## THE BRAZILIAN SURVEYING VESSEL « JACEGUAY »

(Translation of an article in the Annaes Hydrographicos, Rio de Janeiro, 1936, Tome IV, page 29).

The Brazilian surveying vessel *Jaceguay*, acquired by the Brazilian Government at the beginning of 1937, has been definitely placed on the Navy List from February 17, 1937. At the present time she is undergoing slight repairs and alterations, and will commence her service of hydrographic surveying during the course of the year.

The name this vessel bears was conferred upon her in memory of Admiral Arthur Silveira da Motta, Baron de Jaceguay, one of the most eminent officers of the Navy. Born on 26th May, 1843, he entered the naval Academy at the age of 15 and proved a brilliant scholar. Promoted to the rank of Midshipman in the Navy in the year 1860, he completed a long training cruise and a short time after having been promoted to the rank of Ensign in 1863, was assigned to duty as instructor in Hydrography to the new corps of midshipmen.

In February 1865, being then a lieutenant, he saw service with the squadron which was preparing for the conflict with Paraguay in the Rio da Prata. From the start, the Squadron Commander, Vice Admiral Vicomte de Tamandare, had him assigned as his Flag Secretary and Aid.

When, two years later, Vice-Admiral Tamandare had relinquished command of the Brazilian Naval Forces, Silveira da Motta, already a Lieutenant-Commander in the Navy and *Conseiller* of the *Ordre de la Croix*, was sent to Rio as the bearer of important dispatches for the Emperor concerning the High Command of the Brazilian Forces.

On his return to the scene of hostilities, he was ordered in command of the cruiser *Barroso*, and on board this vessel he took part in forcing the passage of the Curupaity and later, his ship was chosen to force the passage of the Humaytà. The part taken by Silveira da Motta in this glorious page of our naval history earned him promotion to the rank of Commander and his nomination to the grade of *Dignitaire de la Croix*.

At the end of the war he was appointed in command of the frigate *Nictheroy* and was sent on a training cruise in the Atlantic. The year before he had already been promoted to the rank of Captain, at a time when he had barely reached the age of twenty-six.

Later, in his capacity of Commandant of the Brazilian Naval Station in the Rio da Prata, he was in charge of the hydrographic surveys of that estuary and the two rivers which empty into it.

At the age of 35 he was promoted to the rank of Rear-Admiral and the following year was sent on a special mission to China to negociate a commercial treaty. On his return to Brazil he was promoted to the rank of Vice-Admiral and received the title of Baron de Jaceguay, in recognition of the eminent services rendered the Empire throughout his naval career. He was then ordered as Commander-in-chief of one of the largest and most powerful squadrons ever assembled in Brazil under one command.

In 1887 he was retired from active service at his own request. This however, did not prevent him from continuing to lend his services to the Navy in 1900, when he returned to active duty by virtue of a special Act of Congress. He was appointed Superintendent of the Naval Academy, where he left his imprint as an instructor and a disciplinarian.

His last duty was as Director of the Service which has since been entitled the Service of Maritime Charts. His endeavours to improve the Hydrography of Brazil and the printing of the nautical charts are well known to those who work here today in the *Directoria*.

In February 1911, when his health was declining, he again obtained his retirement and on 6 June, 1914, he died at Rio de Janeiro.

He has left us various works of great technical value and several historical works on the War with Paraguay and on the Navy of his day. But a more valuable legacy for the Navy than his works is represented by the tradition which he has left by his acts and his life: a tradition of bravery, of discipline, of high-mindedness and solid technical preparation, which made him one of the most representative figures in the brilliant Navy of his day.

The Surveying Vessel *Jaceguay* was built at Glasgow, Scotland, by the Lloyd Shipbuilding and Engineering C° Ltd., and launched in 1919; the following are the principal characteristics:—

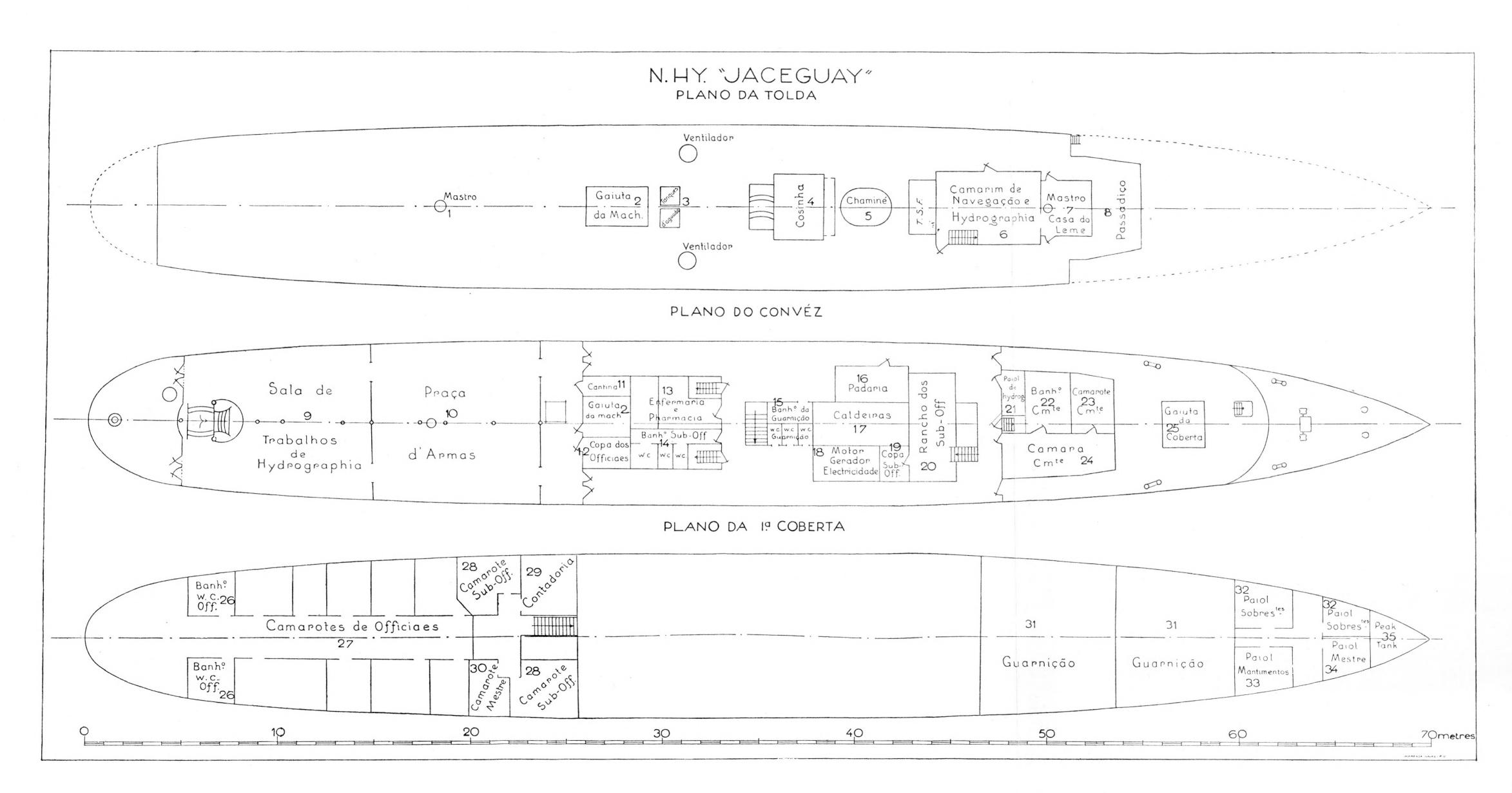
Length, over all	70.2	metres	(230	ft.)
Beam, midship-frame	8.35	))	( 27	ft.)
Freeboard above keel	4.50	))	( 15	ft.)
Maximum draft	2.75	))	( 9	ft.)
Displacement at maximum draft	815.15	tons		

The engines of the vessel are of the Yarrow Type, of 900 HP. each. Her boilers are also Yarrow type with a working pressure of 235 lbs/sq. in. Her maximum speed is 19 knots, economical speed, 14 knots. The radius of action of the vessel is about 1,500 miles.

The electric lighting is provided by a dynamo of 15 K.W. and a gasolene motor of 8.6 K.W.

For the hydrographic operations the vessel is supplied with two launches, identical to those on board the Surveying Vessel *Rio Branco*, described in the Hydrographic Review, Vol. XIV, N° 1. The following are the principal dimensions of the launches:—

Length over all	10.2	metres	(33	ft.)
Beam	2.4	))	(7.9	ft.)
Freeboard, above keel	1.2	))	(4	ft.)
Draft	06	"	(2	ft )



This type of boat has already been sufficiently tried out in service in the various hydrographic expeditions of the *Rio Branco* and may be considered as fulfilling perfectly the role assigned to it.

The vessel is equipped with the following hydrographic equipment:—

Acoustic sounding machine of the Atlas Werke with range up to 500 m., radiogoniometer, Telefunken type; an electric log. This equipment will be installed in the chart room, located just abaft the bridge. This room which is spacious and well-ventilated, measures 3.7 x 5.5 metres (23 x 18 ft.). In addition to this equipment the vessel is also supplied with two sounding machines, and one of the launches will be provided with an Atlas Werke echo-sounder, giving soundings up to a depth of 100 metres.

The arrangement of the cabins and the quarters for the Commanding Officer, the officers and crew, as well as the construction of the water and fuel tanks, has been made the object of particular care, in view of the fact that the vessel must spend considerable time away from her base while on hydrographic expeditions.

The armory and the office for hydrographic work are located below the after superstructure. They are spacious, well ventilated and have adequate natural lighting. The office for hydrographic work measures 7.5 by 8 metres (23 x 26 ft.).

The vessel is designed to carry on board: One Commanding Officer, 8 officers and 71 men.

