

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 takes 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.

Interference
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 out heated talk on both sides.

In the course of these discussions, it is expected, will come suggestions on the best way to permit nation-wide 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 clockmaker's* journal. They were transmitted during tests between two Paris observatories.

The Voice From WLS



One of the most popular announcers in the country is George D. Hay, the "Solemn Old Judge" of WLS at Chicago. Hay formerly announced from WMC, Memphis. Hay's favorite is the "Husk-puckin'" a river boat whistle with which he began and ended his broadcasts. Now he uses a locomotive whistle for the same purpose.

North Side Residents to Meet Tuesday Night.
North side residents will discuss proposed operation of buses on Capitol Ave. in a called meeting of the Mapleton Civic Association at the North M. E. Church, Illinois St. and Maple Rd., Tuesday evening at 7:30. George W. Beaman, president, said today.

Feeling is divided on the project, and citizens will be asked to express their opinions. Representatives of the street car company are expected to submit a compromise plan of running busses "feeding" Illinois St. lines north of the terminals. Demand for busses is said to come largely from those living beyond street car lines. Bus officials will represent, explaining their plans. Public hearing on the question of operating busses on Capitol Ave. will be held by the park board Thursday at 1:30 p. m. in the city hall.

FIND DEBRIS OF LOST LAKE SHIP

Believe Crew of Twenty-Eight Men Perished.
By United Press
CLEVELAND, Sept. 29.—Wreckage of the steamer *Clifton*, picked up in Lake Huron over the week-end confirmed belief the missing whale-back went to the bottom with its crew of twenty-eight men.

Search for bodies was continued today. Broken hatch covers and part of the pilot house of the *Clifton* were picked up by Capt. Dalton Hudson of the steamer *Glencora*. The *Clifton*, bound for Detroit from Saugeen Bay, Wis., with a cargo of crushed stone, is believed to have sunk last Monday off Goderich, during a sixty-mile gale.

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 distance, when the atmosphere is clear, the outside antenna has been found to be 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 L-50 honeycomb coil.

P, one 200 to 400-ohm potentiometer.

R, one 6-ohm rheostat.

One tube socket.

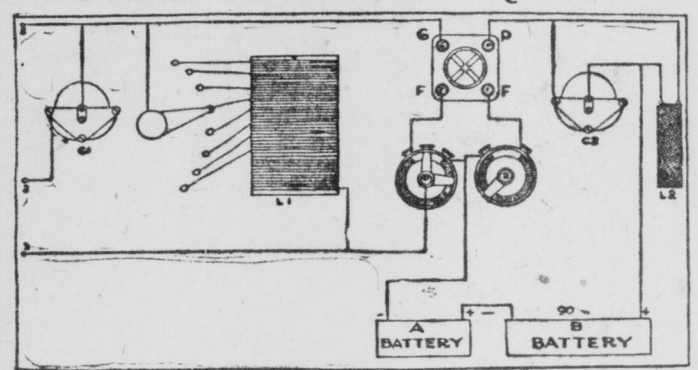
One switch and eight switch points.

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 variocoupler, 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 tap open as a terminal for loop reception.

Coil L2, which is an L-50 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 variocoupler inductance in the detector, the coil L2 may be set on the cabinet above the variocoupler.

This makes any alterations in the detector unnecessary.

The tube for this amplifier, of course, should be a UV-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 for outside antenna, 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.

LADS 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 Warman, 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.

YOUTH SUCCUMBS FROM CROSSING WRECK INJURIES

Coroner Robinson Investigates Railroad Crash.

Coroner Paul F. Robinson is investigating the circumstances attending the death of Volney Riggles, 18, of Castleton, Ind., who was fatally injured Saturday when the machine he was driving was struck by an inbound Chicago train on the Monon Railway at Eighty-Sixth St. Riggles died at the Methodist Hospital Sunday.

William Grey of Castleton, who was riding with Riggles, 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 Hersch, postmaster at Nora, Ind., told police the car was not in the crossing.

Robinson said the engineer, Thomas Kline, 2629 Bellefontaine St., would be slated on an involuntary manslaughter charge.

Mrs. Morris Injured
Mrs. Woodbury Morris, 3414 Washington Blvd., is suffering from face and head injuries received Sunday 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 speeding and assault and battery.

Charles Vickery, 43, of 416 E. New

York St., was injured about the head and legs Saturday when a machine driven by Clarence McClain, 753 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, 2928 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, 658 E. Forty-Second St., riding with Seery, was cut about the face.

Machines Collide
Miss Irma Prettyman, 615 Fulton St., was injured about the head and Mrs. Charles Cook, 3050 Broadway, was injured on the arms when machines driven by Fred Cunningham, 2758 Chester St., and Charles Cook, 3030 Broadway, collided Sunday at Commerce and Massachusetts Aves. Both drivers were arrested.

Leslie Durham, colored, 530 Paterson St., was injured about the legs and hips Sunday when struck by a machine driven by Grant Hall, 115 Beverly Dr., at Southern and Madison Aves.

Miss Mary Sullivan, 3106 College

Ave., riding with Hall, was injured about the face. Hall was held.

Mr. and Mrs. Harrison Feaster, 1346 Fremont St., their three children, Roy 12, Ellen 14, Margaret 11, Ralph Randall, of North Vernon, Ind.; Electa Wilson, 15, of 1224 W. Twenty-Sixth St., were badly shaken up Sunday when the machine driven by William Dawson of North Vernon, Ind., was struck by an inbound E. Michigan street car at Bancroft and Michigan Sts.

Porter Dutton, Plainfield, Ind., and Frank McClellan, 1640 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 McClellan's wife was bruised about the shoulders.

Miss May Bowlsch, 2416 E. Michigan St., is held on an assault and battery charge after the machine she was driving struck a motorcycle ridden by Stanley Biedman, Saturday at Meridian and Ray Sts. Biedman was slightly injured.

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