OBITUARY NOTICE

CAPTAIN ABEL FONTOURA DA COSTA (1871-1940)

The naval scientific world has suffered a great loss in the person of Captain Abel Fontoura da Costa of the Portuguese Navy, who died on 7 December, 1940.

He entered the naval service as a midshipman in the year 1887 and since that time displayed greater and greater talents, sustained by persistant and hard work directed towards the perfection of the theory and practice of navigation. His career and his entire life were devoted to a long series of labours in various fields, among which figured very prominently the development of nautical science and the study of maritime archeology.

A distinguished mathematician, his ingenious mind soon made itself manifest and he astonished his comrades in the Naval Academy by this concept of the curious *Teoria das pinhas de anel*, which was later made the subject of one of his contributions to the Academy of Sciences (The Turks Heads and the Equation of their interwining - 1938).

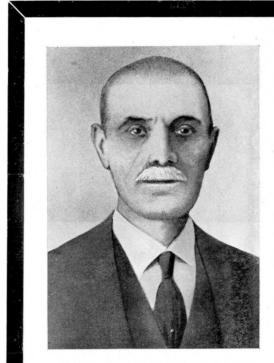
While in command of the gunboat Mandovy he collated the most meticulous information for an edition of the Roteiro das ilhas de Cabo Verde. Having developed a special method for the calculation of the position at sea, he published, in collaboration with V. H. AZEVEDO COUTINHO, a new set of tables intitled: "Tábuas para Cálculos Náuticos" (1907).

Promoted to the rank of Commander in 1915 and to Captain in 1919, he served as instructor for a number of years and later as professor at the Naval Academy and the Nautical School of the Merchant Marine, of which he was named Director from 1936 until he reached the age limit. He was also a Member of the Advisory Board for the improvement of the Lycee at Lisbon.

In June 1910 he headed the Portuguese Commission for the delimitation of the frontier with the French Congo.

He served as Governor of the Cape Verde Islands from 1915 to 1917, and in 1923 he assumed for several months the duties of Minister for Agriculture and for the Navy.

In 1938 he attended the International Congress of Historical Sciences



Captain Abel Fontoura da Costa.



at Zurich and in 1939 he was charged with the mission of visiting France, Germany, Italy and England, as a Member of the Executive Committee of the Second Centenary and of the Exhibition of Ancient Portuguese Cartography, to collect copies of the principal ancient charts of the XVIth century.

It was as professor of Navigation - a subject to which he devoted his entire career - that Captain Fontoura da Costa had occasion to apply his great ability to the investigation and interpretation of the Maritime Art of the ancient Portuguese navigators; to this he devoted practically all the last years of his life as well as his leisure moments and was thus enabled to bring to life the monuments of the ancient navigation in his important work A Marinharia dos Descobrimentos,(*) published originally in the "Anais do Club Militar Naval" of Lisbon, and accompanied by a Portuguese Nautical Bibliography extending to the year 1700, which entitled it him a high place amongst the authors of such historical works.

The works of Captain Fontoura da Costa were equally well appreciated in foreing countries as in Portugal. He was made an honorary Member of the Academy of the French Navy and participated in numerous international maritime conferences. A Grand Officier of the Military Order of Aviz and decorated with the Gold Medal for Comportamento Exemplar, he had also received the distinction of the Order of the Bath.

Below we give a bibliographical list of the most important maritime works of Captain Fontoura da Costa.

- "Sôbre deflectores" (separata da Rev. Colonial e Maritima) 1905.
- "Tábuas náuticas" (em colaboração com V.H. Azevedo Coutinho) 1907.
- "Uma recta de altura histórica" (Anais do Club Militar Naval) 1913.
- "Fórmulas do triângulo de posição" (Anais do Club Militar Naval) 1920.
- "Elementos de navegação astronómica moderna" 1921.
- "Traçado das curvas de altura" (Separata dos A.C.M.N.) 1927.
- "Navegação radiogoniométrica Curvas e rectas do azimute" 1927.
- "Instruções sôbre os deveres do encarregado de pilotagem" (em colaboração com Rául Mário de Serra Guedes, Vitor Hugo de Azevedo Coutinho, Fernando de Oliveira Pinto e Sebastião José de Carvalho Dias) 1929.
- "Hora do relógio de bordo (hora legal) ao meio-dia verdadeiro, sendo o observador móvel" (Anais do C.M.N.) 1929.
- "Moderna navegação astronomica" (Fôlhas da 5a. cadeira da Escola Naval) 1930.
- "Desvios da agulha magnética" (Fôlhas da 5a. cadeira da Escola Naval) 1930.
- "O actual e o futuro ponto no mar" 1930.
- "Normas relativas a operações sôbre logarithmos" (em colaboração com R.M. Serra Guedes e Francisco Penteado) 1931.
- "A reforma do calendário" 1931.

^(*) See Hydrographic Review, Vol. XII, No 2, Monaco, November 1935, pages 154-162.

- "Compensação estável do desvio quadrantal das agulhas liquidas de forte momento magnético" (Anais do C.M.N.) 1932.
- "Instruções para uso das principais Tábuas do "Ponto Auxiliar" (em colaboração com Francisco Penteado) 1932.
- "Bibliografia dos roteiros portugueses até ao ano de 1700" 1933.
- "L'almanach perpetuum de Abraham Zacut" Leiria, 1496 1934.
- "A marinharia dos descobrimentos" 1934.
- "Le point du navire" (Trabalho apresentado à Academia de Marinha Francesa) 1936.
- "Astronomical Fixes by Azimuth, astronomical fixes by simultaneous altitude and azimuth of the Sun, Radiogoniometric fixes for distances nearer the Station" (Hydrographic Review, Vol. XIV, N° 2, Monaco, November 1937).
- "La science nautique des portugais à l'époque des découvertes" 1935.
- "Tábuas de altura e azimute" (em colaboração com Francisco Penteado) 1936.
- "As portas da India em 1484" 1936.
- "A arrojada viagem de Pedro Alvares Cabral e da sua Armada" (1500-1501) 1937.
- "Deambulações da Ganda de Modafar, rei de Cambaia, de 1514 à 1516" 1937.
- "A intriga penúltima página do Regimento de Munich" 1937.
- "Les bonnets turcs et son équation d'ourdissage" 1938.
- "Pedro Nunes (1502-1578)" 1938.
- "Descobrimentos maritimos africanos dos portugueses com D. Henrique, D. Afonso V. e D. João II" 1938.
- La découverte du Brésil en 1500, 22 Avril, date historique; 3 Mai, date conventionnelle" 1938. (Revue Hydrographique, Vol. XVI, N° 1, Monaco, Mai 1939).
- "Sôhre una nova versão, do descobrimento da Ilha de Santiago de Cabo Verde" 1938.
- "L'art nautique des découvertes" (Public. na Revue d'Histoire Moderne) 1939.
- "Cartas das Ilhas de Cabo Verde de Valentim Fernandes (1506-1508)" 1939.
- "Bibliografia náutica portuguesa até 1700" 1940.
- "Roteiros portugueses inéditos da carreira da India do século XVI" 1940.
- "Roteiro da primeira viagem de Vasco da Gama, por Alvaro Velho" 1940.
- "A arte de navegar, por mestre Cristóvão Bruno" 1940.
- "O livro da marinha do Vaticano" 1940.
- "Sete únicos documentos de 1500 conservados em Lisboa referentes à viagem de Pedro Alvares Cabral" (em colaboração com o dr. António Baião) 1940.

H. B.

