

PROGRAMS NEWS

MAJOR

HOOK-UPS COMMENT

Motor Tourist Now Finds Radio Necessary Adjunct

Regular or Portable Receiver Entertaining and Useful Instrument to Take Along.—Power Furnished by Auto Battery and B Units

BY BRANNAN FOOTE. Motor touring and camping has grown to immense proportions in the United States and the normal habit of some motorists is to take a portable radio set with them on their trips.

The auto camper has his tent, cooking equipment and supplies stowed away in boxes, hampers, running board carriers and the like. Many of them find a portable radio set, or their usual set adapted for the purpose, an entertaining and useful instrument to take along.

An important question is that of obtaining the necessary power to operate the set. An all-electric set is naturally out of the question, as it could only be used when the tourist happened to stop at a camp or lodging place where the right kind of electric power could be "tapped"—usually on a coil.

Battery Type Needed. The type of set operated from batteries is the kind required. A set that is ordinarily run from A and B elements as at home will answer the purpose admirably. As every car has a storage battery, the most convenient source of power supply is solved at once. The car battery will run the set many hours each night when the tourist travels 50 miles or more in the daytime, and does little or nothing at night.

The operation of the car keeps the battery fully charged. The auto storage battery can supply power enough and spare for a five, six or seven-tube set. Use storage batteries have three cells, giving six volts in all, the right voltage for the radio tubes. The use of cells in using these for radio purposes, is to provide strong and steady battery dips, with which contact can be made with only half the battery. If this is done for two or three days, the set can be "recharged" over to the other half of the battery for another equal period.

Use a flexible lamp cord to furnish the power can be attached beneath the dash, in most cases by attaching one clip to the positive terminal of the car motor anywhere and the other clip to one of the rear binding posts of the dashboard ammeter.

It is well to remember that B batteries will furnish the "plate" energy. The smaller B batteries are not economical for any set, and should not be bought except in extreme cases for space-saving. The medium size is recommended for five tube sets, and heavy-duty size for six tubes or more. In carrying your set, the tubes should be removed and kept in cloth or paper.

RADIO CLUB OF R. I.

Tomorrow Night to Be Devoted to Remodelling. The Radio Club of Rhode Island will devote tomorrow evening the regular meeting night to the work of remodelling the organization's recently acquired clubhouse and laboratory which is located at the foot of Pease street, Rumford.

In order that they may take advantage of all the daylight available, the club members will meet at the building at 7:30 p. m. on Monday, July 1, at the interior of the building and the installation of benches, shelves and laboratory equipment, as well as the creation of a regular meeting place which will seat at least 50 persons, will start at about 6 o'clock.

It is expected that the work to be done will be carried out in short order, due to the intensive efforts of those members who have volunteered their services.

Aids from the remodelling of the building, few other activities will be undertaken at tomorrow's regular session, Charles N. Kraus, president, perhaps. However, there will be a brief business session and the club's operators will maintain their regular schedule over station WICBR, the official transmitter.

Clinton A. Sherman, who recently was assigned the call letters, WICBS, will be on the air with his new station in another month, he announced.

Frederick L. Shaw, secretary of the club and owner of Station WICBR, has been granted authority to operate his transmitter as a portable. His license is now valid at any point in the First Radio District, which takes in the New England States.

WICBR, official station of the club, has been in communication with several foreign countries since its installation in the new clubhouse. It has been operating almost exclusively in the 20-mc. band, which makes possible extreme DX work.

"HAMS" HEAR THORNLEY. Crystal-Control Hiss Subject at Amateurs' Meeting. Howard Thornley, Providence radio engineer, opened the summer session of technical talks of the Associated Radio Amateurs of New England, Inc., with an illustrated lecture on crystal-controlled broadcast transmitters.

The meeting which was addressed was held at the association's headquarters on Kelley avenue, East Providence. Mr. Thornley explained the importance of the recently developed thermionic method of controlling the temperature of the crystal, which assures a constant frequency at all times.

As an example, he explained in detail the apparatus used in the crystal-controlled installation recently placed in operation at Station WJAR. He declared it is his belief that the majority of the transmitting amateurs will be using superheterodyne circuit in the fall in order to overcome the present-day crowding on the high frequencies.

Albert Slaker, Providence radioist, who elected to membership in the association at the business meeting which followed Mr. Thornley's talk, Mr. Slaker announced that he would be "on the air" with one of the 1929-type transmitters in about a month.

Today's Programs in Brief

- For the convenience of radio fans the following hourly schedule of broadcasting today is given in brief form. Figures following station denote wave length. The hours are based on daylight saving time. 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RADIO PROGRAMS

Continued from Page Seven
7:15 p. m.—Universal Safety Series. "Salvy and the Workers" by James J. Davis, Secretary of Labor, National.

WLSI—THE LINCOLN STUDIOS, INC.—218. Today. 10:00 a. m.—Watchtower program relayed from New York city.

WPAW—SHATTENBERG'S—518. Monday. 10:00 a. m.—Good morning.

WVAF—FALLS CHURCH—201. 10:30 a. m.—Sunday afternoon session.

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OUT OF TOWN STATIONS

To-Day. 9:00 a. m.—WVAF—NEW YORK—305.

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BUREAU REVEALS CAUSES OF FADING

These Determined by Extended Series of Observations. Indirect Ray from Station Undergoes Variations of Intensity During Course Through Upper Atmosphere on Its Way to Receiving Antenna.

Some of the principal causes of short period radio fading as determined by an extended series of observations on signals from several stations have been set forth by the Bureau of Standards as follows:

Considerable fading is caused by the fact that the indirect ray from a broadcasting station undergoes variations of intensity during its course through the upper atmosphere on its way to the receiving antenna.

Rotations of the plane of polarization of the ray reflected from the upper atmosphere is indicated as the cause of much fading, particularly during the sunset period; reflections by multiple paths are shown by a periodic type of fading superimposed on the main intensity variations; the rapid periodic type of fading is a direct consequence of an occurrence during the sunset period on transmissions from a selected station has been found to be quite common in the reception from two other stations.

The method feature in selecting a particular broadcasting station and making simultaneous graphic records of its transmission as received by different types of antennas attached to duplicate receiving sets and recording systems.

All observations were made at the bureau's field station located at Kensington, Md., in a position practically free from man-made interference and disturbing influences. Observations were concentrated largely on two stations, but less frequent records were made on transmissions from other stations of varying frequencies of 550 to 1480 kilocycles per second.

These observations have been made during a period of nearly a year and a half. The investigation was directed particularly to those changes of intensity in the receiving antenna which range in period from a few seconds to several minutes between peaks.

As a last resort, in the case of a storage battery type set, the 112A type of tube may be used as the detector, in place of a 201A type. Being more heavily constructed, this tube is less affected by the air vibrations.

Cleaning the Set. In order to restore an old set to its original and efficient operating state, the interior should be free from dust and dirt. Collection of dust and carbon on the insulation may form a leaking path across the insulation that will cut down the power of the circuit to a considerable extent. Clean all parts with an air-blower or a new dust rag. Wipe out all the dust that has accumulated with a dry rag and polish the insulation. Never use water or any other liquid for removing dirt from any of the parts.

Vagrant Waves of Interest to Fans

A leading broadcasting official has hit upon the idea of lighting effects in studios to stimulate the work of artists. Joe Cook, the Hoosier comedian, has five radio sets in his chateau at Lake Hopatcong, N. J.

Children are said by program managers to be excellent radio actors. After a certain stiffness and shyness has worn off, they are said to exhibit unusual naturalness in the interpretation of their roles.

Improved acoustics in broadcasting studios have done much to raise the quality of the final product as the listener hears it in his loud-speaker or ear-phones. Much constructive attention

has been given to this phase of the subject by virtually all broadcasters. About 29 out of each 100 homes in the United States have receiving sets.

The new radio centre of the United States is at Bolling Field in Washington. The War Department hook-up controls 212 land stations.

"Silent Cal" is a term that has frequently been applied to former President Coolidge, yet his voice has been heard by more persons than that of any other President.

Practically every country in the world has regulations governing broadcasting in the large European countries, including the United Kingdom and Germany, broadcasting stations are generally owned and operated by the national government; Sweden grants a concession to one company to operate the main stations, while the smaller ones are owned by radio clubs.

Julian Rose, the highest-rated Hebrew comedian in the world, has invented a new type of program for his broadcasts from 24.0 London. He sings an original Hebrew chant, extolling the charms of the various clients who seek his services as a marriage broker in Yiddish they call him a Schachden.

New Models of MAJESTIC RADIO. A Small Payment Delivers... Balance to Suit the Average Budget.

New MAJESTIC Models Empire Radio Co. CONVENIENT TERMS. 23-25 EMPIRE STREET.

New MAJESTIC RADIOS Radiola, Earl, Apex and Temple at Flint-Adaskin's 243-249 Weybosset Street.

Majestic Cabinets are Furniture of Charm and Beauty. MAJESTIC Radio is manufactured, distributed and installed as one complete, well-balanced unit.

Model 92 Power Detection and four tuned stages of radio frequency. Absolute no hum and no oscillation at any wave length.

Model 91 Power Detection and the new 45 tubes plus four tuned stages of radio frequency. Absolute no hum or oscillation at any wave length.

TIME PAYMENTS. Time payments in the purchase of Majestic Radios are financed through the Majestic Plan at lowest available rates.

Authorized Dealers for MAJESTIC PEOPLES HARDWARE RADIOS. Liberal Allowance for Trade-Ins Easy Payment Plan 39 Plainfield St., OLNEYVILLE Next to Royal Theatre.

All Models of Majestic Radio. B. & H. SUPPLY CO. LARGEST RADIO STORE IN RHODE ISLAND 116 Mathewson Street Gaspee 5550.

MAJESTIC RADIO UNITED MUSIC CO. \$10 DOWN, 1 YEAR TO PAY THE BALANCE. 233 WEYBOSSET STREET OPP. LOEW'S THEATRE 10 OLNEYVILLE SQUARE OPP. UNION TRUST.

OUR AUTO NUMBER FRAMES. WILL BEAUTIFY YOUR CAR. 2834. J. M. BARKER PATTERNS CO. 84 WEST EXCHANGE ST. PROVIDENCE, R. I.

MARSHALL AND COMPANY. Complete Radio Service. Sets—Supplies—Repairs. RABBIT 94 DORRANCE ST. REPAIRS MARRASSETT HOTEL.

Massie Service—the big 1/2 in radio reception. We sell, service and repair all standard makes of radio apparatus.

Like a SHOT ACTS IN 7 SECONDS. ARCTURUS BLUE LONG LIFE TUBES. FOR SCREEN GRID AND ALL OTHER A-C Sets.

A Complete Line of MAJESTIC RADIOS At Easy Terms. AT THE SIGN OF THE BIG CLOCK. R. J. Supply Co. 755 Westminster St.

Your MAJESTIC May Be Purchased On Easy Divided Time Payments at Summerfield's 274 to 280 Weybosset Street Providence.

THE RHODE ISLAND SHOPPING MECCA! BOSTON STORE MAJESTIC RADIO Models 91 and 92. Free Installation Free Service Easy Payment.

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