unusual comforts for their passengers in the way of spacious cabins and comfortable seats, but for the added service in furnishing a courier for each plane. Not only does the courier supply the passengers with meals or any other attention that may be needed, but it is extremely interesting to have the various points of interest called to one's attention when passing over a city or a historical spot and be given the history concerning it. This service, I understand, is not extended beyond Kansas City and, in my estimation, it is a sad mistake. I, therefore, can not too strongly compliment the Western Air Service on their policies, as well as their equipment, and the mere fact that I expect to return East over their routes is clear indication that I really mean what I have said about their service.

* President H. H. Eby Mfg. Co.

It is surely a real privilege to visit Los Angeles again. The hospitality and unusual courtesies that have been extended me have not only been sincerely appreciated, but I shall ever be mindful of them and will strive to earn and deserve their continuance in the future.

It was later my privilege to attend a luncheon of the famous Pot and Kettle Club, an association comprised of hardware and household furnishing organizations. The aims and ideals of this club not only impressed me, but touched my heart, and I wish to personally thank my hard-hitting local representative, Bill Hitt, for the opportunity extended me to attend both the Breakfast and Pot and Kettle Clubs.

As much as I dislike to talk shop, I feel I would not be playing square with my countless friends here if I failed to make some mention of my observations of your local situation. Due to the fact that your city has grown so rapidly in recent years and that transportation, no doubt, enters considerably into the cost of all radio sets sold here, it is easy to see and understand why the new Midget set has taken so well. From the numerous calls that I have made, I have estimated that approximately three thousand of these sets are being made in Los Angeles daily and, as many of the local manufacturers are far-sighted and are extending their markets, I predict that this production will continue in favor for some time.

I wish to confirm the statements I have made to numerous manufacturers—I expect the Midget set to be greatly improved during the next three months. I predict the Super-Heterodyne Midget will soon be produced by all of the local leaders and that new designs of cabinets will also follow.

* * *

Collins-Lane Appointed Leonard Distributors

Announcement of the new Leonard Electric refrigerator to sell at \$189.50 was the outstanding news of the month to the radio trade. George Lane, of Collins-Lane Company, Bosch Radio distributors, announced that his company has been named Southern California representatives for the new refrigerator.

"The entrance of Leonard into the electrical refrigeration field here is of tremendous interest to the radio trade," said Lane. "It means that an established, successful, and experienced manufacturer is offering electrical refrigeration at a competitive price to supplement the radio business at just the time of year when radio dealers most need added volume."

The Leonard Electric line will consist of two models, one a five and the other a seven foot box. In actuality, these boxes are larger than the designation here, Lane said. They feature more shelf area, Leonard approved insulation, visible chillometer for certified refrigeration, visible defroster, broom room underneath for easy sweeping, satin chrome hardware, rubber ice cube trays, all steel box with porcelain linings.

Financing will be handled by a Los Angeles office of the factory finance company, making budget plan selling both easy and economical.

"The new Leonard brings vibrationless quiet to moderate priced refrigeration," said Lane. "It has everything that the public wants in electrical refrigeration, including a sensible price. Although we have barely had time to make our opening announcement we are already flooded with requests from radio dealers for the details of our set-up. We have already sold several carloads, and it looks as though the radio trade had just been waiting for electrical refrigeration at a moderate price and with the name of a proven and seasoned manufacturer upon it."

AN ODE TO THE JALLOPE

By William Marshank

*There's a land 'way out there—have you seen it?
Where the mountains kiss the sea,
And the climate you can't beat it,
Just the place for you and me.*

*There's a land 'way out there—have you seen it?
It's called the Golden West,
Where a ten dollar bill will purchase
A coat, two pair of pants and a vest.*



David and William Marshank

*On the shores of the mighty Pacific,
Where the waves come rolling in,
The tune of a million midgets
Helps to swell the din.*

*It's the land of sunshine and poppies
That grow wild in the fields,
It's the home of Radio Jallopies,
A million per day it yields.*

*It's the land of the Tiffany model,
Radiette and the Mission Bell,
And up on a hill not far from a still,
Stands the mighty Jackson Bell.*

*It's a land of great opportunity,
And a dollar a long way can go, if you spend it best
And do like the rest
And manufacture radio.*

*You don't have to get nervous and fidget
And worry about supply and demand,*

*Just manufacture a midget
And everything will be grand.*

*Just get yourself some wire,
A coil, a condensor or two,
And put them all together—
That's all you have to do.*

*There's a land 'way out there—have you seen it?
It calls to each son of man,
Where is the beginning,
And where will it end?*

*Midgets of every description,
Some white, some black, some red,
And when they all broadcast,
It's enough to wake the dead.*

*They vie with each other for honors,
To reach the production peak,
It's no place for the weakling,
The halt, the lame or the meek.*

*The pace that they set will get you,
And crush you through and through,
For the law of the land of the
Midget can show you what to do.*

*So don't you worry and fidget
If you haven't any dough,
Just go to the land of the midget
And manufacture radio.*

*There's a land 'way out there—have you seen it?
It's the cussedest land that I know,
Where they build the elusive Jallope
In the name of radio.*

* * *

Philco-Ensenada Trip

Ensenada, in Old Mexico, was the setting for one of the most unique radio conventions ever held in the southwest.

Culminating a ten weeks sales contest, about three hundred Philco radio dealers and salesmen, factory officials and radio newspapermen, on the week-end of November 21st and 22nd, were guests of the H. R. Curtiss Company, Philco distributors for Southern California. They gathered aboard the steamship "Ruth Alexander" for a cruise to Ensenada on a three-day convention, providing an opportunity to hold the regular dealer meeting and allowing time for pleasure. Needless to say the trip was a huge success. Claude Foote, Los Angeles manager, presented the sale contest prizes.

SUNSET AERIAL and GROUND**For Greater Pick-up and Selectivity***Ideal for DX Reception*

The Selective Aerial	\$5.00
The Positive Ground	\$2.25
The Super-Ground	\$3.00

SUNSET MFG. CO.

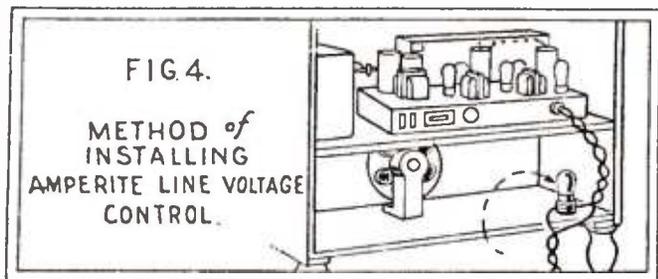
1114 N. Sycamore

HE 4941

FOR THE SERVICE MAN

Automatic Voltage Control

Perhaps the most important improvement ever added to the radio receiver to make it truly modern, is the automatic line voltage control. It has been proved conclusively that under-voltage causes fading, diminished volume, loss of power and sensitivity and generally poor reception, whereas over-voltage results in tube burn-outs, tone distortion and blasting, power pack break-downs, tube noises and lack of selectivity. In order for the set to operate properly, the a.c. line voltage should be maintained within 5 volts plus or minus of the rated voltage. This is exactly the range maintained automatically by the Amperite line voltage regulator, irrespective of the variations of line voltage. Amperite can be installed readily in any standard radio receiver. To in-

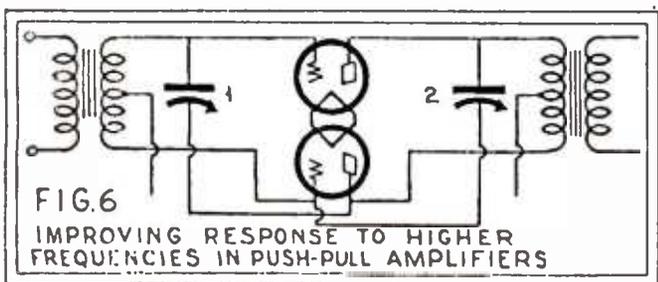


stall, it is simply necessary to cut one lead of the power supply line or cable at any place between the set and the house socket plug. The two cut ends are connected to the terminals of an Amperite adapter socket, or else an ordinary UX-type socket may be used, making connections to two opposite terminals and leaving the remaining terminals blank. The adapter or socket may be mounted at any convenient point, as shown. It is then merely necessary to insert the proper Amperite line voltage control tube and the receiver is ready for operation.

* * *

Improving High Frequency Response

In certain commercial receivers, the response to higher audio frequencies is noticeably deficient. Especially in push-pull arrangements, this defect may be remedied by means of a simple expedient, involving the addition of only two extra midget variable condensers. These are connected as illustrated. Many interesting effects are obtainable by varying the settings of the two condensers. Care should be observed in handling the condensers to avoid the possibility of receiv-



ing a shock from the high plate voltage. The principle involved in the improvement of the response range consists of nullifying the internal capacities of the tubes, thus increasing the response to higher audio frequencies. The improved results are well worth while, and give support to the contention that the use of neutralizing a.f. amplifiers has not been given the consideration it deserves.

Parts Required—Two Silver-Marshall Midget Condensers, type 340 (1, 2).

Antenna and Ground Requirements

All radio dealers and service men should be familiar with the latest wiring requirements of the National Electrical Code pertaining to radio receiver installations.

The antenna wire must not be less than No. 14. The lead-in from antenna to building must also be not less than No. 14 if of copper, and not less than No. 17 if copper-clad steel. The lead-in conductor from the point where it enters the building to the set must have rubber-covered insulation. A lead-in strip, if used, must have approved insulation. Ground wire must be not smaller than No. 14 copper wire.

Additional provisions are as follows:

Antennas outside of buildings must be kept well away from all light or power circuits of more than 600 volts and from railway, trolley or feeder wires so as to avoid possibility of accidental contact. When placed in proximity to light or power wires of less than 600 volts or signal wires, antenna must be constructed and installed durably and located with enough clearance to prevent contact with such wires either by sagging or swinging. Splices and joints in the antenna span must be soldered, unless approved splicing device is used. Light socket antenna, if used, must be an approved device.

Lead-In Conductors from the antenna to the first building attachment shall conform to the requirements for similarly located antennas. Lead-in conductors from the first building attachment to the building entrance shall be installed and kept so that they cannot swing closer to open supply conductors than 2 feet in case supply wires carry voltages up to 600 volts, or 10 feet where supply wires carry over 600 volts. Where all conductors involved are supported so as to insure a permanent separation and supply wires do not exceed 150 volts to ground, clearance may be reduced to not less than 4 inches.

Lightning Arrester must be properly connected, if outside of building as near as possible to point of entrance—if inside building at some point between entrance and set which is convenient to a ground. Must not be placed in vicinity of ignitable stuff or exposed to inflammable gases or dust or flyings of combustible materials. Fuses, if used, must not be placed in the circuit from the antenna through the arrester to the ground.

Ground Connector may be made to a cold water pipe where this is available, is in service and is connected to the street mains. Ground connection may be made to a galvanized iron pipe or rod driven into permanently damp earth. Gas piping must not be used for the ground. Grounding conductor may be run either inside or outside of building. If inside, wires shall be secured in a workmanlike manner and must not come nearer than 2 inches to an electric light or power wire not in conduit, unless separated by a continuous, firmly fixed non-conductor, such as porcelain tubes or flexible tubing.

Storage battery circuits having more than 20 ampere-hours' capacity must be protected by a fuse or circuit breaker rated at not more than 15 amperes. "B" storage battery circuits must be properly protected by a fuse or circuit breaker rated at not more than 1 ampere in the negative lead. Fuses or circuit breakers shall be located not more than 18 inches along the wire from the battery terminal.

Gratitude Expressed

The following letter has been received by Major Lawrence Mott from the Izaak Walton League of America in appreciation of his strenuous efforts in behalf of conservation of fish and game:

Izaak Walton League
of America, Inc.

Dear Major Mott:

The Izaak Walton League of America is very much gratified to learn that radio stations KHJ, KNX, KMPC, KFVD, KTM, KGER, KFVB and KGFJ, have all so generously given their valuable time on the air in the cause of conservation and especially in support of the proposed constitutional amendment to put California's conservation work on a more firm footing.

We will very much appreciate it if you will express personally to the managers of these stations, our sincere appreciation and thanks for their generosity and cooperation. This is the kind of public spirited service that makes life worth while.

We want to again congratulate you upon the wonderful work you are doing in behalf of the cause in which we are all so vitally interested. Keep up the good work and rest assured that you will always have our best wishes.

Very cordially yours,

M. K. Reckord, General Manager.

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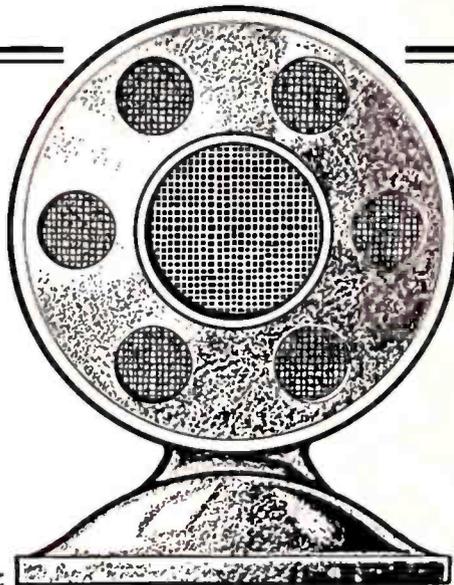
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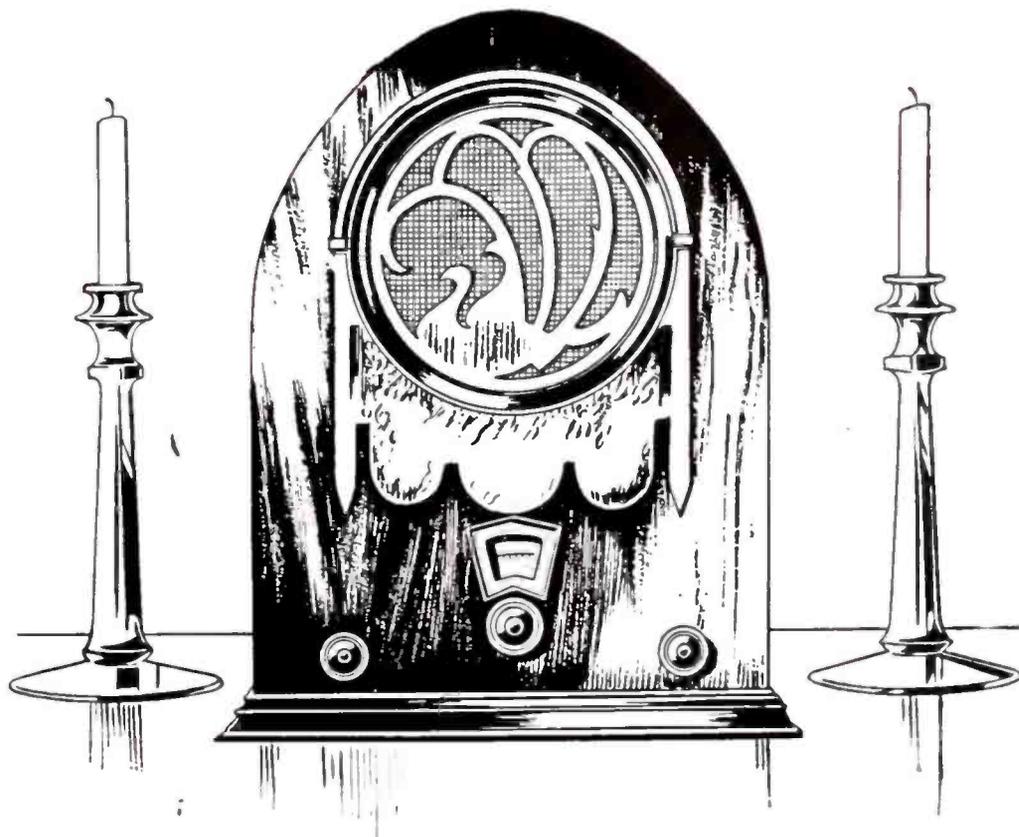
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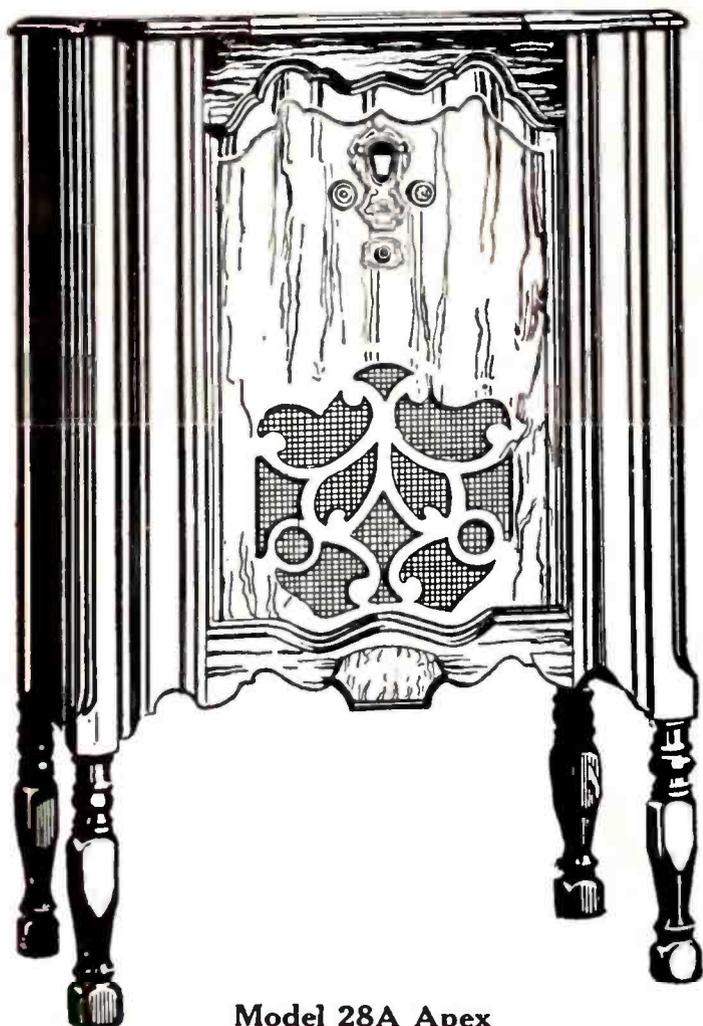
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