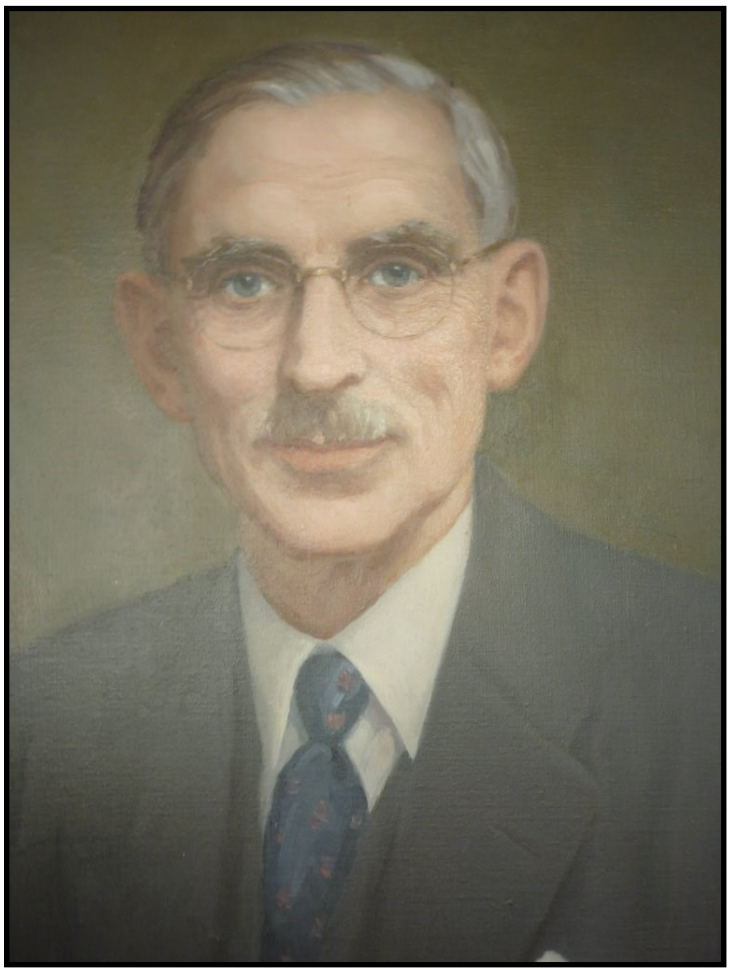
GUY MAUNSELL
Civil Engineer and Designer of the Thames Forts
- By Maxwell Macfarlane

Guy Anson Maunsell was born on 1 September 1884 at Srinagar, Kashmir, the third child and only son of Lt Col Edward Henry Maunsell, a cavalry officer of Anglo-Irish descent, and Rosalie Harriet Anson. He was educated at Eastbourne College, Sussex, in 1897-1903, and at the City and Guilds of the London Institute, 1903-06, from which he graduated BSc with 1st Class Honours. However, he found it very difficult to obtain employment and took a late gap year travelling around England with his sketch pad, for he was an excellent watercolourist whose paintings are now much sought after.

In 1908 he became agent for a contracting engineer, focussing on reinforced concrete and structural steel contractors, but in 1909 he moved to the Scottish firm of Easton Gibbs Ltd, the main contractors for Rosyth Royal Naval Dockyard.

In 1917 he was called up, aged 33, and commissioned into the Royal Engineers. He served for one year on the Western Front but was recalled to England, to work at Shoreham on secret concrete tugs and barges, and also involved in the design of concrete and steel towers intended to close the Straits of Dover to U-boats. Only two were completed and only one survives, the Nab Tower Lighthouse, on a small island in the deep-water channel off the Solent, shielding Portsmouth and Southampton.



Guy Anson Maunsell

In 1919 he put forward proposals to re-start a tunnel under the English Channel and to create a barrier across the Severn Estuary, but neither was taken up at the time.

In April 1922 he married Millicent Geraldine Mockler, also from a military family, and they eventually had two daughters. However, as a consulting civil engineer, though well qualified and a Member of the Institute of Civil Engineers, Maunsell again found it very hard to gain steady employment and often had to rely on his father for financial support. In the mid Thirties, he helped to design the steelwork of the much needed Kincardine Bridge across the Firth of Forth below Stirling.

In 1941, the Prime Minister, Winston Churchill, appreciated the vulnerability of the Port of London to aerial attacks up-river from the Thames Estuary and delegated the Civil Chief Engineer, Admiralty, to direct the construction of forts in the open sea to break

up enemy aircraft formations approaching the port. The design of the forts was entrusted to Guy Maunsell, who had experience of a similar task during the construction of the Storstrom Bridge in south-east Denmark. His proposal was to build the forts beforehand, complete in every detail at a site up river, tow the finished structure to its destination at sea where it was then sunk on to the sea bed.

Thames Estuary Forts

Four Naval forts were erected for the Admiralty in the North Sea at intervals from opposite Harwich to opposite Margate. They were named as ships, e.g. HM Fort *Tongue Sand*, and comprised a reinforced concrete platoon bearing twin cylindrical reinforced concrete towers surmounted by a steel superstructure carrying the armament (Bofors and Lewis guns) which were manned by marines and sailors. All four were in place by the end of 1942.

Six Army forts were then built for the War Office, three at the mouth of the River Mersey (which never saw action) and three in the Thames Estuary, north east of the Isle of Sheppey. These last were named Nore Fort, Red Sands Fort and Shivering Sands Fort. Their design and construction was quite different from the Naval forts. Each comprised of seven steel pods, each pod standing on four hollow reinforced concrete legs on a reinforced concrete base. Once in place the outer pods were connected to the central pod, the control tower, by tubular steel walkways. Each was manned by soldiers of 1st Anti-Aircraft Regiment Royal Artillery, of A.A. Command, and deployed searchlight, a Bofors gun, and four heavy A.A guns. All were in place by late 1943. The Army forts off the North Kent coast proved their usefulness by shooting down 22 enemy aircraft and 30 V1 flying bombs heading for London. All the forts proved the feasibility of the proposed Mulberry Harbours used off the Normandy beaches after D-Day in 1944, which were suggested and worked on by Guy Maunsell.

The Army forts were vacated in 1945 but maintained until 1955. Nore Fort was demolished in 1959-60 after being struck by two separate ships. Shivering Sands Fort was badly damaged in 1963. At times the forts were occupied by various “pirate” radio stations but have been abandoned for many years. The remains can be visited on summer boat trips from Whitstable harbour but actual access is now forbidden.

After the War, Maunsell returned to work with Sir Alexander Gibbs but in 1955 he founded G Maunsell and Partners, London, specializing in pre-stressed concrete design, and spent five years building it up, including the construction of several major bridges in Australia. He continued to work with concrete and his final project was the Hammersmith Flyover, though he did not see its completion.

He lived for a time at Jersey Farm, Hildenborough, but on retirement in 1959 he moved to “The Orchard”, London Road, Southborough. He died on 20th June 1961 and is buried in Southborough Cemetery.