

RADIO DEPARTMENT



New Radio Submarine to Foil U-Boats

THE illustration shows a new submarine controlled by wireless which may rout the Teuton U-boats. It is Robert Morton's model of a wonderful radio diver invented in his Los Angeles laboratory.

Recently Mr. Morton, using an 800 pound model of his invention, held an audience spellbound while he demonstrated it in a huge tank. The model swam the length of the tank as Mr. Morton touched the key of the wireless transmitter. Another touch reversed the propellers and the model returned to its base. Then an ether wave opened the valves of the little craft and it sank until only its antennae were showing. A tiny torpedo attached to the bow was then released by wireless and sped to the end of the tank.

"I can make a fifty foot submarine on these lines," the inventor said, "fill it half full of nitroglycerin, guide it into the Kiel Canal from an aeroplane and destroy every ship within a mile, or it can be guided into the mine fields of Helgoland, blow it up and sweep the entrance to the German base clear of mines. It simply means using the submarine as a huge mine."

[Those interested in radio-controlled vessels should read the article in the October issue, page 390, entitled—"A Radio Controlled Model Boat," by H. C. Van Benthuyssen and Max I. Black.—Editor.]

WIRELESS LOG OF A SEA CRIME.

A succession of wireless calls telling the story of a sea tragedy, in which an unknown steamship was the victim of a German submarine, are recorded in the log of a neutral vessel which arrived "in an Atlantic port" recently from a "Scandinavian port."

The calls were recorded while the neutral vessel was passing close to the Irish coast, on her way to this port, and begin with the international "S O S," followed by the message:

"We are being chased by a submarine."

Ten minutes later, the log shows, the following was heard: "Hurry assistance; we are being shelled."

A lapse of 15 minutes followed, then the entry: "Ship is on fire and sinking; captain ordered men to lifeboats."

Five minutes later comes the final message thru the air: "We are done for," giving also the position of the ship.

The neutral vessel, forbidden by regu-

lations to go to the rescue, relayed the call and in about 20 minutes picked up a radio from an American destroyer, reading: "We will reach you in one hour."

PERSONNEL OF A RADIO SIGNAL COMPANY.

A radio company of the Signal Reserve Corps is commanded by a captain and is composed of the following personnel: A captain and two first lieutenants, mounted. The enlisted men are a master signal

urges that more women be enlisted in the service. The letter reads that women telegraphers are in demand by the government for both the army and navy. They will not be taken abroad however. Their assignments will be at shore stations.

MANY STUDENTS TAKE U. S. WIRELESS COURSE.

Many students are taking the course of radio telegraphy in the U. S. Radio School, Parkway Building, Philadelphia, Pa.

More than 300 students are taking the course. The school is under the direction of Lieutenant G. Y. Cadmus, U. S. R. C., and was established when the government decided to educate a corps of several thousand radio operators for marine service.

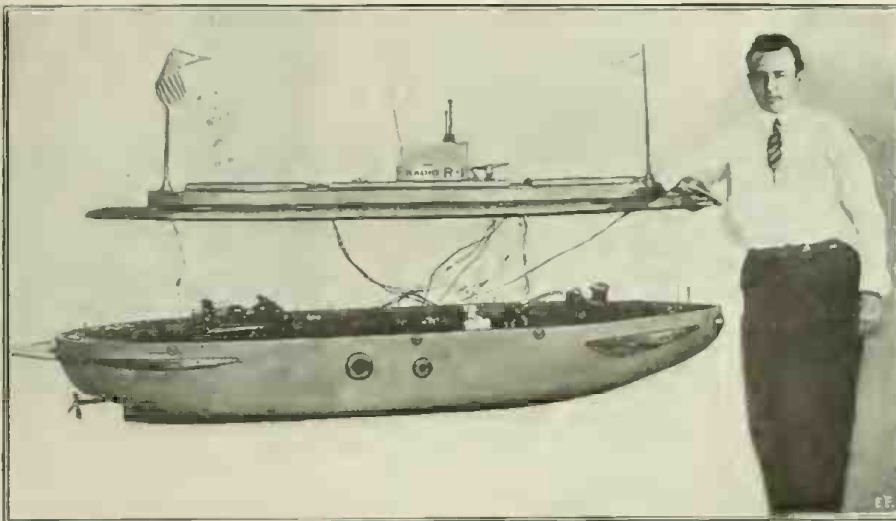
According to reports issued by the staff of instructors the end of the first six months' course will see more than 400 operators graduated from the school, who will be licensed as second-class operators. It is also said that a number of the men will be recommended for the special course in radio telegraphy given at Princeton University.

Previous to the graduating of the present class of students at the radio school in the Parkway Building, enrollment for the second class will start. According to plans announced by those in charge of the school, preparations will be made to accommodate more than 500 pupils. The government will need more than 5,000 wireless operators for marine service within two years.

A WORLD'S RECORD: RADIO HEARD 13,000 MILES.

A radio message has been intercepted half way around the world at last. Using an Audion, radio operator J. L. Davies at Radio Awarna, Invercargill, New Zealand, has accomplished this feat. In a recent letter to Dr. Lee de Forest, the well-known radio authority, Mr. Davies says in part:

"In my experimental work at present it may interest you to learn that using Audion bulbs of the double grid, double plate type, I am daily receiving stations antipodally situated in respect to this station. Distances of 13,000 miles are covered and some of the many stations at about that distance that I pick up are Eilvese, Germany; Eiffel Tower, Coltana, Las Palmas, etc., Eiffel Tower is easily copied on the typewriter, owing to the geographical position of my station." The distances mentioned are indisputably world records.



One of the Latest and Most Promising Models of a Radio-Controlled Submarine, With Which Its Inventor Hopes to Blast His Way Thru German Mine Fields to Their Naval Base Itself.

electrician, technical expert of the radio company, in charge of making repairs and adjustments to wireless telegraph apparatus.

Six sergeants, first class; one assists the captain, handling questions of supplies, finances, etc., and five radio operators acting as leaders of the five sections of the company.

Nine sergeants—a supply sergeant, a stable sergeant, a mess sergeant, one engineer for the gas engines and five acting as first assistants to section leaders.

Fifteen corporals, one farrier, one saddler, one company clerk (office work), two mechanics (miscellaneous repair work) and ten operators assigned to sections.

Thirty-five privates, first class; two trumpeters, two drivers and thirty-one privates assigned to sections. Six privates, one horseshoer and two cooks.

All are mounted except one mess sergeant, two mechanics and two drivers. The arms carried are automatic pistols.

WOMEN MAY ENTER THE WIRELESS SERVICE.

Women are entitled to the study of wireless telegraphy, the same as men, in the class organized by Prof. Harvey Anthony of the Muncie, Ind., high school, and it is hoped that many will file their applications.

A communication received recently by Prof. Anthony from the war department