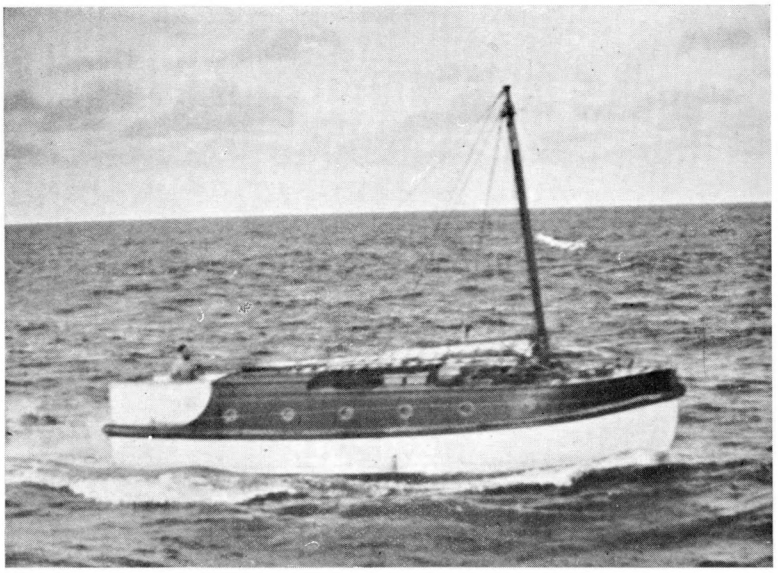
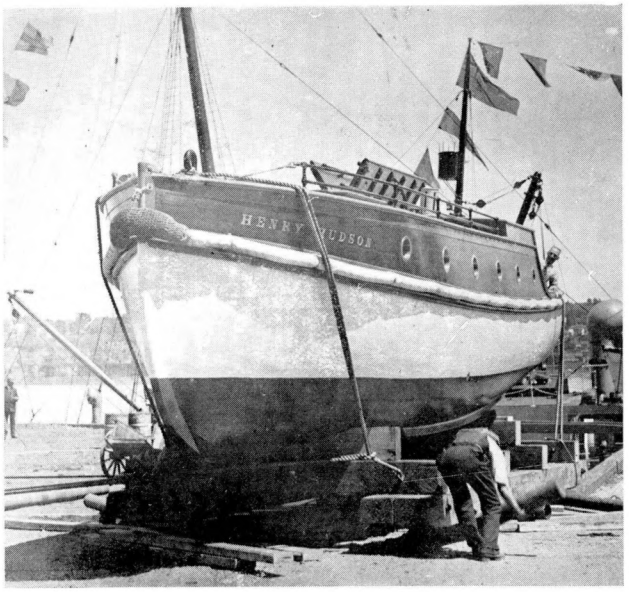
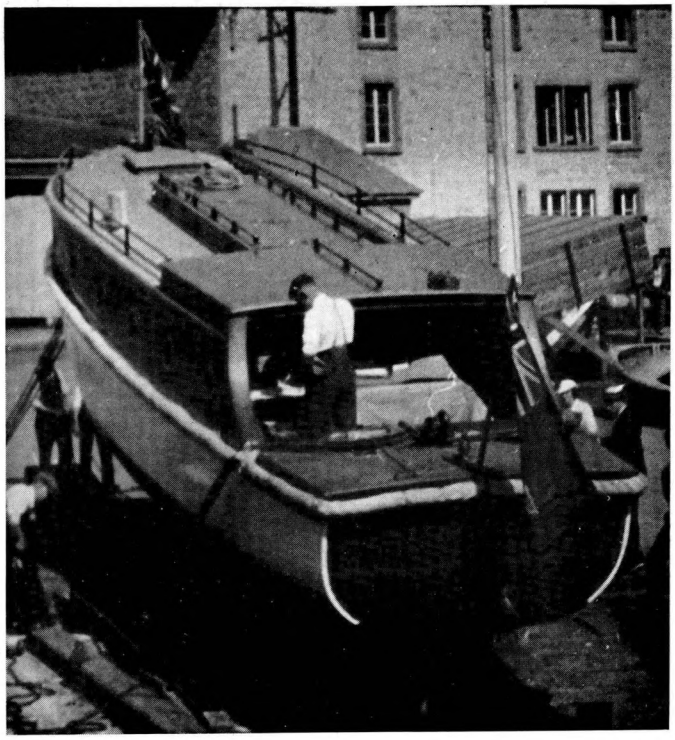




MOTOR CRUISER *"Henry Hudson"*.



MOTOR CRUISER "*Henry Hudson*".

SURVEYING BOATS *(Continued)*

by

VICE ADMIRAL J.D. NARES, D.S.O., PRESIDENT OF THE DIRECTING COMMITTEE.

CANADA.

The latest addition to the fleet of the Canadian Hydrographic Service is the auxiliary motor cruiser *Henry Hudson,* designed for the surveying of Hudson Strait, and for transportation to and from that locality aboard the Canadian Government Patrol Vessel operating on the Hudson Bay Route. She was constructed during 1935 at the Department of Marine yard at Quebec. (See Plan N° 32 and Figs N° 34-36).

		Feet	Inches	Metres
Dimensions of Hull.	Length over all	36	00	10,80
	Beam	9	00	2,70
	Draft	4	00	1,20

Displacement 12 Tons.

General Description. — Single screw wooden gasoline launch, carvel built, square stern, cockpit and officer's cabin aft, engine room amidships, galley and crew's quarters forward. Completely decked-in except for cockpit. Provides sleeping accommodation for 7 or 8 persons. Over the engine is a hinged hatch which can easily be removed to allow the engine to be hoisted out. For emergency purposes the boat is fitted with a removable mast and sail.

Engine. — One "Kermath Sea King" 120 H.P. Medium Heavy Duty Six Cylinders Model BEF.

Fuel Tanks. — Two 16 gauge copper petrol tanks aft, capacity 175 gallons. Square tank in engine room, capacity 40 gallons.

Speed. — About 9 knots.

The keel, keelson, stern knee, floor, engine bearers, bent frames, sheerstrake, garboard strake, bilge stringers, fenders, transom, bilge keels, and deck beams are of oak; outside planking white pine, 1 1/2 inches thick carvel built; deck planking and raised trunk roof white pine 1 1/4 inches thick. Decks covered with 10 oz. canvas. Cockpit and cabin floors, oak beams 2 in.×2 in. Floors laid with 3/4 in. pine. Bulkheads of pine 3 inches thick with V joint. The hull is sheathed with MUNTZ metal on the water-line extending from the bow aft about hali the length of the boat as a protection against ice.

Steering Gear. — Rudder plate and rudder stock in bronze, provided with rudder chain. Rudder stock passing through a brass tube let in fantail piece. Top of tube fitted with a water-tight gland. Rudder fitted with tiller.

Anchor and Cables. — One stockless anchor 75 lbs. and one of 35 lbs., each with 40 fathoms 3 1/4 inch hemp rope.

A cabin is provided for the officer-in-charge fitted with a settee, lockers, drawers, bookcase, pull-out table and a folding wash basin.

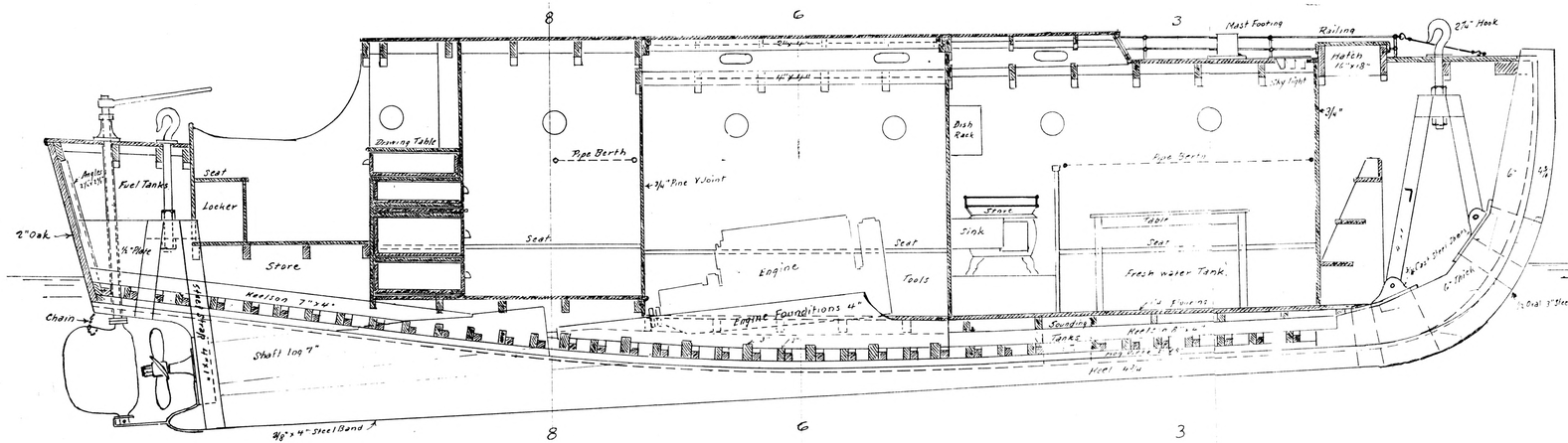
A main feature of the boat's hydrographic equipment is a British Admiralty echo-sounding instrument, Type M.S. II, which registers a graph on a scale of 7 fathoms to one inch in phases of 25 fathoms each. With this instrument depths of 250 fathoms were clearly recorded. The Recorder is located in the cockpit on port side. The instrument operates from three 12 volt batteries which can be charged from a portable electric generating plant in the engine room. The transmitter and receiver tanks are of 1/8 inch copper, circular in shape and built into the hull 12 feet from the bow. These tanks are sufficiently low in height to be placed entirely underneath the floor. With the tanks in this position it was found that the efficient functioning of the instrument was unaffected by aeration even in heavy seas.

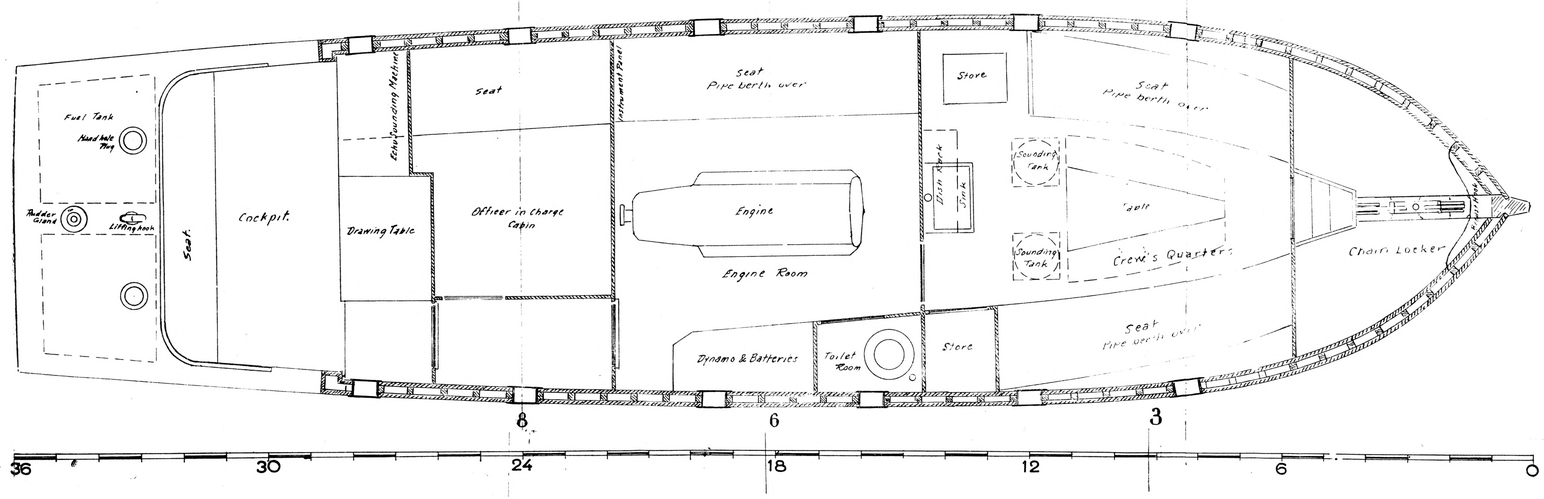
At the right of the sounding instrument in the cockpit is a chart table, above which is a window opening through the bulkhead into the officer-in-charge's cabin. Immediately under the table is a large drawer of sufficient height to hold sextant boxes, etc., below which is a complete set of lockers, drawers and a pull-out leaf table, all opening from the officer-in-charge's cabin.

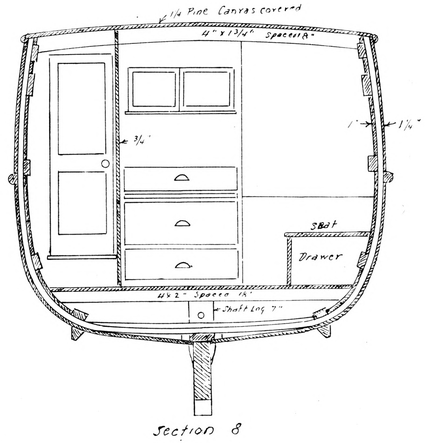
The floor of the cockpit is sufficiently high to enable the surveyors to obtain sextant angles all round the horizon without obstruction. Below the floor are two large metal watertight containers used for the storage of food supplies.

General Performance. — The *Henry Hudson* was used during the season of 1935 in the hydrographic survey of the Digges islands vicinity at the western end of Hudson Strait where some very heavy weather was experienced, and under all conditions she acquitted herself admirably and proved to be a very satisfactory type of boat for the work.

Should further details be required the Bureau will be pleased to supply them on request.







MOTOR LAUNCH HENRY HUDSON"

LENGTH OVER ALL 36'

BREADTH 9'

DEPTH 7'-3" AMIDSHIP

FOR THE

HYDROGRAPHIC SERVICE OF CANADA