

northwest of Heligoland, the GHI has been studying the effects of these disposals during measuring cruises carried out regularly.

From June to August, at 14 measuring stations west of Sylt, the seaway was measured under British, Dutch and American participation with the objective to gain a closer insight into the generation and the dissipation of sea waves.

By request of the Federal Ministry of Education and Science, the GHI, in cooperation with industry, carried out a study on "Systems of automated measuring instruments at sea with telemetering of data".

For the current determination of time and latitude, 1952 transits of fixed stars were observed during 86 nights with the photographic zenith telescope of the GHI. The electronic installations of the time service were improved: Since 1 March, all time signals of the GHI indicate, with an accuracy of 0.1 milliseconds, the UTC (Universal Time Coordinated) of the Bureau International de l'Heure.

The Wind Effect and Storm Surge Warning Service issued – apart from the routine forecasts – 27 storm surge warnings and 9 navigational warnings on extremely low water levels. The Ice Warning Service promulgated 141 Ice Reports and 52 Ice Charts. The Nautical Warning Service transmitted by wireless 1980 informations to mariners. In the year under review, the Hamburg test office and the agencies of the GHI in other ports tested 63 480 nautical devices and instruments.

A commission set up in November by the International Hydrographic Organisation, in which the GHI is represented, finished the preliminary work for the publication of an international set of charts at scales smaller than 1 in 1 Million. The GHI, too, has taken over the responsibility for processing a number of charts.

As to nautical books and publications (Sailing Directions, Lists of Lights, List of Radio Signals, Notices to Mariners, Tide Tables and Calendars, Tidal Current Atlases, the Nautical Almanac a. o.) 693 980 copies were delivered, apart from 220 233 copies of charts. The annual volume 100 of the "Nachrichten für Seefahrer" was issued.