COMMERCIAL FISHERIES REVIEW

## THE ALBATROSS III

## By William F. Royce \*\*

The only ocean fisheries research vessel of the United States Government, <u>Albatross III</u>, was dedicated on March 19, 1948, at the Boston Fish Pier, Boston, Mass. Federal and State officials and leading members of the fishing industry took part in the ceremonies.

The Secretary of the Interior, J. A. Krug, speaking from the quarter-deck of the converted trawler to more than 300 people, stated:

"The dedication of the <u>Albatross III</u> for fishery research in the North Atlantic is an event which justifies widespread consideration of the important problem of fishery conservation in the North Atlantic area.

"While the commissioning of the <u>Albatross III</u> is a start towards nation-wide conservation and development of marine resources, we need similar facilities for the great Pacific Coast fisheries, the Central Pacific, for the unexplored areas of the Gulf of Mexico, and for the enclosed domestic waters of the Great Lakes."



ALBATROSS III AS THE TRAWLER HARVARD OF GENERAL SEA-FOODS CORPORATION

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ALBATROSS III IN COAST GUARD AS C. G. C. BELLEFORIE

The vessel has been named <u>Albatross III</u> to carry on the traditional name of the major fishery research vessel of the United States. <u>Albatross I</u> was a 234foot twin-screw, iron steamer. She was commissioned in 1882 and decommissioned in 1921. During her 39 years of fishery and oceanographic research, she visited both coasts of the United States, Alaska, South America, Central America, the Galapagos Islands, the Hawaiian Islands, Japan, the tropical Pacific islands, and the Philippine Islands. Many distinguished scientists sailed with her and their scientific work vastly increased our knowledge of the oceans. Her not-soglorious successor, the <u>Albatross II</u>, was a 148-foot ex-Navy tug. She operated from 1926 to 1932 and during this time was engaged in research on the mackerel fishery, explorations of the haddock fishery grounds, and preliminary experiments with savings gear.

Acquisition of Albatross III has occupied about 14 years. In 1934, President Roosevelt authorized a fishery research vessel for the North Atlantic, but no funds were made available. Five years later, the Harvard, a steam-driven trawler, was given to the Bureau of Fisheries by the General Seafoods Corporation for the sum of one dollar. In late 1941, after about two years of planning the conversion to research and obtaining the necessary funds, the Harvard entered a shipyard and reconstruction began. War broke out and the Navy requisitioned her. She was transferred to the Coast Guard, named the C. G. C. Bellefonte and completely rebuilt as an Atlantic patrol vessel. She was reconstructed from keel to masthead and put in top condition. Plates and frames were replaced and excellent machinery installed. This conversion was completed in 1944, but as the urgent need for an Atlantic patrol vessel had passed, she was returned to the Fish and Wildlife Service. She was laid up at Woods Hole, Mass., in a semi-operating condition until the summer of 1947. During this time, the plans were redrawn to fit the changes made by the Coast Guard and funds for her reconversion to a research vessel again obtained. Last July, she entered the yards of a shipbuilding corporation and reconversion got under way.

The basic lines of the <u>Albatross</u> <u>III</u> are very similar to those of the large Boston otter trawlers. She has a high head with a Maierform bow, a clear main deck about midships for the handling of fishing gear and a deck house from midships aft, housing the laboratories and officers' staterooms. Her length overall is about 179 feet. She has a beam of about 24 feet and a draft of 12 feet. Her displacement is about 525 tons. She will be able to cruise about 4,500 miles without refueling.

She is of welded steel construction throughout. The main deck is covered with planking set in mastic. The outside bulkheads are all insulated with fiberglass. She is heated by an oil-burning furnace and a circulating hot water system. All quarters, laboratories, etc., are provided with forced-air ventilation systems.

The <u>Albatross III</u> is powered by a 7-cylinder, 805-horsepower diesel engine. A temporary 4-blade propeller is installed pending delivery of an adjustable pitch propeller. With this temporary propeller she cruises at about 11 knots. The electrical system is 110-volt DC; 140 kilowatts are provided by 3 diesel motorgenerator sets. The engine room is fitted with a small machine shop containing a drill press, grinder, and lathe. The galley equipment includes an oil-burning range, a 12-cubic-foot refrigerator, a coffee urn, and a drinking fountain. The room used for storage of bulk galley supplies is mechanically refrigerated.

The chartroom and wheel house are fitted with the most modern navigational equipment. A partial list of the equipment follows:



THE ALBATROSS III LEAVES THE WHARF AFTER THE COMMISSIONING CEREMONIES IN BOSTON, MASS.



FIRST OFFICER JOHN COLLINS AND FISHERMEN MICHAEL SINYARD AND HUBERT POIRIER RIG A FISHING NET ON BOARD THE ALBATROSS 111

Radio-telephone, 75 watt Sonic depth recorder Loran receiver Underwater recording log Gyro compass and repeaters Radio direction finder Electro-telemotor steering gear Engine room telegraph Patent log Magnetic compass Chronometers Aneroid barometer Searchlight

The fishing equipment consists of a large electric winch with a capacity of 600 fathoms of 7/8-inch wire on each drum, which permits operation in 200 fathoms of water. The deck has been fitted out with the standard fishing arrangement of bollards and gallows frames, which will permit the use of full-size trawling nets with the speed and efficiency of the large Boston trawlers. The fish hold is necessarily small, because the space is required for other equipment and because large storage capacity is not needed. It is divided into two sections. The first is a standard hold fitted with pen boards for storing fish in ice. It has a capacity of about 50,000 pounds of fresh fish. Forward of this section are two refrigerated compartments for freezing and holding fish. The smaller room, for quick freezing, is capable of maintaining temperatures of 20° below zero. The other room will hold temperatures at about zero. The whole fish hold is insulated with sheet cork. The laboratories are located in the main deck house just aft of the fishing winch. The wet laboratory opens onto both the port and starboard decks through Dutch doors. It is fitted with a stainless steel sink in the center, suitable for handling and examining fish. Two small sinks are located in the cabinets on the outside bulkheads. These will be used for chemical and hydrographic work. Adequate shelving, cupboard, and drawer space is provided throughout the laboratory for the storage of apparatus. The dry laboratory or library is located aft of the wet laboratory. This room is provided with a large work table, chairs, bench, and shelves. It will be used as an office for scientists for the preliminary study of the data collected at sea.

Attached to the bridge deck just outside of the wet laboratory on either side are the booms for the lowering of hydrographic apparatus. The winches for these booms are located on the bridge deck. These booms feature a traveler to which the lowering block is attached and which is used to regulate the distance of the lowering wire from the rail.

On the port side of the forecastle is the plankton room. This room will be used to facilitate the handling and lowering of plankton nets used to capture the minute animals and plants found in the water. It has a Dutch door and a working platform built into the side of the ship, which is lowered when towing nets. Di-



CHIEF ENGINEER FRANKLIN A. MACAULAY AT THE CONTROLS OF THE 800 HORSEPOWER MAIN ENGINE OF THE ALBATROSS 111



CAPT. MARVIN O. RICE IN THE CHART AND INSTRUMENT ROOM OF THE ALBATROSS 111

rectly over this door is the plankton boom used to make the plankton net lowerings. It also has a traveler similar to the hydrographic booms. The plankton winch is located in the trawling winch room, port side.

The living quarters provide comfortable accommodations for the ship's personnel. The Master's stateroom is located aft of the chartroom. The officers', mates', and engineers' rooms are located aft of the engine room on the main and lower decks. The scientists have four staterooms located around the wardroom on the lower deck forward of the galley and crew's mess. A stateroom for the steward and cook is located on the starboard side just forward of the crew's mess. The crew's quarters are located in the forecastle lower deck.

The operating crew of the <u>Albatross</u> <u>III</u> will consist of 21 men. These are as follows:

Deck Chief Officer Second Officer Third Officer Fishermen (6) Ordinary seamen (3) Master

Engine Room Chief Engineer First Assistant Second Assistant Third Assistant Conmissary Steward Cook Messmen (2)

In addition to the above, the ship will carry 6 scientists in her normal complement. These will be a Chief Scientist, 2 Aquatic Biologists, and 3 Biological Aides. Space for 8 extra men is available. This allows for additional scien-

tists, who may be engaged on special problems, and more crew if such is necessary to efficient operation.

The Albatross III will be used to learn the facts necessary to maintain and increase the production of the fisheries of the northwest Atlantic. The research will be directed at problems of immediate and particular value to the fisheries. The problems receiving immediate attention will include:

- (1) Census of the fish populations on (3) Improving fishing gear. the New England Banks.
- (2) Learning the effect of otter trawling on the bottom.
- (4) Improving method of handling and preserving fish.



CAPT. MARVIN O. RICE IN THE "WET" LABORATORY OF THE ALBATROSS 111

