

Lectures by Radio on Radio And Household Economics

Springfield Station to Give University Extension Course—Students May Enrol and Receive Lesson Material By Mail—Demand May Extend the Series to Many Other Subjects

In order to further extend the use of radio so that it may be put to utilitarian uses, Westinghouse radio station WBZ, at Springfield, Mass., has arranged with the Massachusetts division of university extension for a number of courses in which the successful student will obtain a certificate of perfection at the completion of the course.

These are the arrangements which have been made. For the men a course will be given in "Radio Reception and Transmission." It will be sufficiently elementary to appeal to those radio enthusiasts who are interested chiefly in the results that they can get with their own sets, and who do not care to go very deeply into technical details.

Ten Lectures by Goodrich The course will consist of 10 lectures, each 15 minutes in length, given by Edward H. Goodrich of Springfield, each Wednesday evening, from 7 to 7:30 p. m.

Other Subjects If Any Demand With the addition of radio lectures in the correspondence instruction, this work can be made even more valuable and more extensive.

For women, the division will broadcast a course in "Household Management," consisting of eight lessons and given each Tuesday evening from 7:40 to 8 o'clock.

May Offer Prizes This application and payment constitutes an enrollment and entitles the student to receive an orderly material which may be sent out by mail, and to submit lesson papers to a university instructor for correction.

RADIO AUDIENCE NOW NUMBERS MANY MILLIONS

United States Owns and Operates 99 Per Cent of the World's Radiophone Stations

LINGUIST EXPERT GIVES FREE ADVICE

Hundred Foreign Nations Kept Informed as to Progress of the Wireless Art

In an effort to put wireless on the map of the world the wireless brokerage house of New York, P. C. Kullman & Co., 110-112 Nassau street, is persistently circulating government officials and others in charge of radio development in 112 foreign countries.

OPPORTUNITIES FOR AMBITIOUS RADIOMEN

Salaries Run From \$1500 to \$10,000 a Year—Junior of Today Tomorrow's Executive

As radio becomes more and more a commercial necessity, it is obvious that with the increasing demand for trained radiomen, will come a corresponding increase in the salary scale.

Linguist Expert as Adviser E. Walker Sawyer, a member of the Institute of Radio Engineers, and known through his magazine articles and his radio work on the Pacific coast and Europe, has volunteered to assist in putting radio on the map of the world and recipients of circulars are informed that he will answer any technical questions in English, French, Spanish, Italian, German or Portuguese, by mail, cable or radio.

The following list of stations of the world has been compiled by the Kullman's to show the great strides being made in the installation of radio stations throughout the world:

Table with 4 columns: Station, Call, Wave Length, Power. Lists stations from London to Paris.

Anchored in Eagle Bay Among the Thousand Islands



Late in the summer Will Prescott, vice-president of a laundry syndicate in New York state, was anchored in his motor boat in the center of Eagle bay, in the St Lawrence river, a mile from the nearest land, when he heard through his radio outfit an appeal from WBZ asking for radio vacation pictures.

150 Pairs of 'Phones Hooked to Receiver

The real radio fan enjoys his radio concert most when he has a number of friends with him to enjoy the treat he has lauded after fishing around in the air for a while.

But a somewhat different example of community reception is that revealed in a letter from Arnold S. Hago, president of the Trudeau club at the Glen Lake sanitarium, Oak Terrace, Minn., to the WGY studio.

GUARDING THE EASTERN COAST

Nantucket Shoals Has Eighth Radio-Equipped Lightship—Five More to Be Established

Washington, Sept. 29—A survey of the use of radio signals in navigation, just completed by the lightship service of the department of commerce, states that the new radio-equipped light vessel on Nantucket shoals is the eighth radio fog signal commissioned by the department.

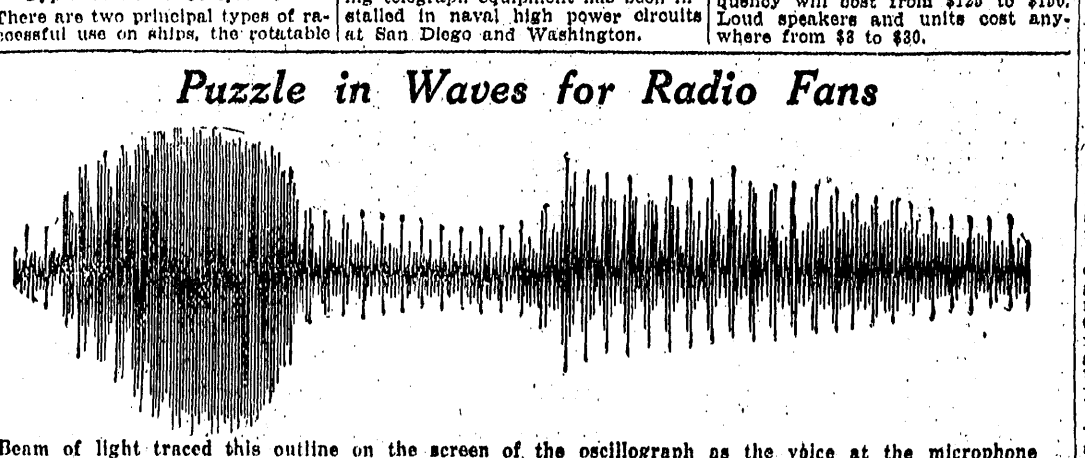
Two Boys Log 100 Stations

Two Philadelphia boys, Mattland and Spencer Roach of 2805 Columbus avenue in the Quaker City, with a home-assembled set, recently logged 100 stations, one of them 2000 miles from their home city.

Puzzle in Waves for Radio Fans

The end of the fiscal year shows a gain of 112 radio stations of all kinds in the United States, according to the department of commerce figures just compiled.

Beam of light traced this outline on the screen of the oscillograph as the voice at the microphone articulated the word, "Hello"



Oscillograph Renders Voice Visible to Radio Engineer

Instrument "Check Up" Transmission and Helps to Provide Perfect Modulation and Clear Reception For the Great Army of Listeners

The illustration shown was reproduced from a motion picture film, not of the ordinary movie theater variety, however. A device known as an oscillograph created this very complex series of zigzag curves.

Inspector of Modulation Connections to the oscillograph are made at the extreme end of the long path over which the sound-modulated electrical oscillations must travel before being shot out from the antenna to eager listeners.

Snapshot of Living Voice After completing this process, one will find that the oscillograph lines represents some form of wave motion. However, that is but the first step toward the solution of the problem.

While engineers at this station expect a continuous performance of this specimen of the oscillograph, the interpretation and application of their observations "behind the scenes" at Broadcast Central is of small concern to the radio fan, who is not interested in their technical problems but in

Inter-type Offers Prize Tomorrow night, too, WEAF offers a prize for the best story written by a radio listener.

8:45 p. m.—Sunday vesper on the Springfield Municipal chimes transmitted direct from the Campanile, Ernest Newton Bagg.

9:15 p. m.—"The Day is Past and Over." Anthem, "Ye Shall Dwell in the Land."

9:30 p. m.—Church services conducted by Rev. J. H. Chaffee, pastor of the Methodist Episcopal church.

9:45 p. m.—"Blossom Time" performance. The WGY Players, who have been out of their homes for some months will resume their weekly radio offerings at WGY, the Schenectady station of the General Electric company.

10 p. m.—"The Annals of the Year." 11 p. m.—Sunday evening concert by the Hotel Commodore orchestra.

10:30 p. m.—Recital by Beulah Beach, noted soprano. Troy (WHAZ) Monday 9 p. m.—(Program suspended until WGI has completed broadcast of "Blossom Time.")

10:30 p. m.—Sunday evening concert by the Hotel Commodore orchestra under the personal direction of Ernest Newton Bagg.

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MARINE BAND HAS SIXTY INSTRUMENTS

Is Now on Tour, and Its Music Will Be Broadcast Twice From New York This Week

For only the eighth time in its 123 years of existence, the United States Marine band is away from Washington, and while on a concert tour authorized by one of the last official acts of the late President Harding it can visit only a limited number of cities.

Over 800,000 people. The band, probably the most famous in the world, was created by President John Adams in the act of 1798, and actually began its duties in 1801 with 13 members.

Until 1911 the band had never played outside of Washington. In 1911 year permission was granted for it to visit Nashville, and the following year a six weeks absence for concert tour was granted the organization.

Mount the sockets of their cell tubes on a soft piece of rubber on a piece of wood suspended by flexible springs, and much of the noise due to slight or heavy shocks and jars will be eliminated.

The flange wires also have a tendency to sag when heated, and in bringing in contact with the other elements may

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COMING EVENTS IN THE FIELD OF BROADCASTING

Twelve Numbers to Be Played on Municipal Chime By Ernest Newton Bagg Tonight

LEHIGH ALUMNI MEET IN TWENTY CITIES

Arrangements Made For Them to Participate in Nation-Wide Radio Program—Company Offers a Prize For Distance Reception

There will be no confusion in the matter of time today, nor for a few months to come, inasmuch as the Enet has gone back to Standard time and radio fans will not have to puzzle when searching programs to decide whether they are one hour ahead or one hour behind.

Character Actor to Feature Pickwick Trial Pickwick's tribulations, not to mention his famous request to Mrs. Bardell for "chops and tomato sauce," will be featured in the trial scene of Bardell vs. Pickwick, and the bullying Sergeant Buzfuz will bring back to radio fans the "living" characters of the immortal legal battle "reported" by Dickens, tomorrow night when St. Clair Bayfield, ex-Brent Great actor, will enact the great trial scene from WEAF, at 9:15.

MAKING A TONGUE SO LEVIATHAN CAN TALK

New York, N. Y.—A girl's deft fingers formed the tongue with which S.S. Leviathan "speaks" at will by radio telegraph to either side of the ocean.

Radio's Rush into Everyday Life Has Brought With It a New Vocabulary

The rush of radio into everyday life, as one writer has phrased it, is having its effect not only upon public habits and tastes, but upon the vocabulary of the average man.

A generation ago no one knew what a carburetor was—or differential, transmission, and a hundred and one other automobile terms which are now a part, often a large part, of the vocabulary of every body.

At yet today the language of the technical radiologist has become the everyday language of most men. They talk as freely—and as understandingly—of amperes, ohms, capacity, resistance, inductance, modulation and amplification as they used to talk about the price of a suit of clothes and the high cost of living.

They are not only making people happier and wiser through its entertainment possibilities and spread of information, but it is enriching the language with a brand new set of words and terms, which are rapidly becoming an indispensable part of every-day conversation.

Cost of Radio Sets A crystal set with a simple tuning coil, a crystal detector and a pair of cheap "phone cords" from \$5 to \$20 complete. A single tube set will cost from \$25 to \$50 if bought complete with dry cell, tube and batteries.

Automobiles Reduce Personnel During the last 10 years commercial companies developed automatic printing telegraph equipment for the transmission over land wires of typewritten characters from one point to another. The present means of copying signals with the tape requires the employment of two or three extra men for translating purposes.

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