

Rescue & Target Towing Launch Mk II

Information

RAF BOAT NUMBERS: 2751 – 2761 & 2767 - 2771

In the mid-1950's, after all the delays over the development of both the Rolls Royce Sea Griffon engines and the Mathway gearbox, Vosper produced the first of the MKII RTTLs, RTTL 2756. The hull form etc followed that of the previous MK1B, but with the introduction of the new power plant.

Subsequent to Vosper completing the MkII production series (RTTLs 2756 - 2761), other builders were given the option to complete further craft, with three completed by Groves & Guttridge at Cowes and two units completed by Saunders Roe at Beaumaris.

RTTLs 2751 - 2755 were retrospectively refitted with twin Sea Griffons replacing their original triple Napier Sea Lions.

The Sea Griffon RTTL MkII craft had a number of problems compared with their "Hants & Dorset" predecessors. The first concerned the three aluminium fuel tanks. These were prone to split, filling the bilges with AvGas. A redesigned five-tank system was introduced, with each tank cascover-sheathed with an epoxy-type coating. Fuel capacity was reduced to 2,200 gallons, further problems did not occur.

The second problem was created by the Plessey cartridge starters fitted to the main engines. Despite many built-in safety devices, the cartridges did not always align correctly, but instead discharged with an impressive jet of flame into the engine room. There were also difficulties restarting hot engines, or even cold engines, in a hot climate. After a few years and many thousands of cartridges later, it was discovered that the cartridges supplied had been of the wrong type.

The third and most significant fault with the MkII boats manifested itself over a period of time, when severe cracking of frames and outer skin began to appear under the starboard chines of several launches.

The problem was principally due to the fact that both propellers rotated in the same anti-clockwise direction while the hull tried to rotate clockwise in response to the torque effect. The starboard chine was effectively slamming into rock-hard water. Urgent trials were conducted to compare the angle of attack of the MkII launches with that of the veteran MkIs. It was found that that the newer boats tended to a bow-high attitude which meant that the deep vee section of the forefoot was above the water and not cutting into it to soften and divide the waves as it should.

Adjustable trim tabs were attached to the transom to deflect the nose of the raft downwards, but although successful, the trim tabs created handling difficulties in following seas. A fixed angle trimming wedge was fitted under the rear hull instead which also helped the launch to rise on to the plane more efficiently.

The boat used for the investigative trials was RTTL 2757. Although wedging helped to reduce the pounding, the torque reaction could not be eliminated altogether. The RTTLs were strengthened internally, but eventually a third outer skin was fitted to all the boats to the detriment of speed.