

PROGRAMS  
NEWSCommission Says Public  
Favors Present Set-Up

New Reallocation of Stations a Success, Declares  
Radio Board, in First Official Word on Subject.—Quotes Letters of Pleased Fans

BY ROBERT D. HEINL.  
In the first official word expressed on the subject, the Federal Radio Commission contends that the new reallocation of wave-lengths is a success. "It was naturally expected that a large number of complaints and protests would flow into the commission's office at Washington," the commission announces. "These complaints have been reaching the commission slowly, but the complaints have been chiefly centered about five or six specific local cases of station time-sharing or interference, while comparatively little general protest or complaint about the allocation has developed in contrast with what might have been expected from a radio audience numbering 40,000,000 people."

"On the other hand, it has been supposed that little or no favorable or approving comment would find its way into the commission's mail, on the theory that pleased listeners would not take the trouble to write. Here again a surprise faced those thus predicting the human reaction, for several hundred telegrams and letters already received from all parts of the country tell eloquently of the writers' appreciation of the relief afforded to radio listeners, and particularly to those whose locations away from the large cities force them to depend upon distant stations for their regular programs."

Fan Mail is Quoted  
"In the belief that this index of the improved conditions of radio listening enjoyed by urban and remote listeners will be significant, the following extracts have been made from some of the letters just received by the commission:

"Large mail indicates great improvement in Virginia and many other States. Many are suggesting a vote of thanks to Commission.—C. T. Lucy, Station WRVA, Richmond, Va.

"I approve the new wave-lengths. I can get more wave stations and clearer reception.—E. J. Fox, Piqua, Ohio.

"This morning we picked out 25 names at random from the Bridgeport telephone book, and asked how those depending found radio reception under the new arrangement. The answers were in the main enthusiastic approval. Apparently, there is no question but that the reallocation is working out well here.—George N. Y., Bridgeport, Conn.

"I notice that more distant stations come in—clearer, and with volume equal to the old nearby stations.—Harold Watson, Galvestone, Ill.

"I must express my appreciation of the new line-up. So far as New England is concerned, reception has been wonderfully improved. I can receive



HARRY LAUDER, it seems, has entered the ranks of radio inventors. His first contribution to the science is a device which improves the broadcasting of the voice.

It involves nothing more costly than a towel soaked in water. The towel is placed over the microphone and has the effect of emphasizing the singer's voice and, at the same time, subduing the sound of the orchestra.

The Associated Press tells us that officials of the British Broadcasting Company were a little skeptical when Sir Harry insisted upon having a wet towel before he would face the microphone. Such a request had never been made in the studio before.

But when the expert in the listening cabinet signalled that it was yielding excellent results, astonishment turned to delight, and Sir Harry beamed a canny "I told you so" out of the corner of his eye.

THE NEW TIMES  
High on the tree-top  
Now we have started  
On listening days.  
News from the city.  
And music and song.  
Shortening gaily  
The nights that were long.  
Gone are the evenings  
Of old-fashioned style.  
When, for enjoyment,  
You drove many a mile.  
High on the tree-top  
The aerial ways.  
Now we have started  
On listening days.  
—Mintie.

The city fathers of Corning, Ia., like their radio. And they like it well enough to do something about it.

Under an ordinance that has passed first reading, the Aldermen would make it unlawful to receive any apparatus which caused reasonably preventable interference with any other device, including the radio receiver.

Violators would be liable to a fine of not more than \$100 or imprisonment of not more than 30 days.

Reallocation of the broadcast frequencies has demonstrated one thing—that is that the "blooper," or faulty receiver, still is present in force. Here in Providence these relics of the bygone broadcasting days which have been having a merry time since Nov. 11, radio's moving day, the change of setting distant stations again and the fact that dial locations had to be found all over again brought them

## Today's Programs in Brief

For the convenience of radio fans the following hour-by-hour schedule of today's programs is given in brief form. Figures following station denote wave length. The hours are based on eastern standard time.

**LOCAL STATIONS**  
10:00—Conference, WLSI, 248.  
11:00—Church, WEAN, 545.  
12:15—Organ, WEAN, 545.  
1:00—Music, WEAN, 545.  
1:30—Music, WEAN, 545.  
2:00—Music, WEAN, 545.  
2:15—Sunday school, WEAN, 545.  
3:00—Music, WEAN, 545.  
4:00—Music, WEAN, 545.  
4:30—Music, WEAN, 545.  
5:00—Music, WEAN, 545.  
5:30—Church, WEAN, 545.  
6:00—Music, WEAN, 545.  
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**EASTERN STATIONS**  
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## RADIO POLICEMEN CRUISE AIR LANES

### U. S. Inspectors Constantly Checking Wave-Lengths

Commerce Department Equipped  
with Four Test Cars Capable of  
Determining Power, Frequency  
and Monitoring Programs of  
Any Station.

It would seem that the enforcement of radio laws is mostly a matter of internal respect for law and order. Yet the Radio Service of the Department of Commerce has definite ways and means of knowing what is going on in the air, and of apprehending those who break the radio laws.

"The constantly growing interest in radio communication extends throughout the world, and it is necessary to supervise the operation of all stations to prevent interference nationally and internationally between the commercial services, private services and Government services," states V. D. Terrell, Chief of the Radio Division. Department of Commerce in a statement for the Congress Digest.

"It is not unusual for the radio inspectors of the Department of Commerce who have put in their full day's work at the office or in inspection work to remain on duty until midnight or later checking the wave lengths or frequency of operating stations to determine if there is any interference, which stations are violating the law or the provisions of their license."

"In the early days it was necessary to inspect ship stations and stations working with ships only. Now it is necessary to inspect all stations and carefully to observe their operation."

"These ever-increasing duties have taxed the inventor and the manufacturer to provide accurate measuring instruments for the use of our service. Few people realize the difficulty of pointing the ether highways and endeavoring to prevent conflict between these invisible carriers of messages relating to distress, commerce, entertainment, education, farm reports, stock reports, weather forecasts, time signals, Government communications, pictures, facsimile messages and the many other messages of various character which are passing through the ether hourly not only originating in this country but many of them originating in other countries and often passing through this country."

"It is not unusual for the amateur with his home-made set using power of perhaps 100 watts or less to transmit a message which is picked up in Europe, Australia or New Zealand. The slightest disarrangement in transmitting apparatus may cause this message to interfere with some other service."

"The inspection service is now equipped with four radio test cars and we will have two more before the end of this calendar year. These cars are portable radio inspection offices equipped with apparatus which enables the inspector to measure the strength of signals from a radio station and determine the power the station is using. To check the wave length or frequency of stations, to monitor the programs and facilities for giving examinations to radio operators."

"These cars are proving a great convenience in enabling the inspector to travel around the country without having to rely on infrequent train service."

#### Collection of Leaks.

The grid leak in the detector circuit should be adjusted for best results. While the 2-megohm value may be satisfactory for powerful local signals, this resistance value is too low for weak signals. Either a collection of grid leaks of various values should be on hand or a suitable variable grid leak, such as the grid leak clorostat, should be employed if good distance is desired.

#### Keep the Dials Tight.

A set which suddenly gets into the habit of tuning in a mysterious fashion is nothing to worry about. The chances are that its behavior merely indicates that one of the tuning dials has become loose. This is likely to be true of the older type neurodynes where there are three possibilities of dials coming loose and more opportunities for different and puzzling varieties of tuning conditions.

### A Strength-building Food For Feeble People

SCOTT'S  
EMULSION

Rich In  
All Cod-liver Oil  
Vitamins

See the  
Christmas  
Gifts  
at  
Blandings

Scott & Bowne, Bloomfield, N. J.

## RADIO PROGRAMS

Continued from Page Eight.

1:00 p. m.—Littman's period.  
10:30 p. m.—Service from Holy Trinity Church.  
11:30 p. m.—Orchestra.  
12:00 p. m.—Studio program.  
12:30 p. m.—"Financial Cavaliers."

WIP—PHILADELPHIA—192.  
10:45 a. m.—Service from Holy Trinity Church.  
10:00 p. m.—Symphony orchestra.

WJZ—NEW YORK—345.  
9:00 a. m.—Children's hour.  
1:00 p. m.—National string quartet.  
1:30 p. m.—White House dinner music.  
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3:30 p. m.—Young People's conference.  
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4:00 p. m.—"The Continentals."

WJZ—NEW YORK—345.  
9:00 a. m.—Children's hour.  
1:00 p. m.—National string quartet.  
1:30 p. m.—White House dinner music.  
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## PIANO CAN BE USED AS LOUD SPEAKER

### Adaptation Simple and Results Are Well Worth While

Driving Pin of Magnetic Type Unit  
Should be Attached to Sound-  
Board with Tiny Screw. — Ar-  
rangement a Revelation of  
Power Tube is Used.

The piano soundboard is a large wooden board of varying thickness, placed behind the strings. We can utilize this as a pleasing radio speaker, particularly for musical selections, by a very simple attachment, which in no way interferes with the normal use of the piano.

The method consists in mounting an ordinary magnetic type loud-speaker unit behind the piano and attaching it by means of a very tiny screw. Most anyone is capable of attaching the unit, too, as there's no special trick to it.

The type of unit should be of high grade. The unit should be located about in the center of the soundboard, although the exact position does not make any noticeable difference.

There are a number of very heavy wooden uprights in back of the piano that can be seen after the cloth-covered framework is taken off. This framework is often screwed in along the top and side, and when the screws are removed, it is lifted up out of a slot into which the bottom is fitted.

A fairly heavy wooden board is placed horizontally across the center two uprights, being attached firmly to them by a wood screw at each end. The speaker unit is fastened by one or two machine screws and nuts at the center of this cross-bar. Care must be used in handling it. Washers should be placed between the unit and the cross-bar, or between the cross-bar and the heavy piano uprights, in order to move the unit toward, or away from, the soundboard. It should be placed so that the stylus of the unit not quite touches the soundboard. Make a pencil mark at this spot.

Then remove the unit temporarily, and insert a very small brass or nickel-plated screw—as small as you can find—at this spot. If you have difficulty with this, drill a tiny hole through the board, and insert a brass 2-56 machine screw through it and attach a nut on the other side, tightening firmly.

Replace the unit. Be sure the end of the stylus and the head of the screw are free from dirt. Better sandpaper them a little. Put a speck of soldering flux on each, then hold the clean end of the soldering iron against both, and touch it with solder. Too much solder should be avoided—just use a tiny drop and be sure you get good firm contact.

If your set is a high-grade one, having a 175 or a 210 type power tube, this type of speaker will certainly prove a revelation. For orchestral music, dance numbers, etc., it has no superior. Both high and low tones, with an astonishing range, will be heard as provided the set has a good amplifier. On a poor

set, a smaller speaker of the horn or cone type may sound as good or better. For voice, some like the cone speaker better, and arrange a switch to change from one to the other. At any rate, this is an interesting experiment, and, with a little care, you will do no damage whatever to the piano or loud-speaker unit.

### GUIDE TO PLANES

Radio-Actuated Toned Reeds Indicate  
Craft's Course.

An airplane flying through fog or above clouds may now be guided on its true course by means of a visual course-indicating device which consists of two vibrating metal reeds mounted on the airplane instrument board in a shock-proof case, according to the Department of Commerce.

The electromagnets operating these reeds are connected to the airplane's radio set in place of the usual headphones. When a radio beacon signal is received, these reeds vibrate. Their tips are white so that each produces a vertical white line when moving. If these lines are equal in length, the pilot knows he is on the course.

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