## London's unnecessary Flood Barrage

London, in its long history since Roman times, had often been flooded and records exist far back, as for example in the famous *Diary of Samuel Pepys*. On 7 December 1663 he wrote: "There was last night the greatest tide ever remembered, all White-hall having been drowned."

It was the overtopping of the East Anglia flood defences in November 1897 which finally spurred the British Government into action, and a Royal Commission was set up which reported in 1906 that either the coast tracts were sinking or that the tides had become higher. Then again, during the night of 6-7 January 1928 a particularly high tide overflowed the Embankment in the centre of London and 14 people were drowned.

At last serious research was started, as both Government and the people of London realised the dangers facing them. One of the results was that the 'storm surges' were recognised which occurred when there was high atmospheric pressure to the West of England and low pressure in the East, thus providing a pressure gradient which produced a flow of water into the funnel-shaped North Sea, between Denmark and England. A second discovery was the gradual downward tilting of the southern part of England, due to the rising of Scotland, as the result of the effects of the end of the last ice age. This amounted to about 2.5 cm per century, a quarter of a meter since the time of Roman occupation of the British Isles.

Together with the highest tide ever recorded in London, 2 meters above the predicted level, the final disaster occurred on 31 January 1953 with over 150 people drowned. Only in 1965 a study started of a Barrage across the Thames, designed to safeguard once and for all the Capital city of England. The 1953 flood caused the breaching of many dykes in the Netherlands, where the death toll was 1853 people. There, as a result of this tragedy, the great DELTA Plan was conceived andcarried out in the following decades. [See next page and Title 365]

In London, the great 500 m long Thames Flood Barrier was built and completed in 1982 with its seven huge gates, normally removed to let big ships pass upstream to the Docks. However, by 1982, this magnificent engineering achievement had become quite unnessary, as the great revolution of container transport from 1960 onwards, had occurred. It made Tilbury, far downstream from the Barrage, into London's major container port by 1965, and no large ships were any longer moving upstream to the Docks in central London. A simple dam, much cheaper, with suitable locks for small ships, would have had the same result of preventing high tides from reaching Central London. What an example of administrative delay and lack of interdisciplinary planning!