

EXPERTS TO MEET FOR DISCUSSION OF RADIO TANGLES

Conference Called for Oct. 6 by Secretary Herbert Hoover.

By NEA Service
WASHINGTON, Sept. 29.—Broadcasting over a wider area than has ever before been attempted, advertising by radio, distribution of wavelengths, classification of stations, time divisions, interference, amateur difficulties—

In fact, every phase of radio transmission and reception is to be taken up for serious consideration and solution at the third national radio conference, which will be opened here on the night of Oct. 6.

The conference has been called by Secretary of Commerce Hoover, primarily to find a more equitable means for distributing wavelengths or frequencies among broadcasters, amateurs, commercial, ship and government stations. The first two conferences, also designed for this purpose, did not look far enough ahead to allow their findings to continue practical.

In the face of difficulties encountered by overlapping of wavelength limits, and the increase of broadcasters, amateurs and other stations, Department of Commerce officials have found it necessary to redistribute the frequencies on a wider basis. To do this the conference here will be open to all persons interested in radio.

Interest

Only by free discussion of the various situations in the industry, it is realized, can anything like a permanent program be reached.

Interference among broadcasters, amateurs and ship stations has come to such a pass that only by getting spokesmen from all types of radio application together can this problem be thrashed out to suit all.

Amateurs especially have been whipped about from one class of wavelengths to another. Given more freedom recently in a short wave schedule, the amateurs found themselves confronted with opposition from various commercial stations and special broadcasters, who also have been permitted to use low wavelengths or high frequencies.

Broadcasters have found difficulty among themselves, with more stations cropping up at points already crowded with broadcasters, with calls for more advertising and limitations in this field, and with efforts to spread their own propaganda from coast to coast.

Relaying

The last point may produce one of the most important discussions at the conference. The questions whether one dominant station or series of stations should be permitted to broadcast over the whole country at the same time, almost to the exclusive of others, may bring heated talk on both sides.

In the course of these discussions, it is expected, will come suggestions on the best way to permit nationwide broadcasting by relays in the cheapest possible manner. At present relay broadcasting is feasible about as far as the Middle West, starting from the dominant stations in the East. Cost of long distance wire service is almost prohibitive for relaying to farther stations.

But a system of relaying by short wave wireless may come out of the suggestions expected to be made at the conference, with the result that the Pacific Coast may soon enjoy the same "relays" of important events that the East and Middle West have been getting.

First Time Signals

The first radio time signals were sent out in 1904, according to a Swiss "clockmakers" journal. They were transmitted during tests between two Paris observatories.

The Voice From WLS



NO CHANGE IN DETECTOR NEEDED TO ADD STAGE OF TUNED RADIO FREQUENCY

BY ISRAEL KLEIN
NEA Service Radio Editor

Tuned radio frequency has been found the most economical means of radio amplification.

It is not only cheaper than the transformed-coupled radio frequency, in that a single stage of the former is equal to two of the latter, but it is easier to operate.

Going even further than mere tuned radio frequency, a clever little hook-up has been devised by which either outside antenna or loop may be used in reception. For instance, when the atmosphere is clear, the outside antenna has been found to best advantage. But the loop has given better satisfaction when static interfered, or when local interference was especially troublesome.

The hook-up that follows is designed for both these forms of antenna. Its parts consist of the following:

C1 and C2, two 11-plate variable condensers.

L1, special tapped coil.

L2, one L50 honeycomb coil.

P, one 200 to 400-ohm potentiometer.

R, one 6-ohm rheostat.

One tube socket.

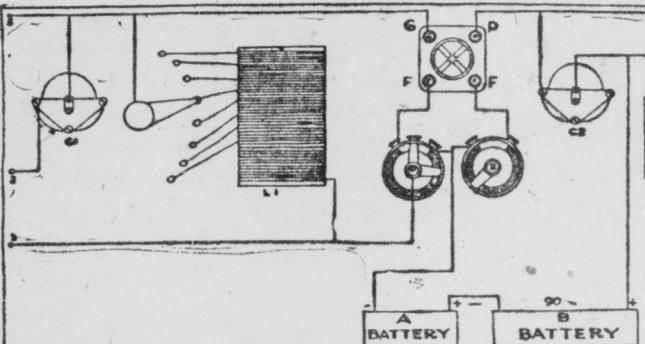
One switch and eight switch points.

Seven binding posts, bus wire and small spool of No. 22 DCC wire.

The two condensers should be mounted on opposite sides of the panel.

Coil L1 may be the primary of a varicoupler, or it can be made by winding sixty turns of No. 22 DCC wire on a tube three and one-half inches in diameter. It is tapped at every fifth turn, up to the thirty-fifth, leaving the eighth open as a terminal for loop reception.

Coil L2, which is an L50 honeycomb coil, is designed to be placed



HOOK-UP OF TUNED RADIO FREQUENCY AMPLIFIER.

in inductive relation to the grid circuit of the detector, or within three inches of the tuner secondary. In case of a varicoupler inductance in the detector, the coil L2 may be set on the cabinet above the varicoupler.

This makes any alterations in the detector unnecessary.

The tube for this amplifier, of course, should be a U-201-A, or any other type of hard tube, and the B battery should have a voltage of about ninety volts.

Binding posts 1, 2 and 3 are arranged to meet requirements for outside or loop antenna, with the condenser in parallel or in series.

For loop reception, condenser in parallel, connect one loop terminal to No. 1, binding post, and the other to No. 2, with No. 3 post shorted to No. 2.

For outside antenna reception, condenser in parallel, the connections are like those with loop and condenser in parallel. However, if the condenser is to be used in series, with outside antenna, connect binding posts 2 and 3, leaving No. 1 open.

The best combination for the

outside antenna connections will be determined by experiment. There is only one way to hook up the loop, however.

This tuned amplifier will be found effective in blocking oscillations from a single circuit receiver. But due control must be kept of the amplifier itself, with proper use of the potentiometer, or severe oscillations will come from it.

LAWS SERIOUSLY HURT

One Loses Eye, Other Teeth in Collision of Auto.

By Times Special

JEFFERSONVILLE, Ind., Sept. 29.—Clark County authorities today searched for the owner of a large touring car into which an auto driven by William Conlin, 16, crashed early Sunday.

Conlin lost an eye in the collision, and his companion, Ralph Warram, 21, had his teeth knocked out.

The two boys said the touring car was parked at a dangerous point on the road. Identity of the driver was not learned.

Charles Vickery, 43, of 416 E. New

York St., was injured about the head and legs Saturday when a machine driven by Clarence McClain, 752 N. Elder Ave., ran over the curb at Meridian and Ohio Sts. and knocked him down.

A peanut wagon, operated by

James Xantis, 315 Ogden St., and a

machine owned by John Huetter,

5018 N. Illinois St., were damaged.

McClain, who was arrested, told police he ran into the curb to avoid striking a machine in front of him.

Joe Seery, 2328 College Ave., was

slated on an assault and battery

charge after his machine struck a

machine parked in the 1000 block on

N. Delaware St. Saturday, Clifford

Smith, 656 E. Forty-Second St., rid-

ing with Seery, was cut about the

hand and Michigan Sts.

Porter Dutton, Plainfield, Ind., and

Frank McClellan, 1646 E. Ohio St.,

are held on charges of speeding and

assault and battery following a

collision between their machines

Sunday at New York St. and Senate

Ave. Dutton was cut about the

hand and Michigan Sts.

Leslie Durham, colored, 530 Pat-

terton St., was injured about the

head and hips Sunday when struck

by a machine driven by Grant Hall,

115 Beverley Dr., at Southern and

Madison Aves.

Miss Mary Sullivan, 3106 College

Whitaker, 2418 E. Michigan St.,

was held on an assault and battery

charge after her machine struck a

motorcycle ridden by Stanley Bier-

man, Saturday at Meridian and Ray

Sts. Bierman was slightly in-

jured.

Science From Irish

The new broadcasting station at

Belfast has been scheduled to broad-

cast a program of lectures on popu-

lar science. Professors from Belfast

University will talk.

By Times Special

WILLIAM Grey of Castleton, who

was riding with Riddle, escaped serious

injury by jumping. Grey told

police they were driving east on

Eighty-Sixth St. and when in the

middle of the tracks the engine

stopped. He said the train stopped

about a quarter of a mile after the

accident. William Hersche, post-

master at Nola, Ind., told police the

train did not whistle for the crossing.

Robinson said the engineer,

Thomas Kline, 2629 Bellfontaine

St., would be slated on an involun-

tary manslaughter charge.

Mrs. Morris Injured

Mrs. Woodbury Morris, 3414 Wash-

ington Blvd., is suffering from

face and head injuries received Sun-

day when the machine driven by her

chauffeur, Henry Shirley, colored,

was struck by a machine driven by

William Sweetland, 106 N. Bradley

Ave., at Thirty-Eighth and Illinois

Sts. Sweetland was held for speed-

ing and assault and battery.

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Madison Aves.

Both drivers were arrested.

Machines Collide

Miss Irma Prettyman, 615 Fulton

St., was injured about the head and

legs Saturday when a machine

driven by Clarence McClain, 752 N.

Elder Ave., ran over the curb at

Meridian and Ohio Sts. and knocked

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