



INTERNATIONAL ICE OBSERVATION AND ICE PATROL SERVICE

By Captain F. B. BASSETT, Hydrographer, U. S. Navy.

HISTORICAL

PREVIOUS to 1912 no ice patrol service had been maintained, but on April 14th. of that year, when the giant passenger steamer *TITANIC* was sunk on her maiden voyage by striking an iceberg, the U. S. Hydrographic Office recommended the establishment of an ice patrol.

The U. S. Navy Department, acting upon this recommendation, detailed the scout cruisers *CHESTER* and *BIRMINGHAM*, which immediately took up the patrol of the ice regions and continued it throughout the dangerous period of that year.

At the International Conference on the Safety of Life at Sea, which was convened in London on November 12, 1913, the subject of patrolling the ice regions was thoroughly discussed, and the convention signed on January 20, 1914, by the representatives of the various maritime powers of the world, provided for the inauguration of an international derelict destruction, ice observation, and ice patrol service consisting of two vessels, which should patrol the ice regions during the season of danger from icebergs and attempt to keep the trans-Atlantic lanes clear of derelicts during the remainder of the year. The Government of the United States was invited to undertake the management of this triple service, the expense to be defrayed by the 13 powers interested in trans-Atlantic navigation in a fixed proportion which was definitely agreed upon, subject to ratification by the law-making bodies of the Governments concerned.

As the convention, when ratified, would not go into effect until July 1, 1915, the Government of Great Britain, on behalf of the several powers interested, made inquiry on January 31, 1914, as to whether the United States would be disposed to undertake the work at once under the same

mutual obligations as provided in the convention. The President on February 7, 1914, directed that the service begin as early as possible.

Each year since then, with the exception of 1917 and 1918, a patrol has been maintained by the United States Coast Guard. The work includes scientific observations in oceanography and biology, as well as the locating of ice limits and the warning of shipping.

Arrangements are in progress to equip the patrol vessels for the season of 1924, with the Sonic Depth Finder, and it is hoped that this instrument will prove serviceable in detecting the presence of icebergs in the vicinity of the vessel.

DISSEMINATION OF ICE INFORMATION

The patrol vessel keeps in communication by radio with vessels in the danger zone, furnishing and receiving information.

The United States Hydrographic Office receives reports from the patrol vessel and from other sources, and broadcasts this information through U. S. Naval Radio Stations. It also publishes the information for the benefit of mariners in a Daily Memorandum, Weekly Bulletin and a Weekly Ice Supplement to North Atlantic Pilot Charts, which represents conditions graphically and indicates the normal and temporarily adopted North Atlantic Lane Routes.

NORTH ATLANTIC LANE ROUTES

By International Agreement, the selection of the steamer routes across the North Atlantic in both directions is left to the steamship companies. The principal steamship companies have organized the North Atlantic Track Agreement, a committee which prescribes the North Atlantic Lane Routes to be used at all times, changes being made to conform to changing ice conditions. Every influence is used to induce owners of all vessels crossing the Atlantic to follow the routes adopted by the Agreement.

