

Radio Broadcasting and Reception

WHERE THE COOLIDGES SPENT CHRISTMAS



The beautiful home of Howard E. Coffin on Sa Pelee, one of the group of Golden Islands fringing the coast of Georgia, where the President and Mrs. Coolidge spent their Christmas.

CRIME TO CAUSE RADIO INTERFERENCE

SAYS WRITER IN NEW YORK SUN, WHO TELLS HOW PEOPLE ARE PREVENTING IT

The constant demand for sensitive and more sensitive radio receivers has finally given broadcast receivers capable of tuning in an electric motor's sparking brushes a mile away quite as well as the program of a broadcast station 3000 miles distant, writes S. R. Winters in the New York Sun. In other words, in our conquest of distance we have steadily approached the normal noise level which exists in any mildly congested locality, so that today we are just as apt to tune in the sparking motors, light on coils of oil burners, seat motors of elevators, sparks of trolley wheels and other devices as we are to tune in distant signals.

Man-Made Static

Unfortunately, man-made static, or inductive interference set up by sparking electrical appliances, is just as persistent and impossible to eradicate at the receiving end as is nature's own brand. It becomes a question of (1) decreasing the sensitivity of our broadcast receivers, which is certainly a step backward, and therefore unsatisfactory; (2) becoming satisfied with powerful broadcast signals that ride high above the inductive interference level, which is generally the practice; and, (3) locating and eliminating such interference sources as are most troublesome.

Because broadcast reception is so generally practiced it has become as much of a crime to interfere with such pursuit of happiness as it is to cause unnecessary noise in my community. In fact, the Golden Rule is being voluntarily applied to the prevention of radio interference in a manner that is truly commendable. Not only do users of interfering equipment generally correct the guilty apparatus when it is called to their attention, but many manufacturers of electrical refrigerators, small motors, oil burners and other household devices are beginning to equip their products with interference prevention devices, which cost so little yet mean so much by way of keeping the radio atmosphere from becoming polluted in those sections where the products are to be installed.

By-Pass Interference

Radio interference may be caused by many conditions, but these are readily classified by the radio interference specialist. First of all, it is patent that most interference is broadcast over the electrical system. The problem, therefore, is to block, or at least bypass, the interference before it can get out on the power lines and be widely disseminated. Usually the simplest method is to employ an inexpensive interference prevention device, comprising a pair of condensers of proper capacity and voltage rating, connected across the lines, with the centre-post, or pigtail grounded. This arrangement effectively grounds the high frequency disturbance before it can be distributed over the electrical system.

Household electrical devices, such as a heating pad with thermostatic control constantly making and breaking the circuit, electric irons with uncertain connections and resultant heavy arcs, electric curlers also with arcs, violet-ray devices with high frequency radiations, massage machines with sparking brushes and so on are capable of interfering with sensitive broadcast receivers over a distance of a mile or more. The practice here is to insert a simple interference device across the line feeding the appliance in question with centre tap grounded. Similarly with flashers, contractors and other sparking devices, an interference device can be placed across the contact points, with a 50 to 100 ohm resistor perhaps required in one or both leads to the device itself in D.C. circuits, and also with the centre tap grounded.

In the case of an interfering motor, an interference device can be connected across the brushes, with the centre tap grounded, as well as across the line, also with centre tap grounded, so as to make the preventive means as effective as possible.

Inexpensive Device

In the case of a transformer in the line, the interference device is preferably placed on the line side, with the centre tap grounded. Not only should interference devices be employed at the source of interference as a Golden Rule proposition by all those who have the interests of the community and their neighbors at heart, but it is well to include an inexpensive interference device across the line leading to the electrified radio, with the centre tap grounded, as a means of keeping out much noise which is certain to come over the line and be introduced in the radio set through the A.C. tubes. The cost is very slight compared with that of the radio set itself, yet the remarkable difference in background noise is worth much to the critical radio fan.

There are engineers who have long specialized in radio interference problems, for the reason that the solutions are mainly in the form of special condenser combinations for bypassing the high frequency interference to ground. The more persistent interference problems must be solved with a combination of condensers and choke coils, and sometimes with resistance as well, worked out in a suitable filter system by skilled engineering methods.

Cost Relatively Small
Invariably serious interference in any locality is soon traced to its source by radio listeners as well as by the electric light company. The owner of interfering equipment is usually more than willing to correct the trouble because the cost is relatively small. And, as already stated, more and more the manufacturers of electrical equipment are building interference prevention devices into their products, so that there is no possibility of interference with local reception. Hence we may continue in our quest of greater sensitivity, assured that the noise level in our community will be kept at an absolute minimum by conscientious neighbors.



THE FATALIST: "Ah, what will be, will be!" -London Opinion.

MEMBERS RADIO COMMISSION GO EUROPE SOON

MONTREAL, Jan. 7.—Members of the Radio Commission recently appointed by the Dominion government have completed plans for their journey to Europe where they are to study broadcast conditions and all matters which affect stations and listeners in. Two of the commissioners will sail from Halifax. These are Dr. A. Grifon of Montreal and C. A. Bowman, Ottawa. They are booked to leave by the ss Baltic, White Star Line, which sails Monday and are proceeding to the Atlantic port on board the Ocean Limited of the Canadian National Railways. In addition to the two members, the secretary of the commission will also sail from Halifax.

Sir John Aird, Lady Aird and daughter will sail on the ss Majestic from New York January 19, and will travel from Toronto direct to New York using the Canadian National and its connections.

MEETING MUST HAVE HAD QUICK EFFECT RADIO RECEPTION

It was rather a curious coincidence that after last Friday night's radio meeting when numerous complaints were made in regard to poor reception, on arrival home the members found that reception was excellent and dozens of stations were obtainable even by the downtown sets. There was a little interruption locally, but the programs were coming in so loud that most of the trouble could be tuned out.

KETCHIKAN HEARD DURING NOON HOUR

When the Seattle and other powerful stations do not come in well at Prince Rupert, Ketchikan is often picked up. Yesterday at noon and Saturday at supper time it came in well.

W. BALAGNO IS HEARD ON AIR

Heads Sunset Orchestra Which Plays CFCT at Victoria

Victoria is putting out a program in connection with its broadcasting station at the top of the Union Building. Its official designation is CFCT. One of its features is music of the Sunset Concert Orchestra led by William Balagno, formerly of the Westholme Theatre orchestra, Prince Rupert. It also gives reports of the hockey games and various other interesting features. The difficulty with Victoria is that it is not picked up very often in Prince Rupert owing to poor reception here. Most local fans tune in to the more powerful stations.

Little Done Yet in Locating Disturbance

Owing to bad weather not much was done Saturday and Sunday in the way of locating the local disturbance that puts radio sets out of business part of the time. The roar continues at various times. No one knows when it will come on and sometimes it keeps up for a few minutes only, while at others it monopolizes the air for hours.

Will Investigate State Broadcasting

HALIFAX, Jan. 8.—With the object of examining various methods of broadcasting in European countries and particularly in the countries where the state monopolize the broadcasting stations, two members of Canada's royal commission on radio broadcasting, C. A. Bowman and Augustin Frigon, sailed yesterday for Liverpool.

KOMO PROGRAM FOR THE WEEK

Tuesday, Jan. 8
5.00: Kiddies Program.
5.30: Stock and bond quotations.
5.45: News flashes.
6.00: Eveready hour.
7.00: Clicquot Club Eskimos. Freshmen program.
8.00: Concert orchestra; tenor. "Something about Everything."
8.30: Amazo's Gitanos.
9.00: Correct time.
Symphony Orchestra; contralto—joint with KGW, Portland.
10.00: Dance orchestra interspersed with popular vocal—joint with KGW, Portland.
12.00: Concert orchestra; vocal.

Wednesday, Jan. 9
5.45: News flashes.
6.00: Concert orchestra; vocal.
6.30: Palmolive program.
7.30: Program originating KGW, Portland.
8.00: Concert orchestra, vocal.
9.00: Correct time.
9.00: Concert orchestra; vocal; "Something about Everything."
11.30: Late news flashes.
11.45: Fifth Ave. theatre organ recital.

Thursday, Jan. 10
5.45: News flashes.
6.00: Seiberling Transcontinental broadcast.
6.30: Spanish orchestra; Spanish vocalists.
7.30: Standard Symphony hour.
8.30: Concert orchestra; vocal.
9.00: Correct time.
Concert orchestra; vocal; "Something about Everything."
10.00: Brass band.
11.00: Late news.
11.15: Concert orchestra interspersed with vocal.

Friday, Jan. 11
5.52: News flashes.
6.00: Wrigley review.
6.30: Philco hour.
7.00: Concert orchestra; vocal.
7.30: Program originating at KGW, Portland.
8.00: NBC System—R. C. A. our.
9.00: Correct time.
"Something about Everything;" Evensong.
9.30: Moon Magic.
10.00: Trocaderans.
11.00: Trocaderans.
12.00: Late news; vocal and piano solos.

Saturday, Jan. 12
5.00: National orchestra.
6.00: Great Northern Railway—Opening of Cascades Tunnel.
7.00: NBC System—Lucky Strike hour.
8.00: General Insurance orchestra; vocal—joint with KGW, Portland.
9.00: Correct time.
Mixed quartet; concert orchestra; "Something about Everything."
10.00: Vocal; concert orchestra.
11.00: Late news.
11.15: Concert orchestra; vocal.

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GRIPPE PREVENTION

You know that *grippe, influenza* and other respiratory ailments are caused by germs taking hold of the weakened body, but do you realize how true is the old adage "An ounce of prevention is worth a pound of cure"?

SCOTT'S EMULSION

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owes its power to prevent weakness to its ability to nourish and strengthen the system and help keep resistance normal. Do not let grippe-weakness overtake you, take Scott's Emulsion and keep strong and vital!

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KOLSTER

The new Kolster models have created an entirely new set of standards by which radio quality and radio value are being measured today.

Kolster performance—pure, natural tone—rare distance-getting ability—precision of program selection—reaches new heights of radio excellence. Kolster reproduction is so realistic that it brings a sense of actual presence. Lovely cabinets, conceived in the mode of to-morrow, make Kolster as pleasing to the eye as to the ear. See Kolster—hear Kolster—there's a delightful treat in store for you.

The new Kolster All-Electric sets are equipped with phonograph plug-in jack which, with pick-up unit, will give electrical reproduction of records.

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