## THE NETHERLANDS

## Kingdom of The Netherlands

The Kingdom of The Netherlands is situated in northern Europe, it is bounded to the south by Belgium and to the east by Germany. The land area is about  $15,900~\text{M}^2$ . The population is about 15.5~million. The capital city is Amsterdam but the seat of government is at Den Haag (The Hague), while Rotterdam ranks as the largest port in the world.



FIG. 1.- The Netherlands.

Historically, the seventeenth century was a golden age of maritime discovery and trade, the Dutch East India Company being formed in 1602; this was a period of great importance for the port of Amsterdam. The trade companies appointed chart makers of which Plancius and Blaeu are well known names, like the private chart makers company Messrs van Keulen. A complete coverage of the world was obtained and the Dutch were leaders in world hydrography and maritime cartography in the 17th and beginning of the 18th century, a position which was gradually taken over by the English and French hydrographers in the course of the

18th century. The Kingdom of the Netherlands is a constitutional and hereditary monarchy, the present Queen being Queen BEATRIX.

Geographically, the Netherlands coastal areas of the mainland consist of an alluvial plain. Much of the territory is below mean—sea level and is protected by massive sea defences. The offshore areas are very much an extension of the coastal physiography with a generally shallow sandy seafloor that has been formed in places into sandwave areas. Although this means that the bottom is free from natural obstructions, there are very many wrecks. Heavy shipping traffic through the Netherlands area and into its major ports requires continuous maintenance in the form of dredging, surveying and the construction of hydrologic structures.

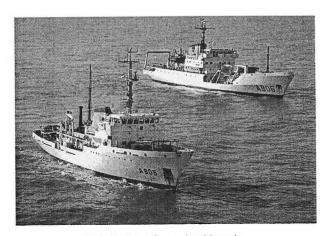


FIG. 2.- Two Surveying Vessels.

The discovery of large fields of natural gas on land in the 1960's led to further offshore discoveries extending also into British waters. Fishing is traditionally an important occupation and today recreational boaters are an important category of marine user as well.

The Netherlands has a strong relationship with the sea both as an ally and as an enemy. Land reclamation projects and the construction of defences against disastrous storm surges are but part of the subsequent marine activities. The Netherlands claims a territorial sea of 12 miles and an (exclusive) fishery zone of 200 miles. Continental shelf treaties have been agreed upon with Germany and the United Kingdom. Territorial sea and continental shelf boundaries are being negotiated with Belgium.

## Merchant and Naval Tonnage

The Netherlands currently has a total of 3,415,074 merchant tonnage and 109,342 naval tonnage. In addition, 445 fishing vessels are registered under the Netherlands' flag . There are 250,000 pleasure craft, of which some 120,000 are potentially seagoing.

## Hydrographic Service

The history of hydrography in the Netherlands goes back many years but, in particular, it became active in marine cartography during the seventeenth century. It became involved in hydrographic surveys both at home and in its colonies, particularly the East and West Indies throughout the nineteenth century leading to the establishment of its Hydrographic Bureau as a 5th Section of the Navy Department in 1874. The earlier history of the Service may be found in an article in the I.H. Review, 1974 (2) by Rear Admiral H.H. VAN WEELDE.

The Netherlands Hydrographic Service became a member of the IHO at its creation in 1921 and, apart from a break from 1934 to 1949, it has been actively involved in its affairs. Captain J.M. Phaff was elected as a member of the first Directing Committee and, on the death of Vice Admiral Sir John Parry, he became President in 1926. During that year, he also served as the President of the 2nd International Hydrographic Conference. Since then The Netherlands has provided three other Presidents and one Vice President of the Conferences. The dynamic Rear Admiral Ir. W. Langeraar was a strong proponent of the International Chart and in the formation of the North Sea Hydrographic Commission. In more recent years, first Rear Admiral L.H. Van Opstal, later on Chief Civil Hydrographic Officer B. Buis has chaired the Group of Experts establishing specifications for ECDIS.

For years the Netherlands Hydrographic Service has been based in The Hague and has a total complement of 200 naval and civilian personnel. Assistant Hydrographers are responsible for the civil and naval activities. The Service is active in both hydrography and oceanography, and is served by three surveying vessels. The hydrographic/oceanographic vessel TYDEMAN (2800 T) carries out far ranging activities in foreign and home waters while the smaller vessels BUYSKES and BLOMMENDAL (1050 T) mainly work on hydrography in North Sea waters, with incidental more distant missions.

The Service has a formal co-operation agreement with "Rijkswaterstaat" (Ministry of Transport) which is responsible for the many inland canals, waterways, estuaries and some deep draught channels. Survey operations in the home waters are harmonized under this umbrella.

The historical background in marine cartography remains strong and the Service maintains 75 charts. These cover all Netherlands' European waters and areas of the West Indies . Charts for Suriname (former Dutch colony) are now produced in co-production. Special charts for recreational craft as well as tidal stream atlases are produced. Technically, particularly in the field of cartography, the Netherlands Hydrographic Service maintains a forward position and is involved in the developments of digital data handling. ENC production is presently realised via the North European RENC.

Hydrographic surveying staff are trained primarily abroad, mainly in the United Kingdom, while cartographers are being trained in cartography at the ITC (International Training Centre) at Enschede.

The present Hydrographer, Captain L.P. VAN DER POEL was appointed on 30 August 1996 replacing Commodore E. BAKKER who has retired.