

Flash steam tethered hydroplane 'Evil Spirit'

Built by Fred Westmoreland in 1915

'Evil Spirit' is one of Britain's oldest surviving tethered hydroplanes. It was the first boat to break the 25mph barrier, taking the British record in 1915 at 25.06mph, which she then held for seven years until 1922.

Fred Westmoreland was apprenticed as an engineer in 1892, and his great love was steam, which he pursued initially as a fitter for Bellis and Morcom in Birmingham. After a long spell with British Westinghouse and a short foray into car manufacture with Daimler he took up a private post as a mechanic to a wealthy Mancunian businessman, finally settling in Salford. Here he was able to devote most of his spare time to his workshop and became well respected as a model engineer, winning many prizes and certificates for the pieces he submitted to exhibitions around the country. Such was his standing within the local modelling community that he was elected President of the Manchester Society of Model Engineers in 1921 and 22.

'Evil Spirit' was built as a result of his two previous IC engined hydro's being unable to match the speeds of the contemporary flash steam driven boats. In 1914 the speed record was 24.25mph. held by HH Groves with 'Irene IV' and Fred used Groves' published plans and articles as a basis for his new boat.

The horizontally mounted twin cylinder engine is constructed primarily from items that were in his scrap box. The rotary valve controls both the steam admission and exhaust, although a set of auxiliary ports at the bottom of the stroke give a semi uniflow configuration. The boiler has 20ft of solid drawn steel tube with a single burner petrol blowlamp fed from a pressurised copper fuel tank. Thin brass reduction gears drive the oil and water feed pumps. The engine was temporarily fixed into 'Irene IV' for its trial run at Victoria Park London, in September 1955.

The metre long, single step hull, has a beam of 7" with 1/8" mahogany sides and 22swg aluminium bottom and transom. Fred commented that he should have made the width 8" as it would have made fitting the pipe-work easier and avoided later having to cut a hole in the hull and insert an aluminium plate where the superheated steam had burnt and warped the side.

Although a record holder 'Evil Spirit' suffered numerous mechanical breakdowns due to inherent design weakness of the engine and was never raced seriously. Following war service Fred gave regular demonstration runs until his untimely death in 1935. The 'Spirit' then passed to his son, also Fred, who disposed of it at some stage. Its later history is unknown until its discovery in a rubbish skip sometime after the Second World War, when it was then given to its present custodians, the N.A.M.E for safekeeping.

Compiled By On the Wire

Editors Note: If anyone can add to the details above the Northern Association would be very pleased to hear from them so that we can bring the story up to date. The boat is in poor condition but it is not considered appropriate that it be restored. However, the prospect of building a replica is being looked at.