

## ARGENTINE SURVEYING VESSELS.

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The Department of Navigation and Hydrography of the Argentine Republic possesses two Surveying Vessels: the Oceanographic Vessel "*Bahia Blanca*" and the Oceanographic Vessel "*Madryn*".

Both were built by the Hawton & Leslie Co., Ltd., Helburn-on-Tyne, England, and have the same characteristics, so that this article will be limited to a description of the first-mentioned vessel, the "*Bahia Blanca*". It is this vessel which, in fact, carries out the majority of the hydrographic campaigns since the principal duty of the "*Madryn*" is to watch over the Buoyage Systems, a service for which she has been more especially equipped.

The "*Bahia Blanca*" arrived in our country at the same time as her sister-ship, the Oceanographic Vessel "*Madryn*", in February, 1928.

The vessel's principal characteristics are the following :

Length overall.....	65.00 metres
Beam .....	10.00 »
Elevation .....	4.50 »
Displacement .....	850 tons.
Shaft Power .....	1,000 H. P.
Speed.....	10 knots.
Cruising range .....	5,400 nautical miles.

The propulsion system consists of a 6-cylinder 1,000 H. P. single-acting *Werkspoor* diesel engine, reversible, manœuvred by compressed air. A boiler is installed for use with auxiliary engines. Fuelling is by Diesel fuel-oil.

There is accommodation for 13 officers, 5 petty officers, and 74 crew.

The specified duties of the vessel are emphatically hydrographic and oceanographic and for this purpose she carries the following installations and equipments :

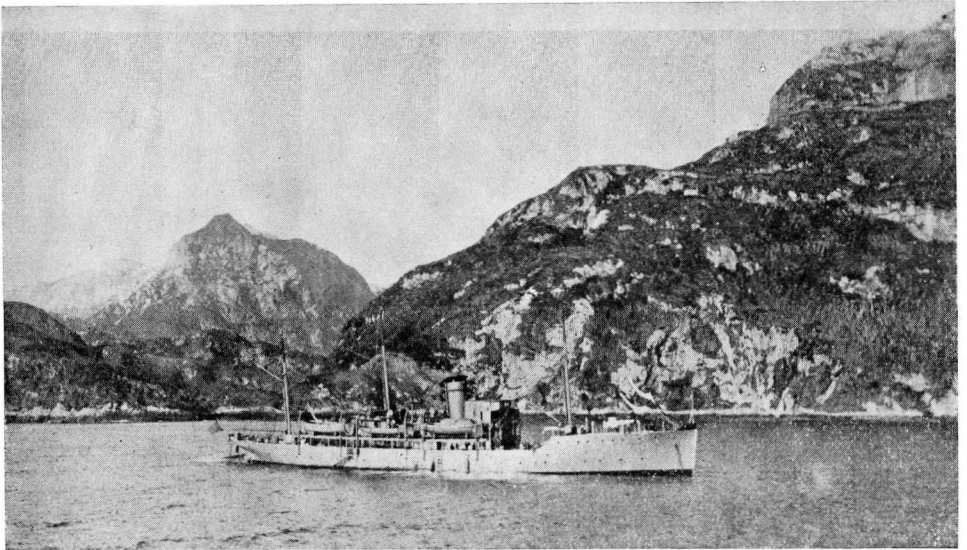
A small cabin assigned to the draughtsmen. In it is an intercommunication system with the navigation bridge, so that during sounding operations the vessel may be governed from the cabin and her track shifted as the work may require ; simultaneously with its execution the work is recorded on the corresponding plan. Also a microphone which, connected to the ship's transmitters and with an auxiliary receiver, ensures continuous communication with the surveying boats and with the observation stations ashore.

Four *Hughes* echo-sounders, three of type MS-XXI-"A" and one type MS-XXI-"B".

Navigational radar and complete W/T installation, 2 transmitters and various transmitter-receivers, besides the usual means of communication.

A completely fitted-out photographic laboratory where the current work may be done (developments, copies, enlargements, etc.).

An oceanographic laboratory with the elements necessary for undertaking on board all current preparatory work ; also a *Bekman* Ph. measurer, electrode



Argentine Oceanographic Vessel "*Bahia Blanca*".

in glass ; a bottom sampler (*Coring*) four *Snapper* bottom-samplers, reversible bottles with reversing thermometers, *Ekman* and *Idrac* current meters, a heavy wire-drag and plankton nets.

Two electric winches each with 5,000 metres of 1/2" cable.

The following are the "*Bahia Blanca's*" auxiliary craft :

1 flat boat, 2 10-oar lifeboats, 1 yawl, 1 skiff, 2 surveying boats : 4 tons ; length 8.00 metres ; beam 2.50 metres ; draught 0.60 metres ; speed 10 knots ; equipped with *Zenith* transmitter-receiver and *Hughes* echo-sounding machine type MS-XXII.

The anchorage equipment consists of 2 *Baldi* bow-anchors of 1,000 kilos, 8 links of chain 15 fathoms each, and a third, the *Martin* sheet-anchor, 850 kilos ; in addition, there are 3 *Admiralty* model grapnels weighing 345, 210 and 190 kilos respectively.

*Buenos Ayres*, 20th November, 1950.

