

Vice-Admiral Hydrographic Engineer

Augusto RAMOS DA COSTA

(1865-1939)

Vice-Admiral Hydrographic Engineer Augusto Ramos DA COSTA died on the 10th August 1939. He entered the Portuguese Navy in 1883 and left it in August 1930, having reached the age limit, after 47 years of prominent activities in the maritime and scientific world. He effected, as a young officer, a two-years campaign at Macau, and took part in the hydrographic commission to Mozambique, but had to be sent home on account of illness. He then dedicated himself to scientific research and published numerous books. During many years, he was in charge of the adjustment of compasses on board war and merchant ships. Following a competitive examination, he became Professor at the Naval College, where he held the chair of Astronomy and Navigation. He was also Professor of Topography and Geodesy at the Military College, and held a class for Hydrographic Engineers.

As Head of the Portuguese Hydrographic Office, he represented his country at the International Permanent Council for the Exploration of the Sea, at Copenhagen, and at the International Hydrographic Conferences at Monaco. He reorganised the Hydrographic Office in Portugal. Credit is also due to him for the study regarding the adoption on the continent and in the colonies of the system of buoys and beacons proposed by the Washington Conference and the project of lighthouse illumination for the coast of Portugal.

He is the author of numerous nautical works and articles relating to naval instruction and to the technical development of navigation. Among these, we cite the following :

- 1897 — Roteiro da barra e do porto de Lisboa.
- 1898 — Instrucções para o uso da agulha magnética.
- 1900 — Algumas palavras sôbre o eclipse do Sol de 1900. E a sua influência no magnetismo terrestre.
- 1903 — Instrucções para o uso do taximetro português e do prumo de sir W. Thomson.
- 1903 — Tratado elementar de Cronometria.
- 1905 — Etude sur les déflecteurs.
- 1907 — Tratado elementar de Trigonometria rectilinea e esférica.
- 1908 — Noções gerais de Geografia matemática.
- 1910 — Noções gerais de Oceanografia.
- 1913 — Análise harmonica aplicada as marés.
- 1914 — O serviço meteorológico e a sciencia da meteorologia.
- 1915 — Agulhas giroscópicas. E o seu confronto com a agulha magnética.
- 1918 — Tratado elementar das agulhas magnéticas, giroscópicas e electro-magnéticas.
- 1919 — A origem do campo magnético da Terra.
- 1920 — Roteiro da barra e do pôrto de Lisboa.

- 1921 — Tratado elementar de Cronometria.
1921 — A Teoria da Relatividade.
1923 — Espaço, Matéria, Tempo (Trilogia einsteiniana).
1923 — Manual elementar da regulação e compensação.
1923 — Tratado prático de cronometria e teoria de relatividade.
1930 — Algumas contribuições para o estudo progressivo da moderna Oceanografia.

He took a special interest in the study of tides and published an article on the *Tratamento das ondas de longo periodo pelo método de análise harmónica*.

Officer of great distinction and high scientific knowledge, Vice-Admiral DA COSTA was a member of the Academy of Science of Portugal. The following honours were conferred on him: Spanish Cruz de Mérito Naval, Gran Cruz de Avis, Gold Medal for exemplary behaviour and Victory Medal.

