



UK

'River' class

With the limitations of the 'Flowers' readily apparent, the Admiralty rapidly produced a design for a larger 'twin-screw corvette' which became known as the 'River' class. (The term 'frigate' was not officially reintroduced until 1942). Overall they were about 28.30 m (93 ft) longer than the later 'Flowers' and this made a very great difference in seakeeping, bunker capacity, installed power and armament. Between 1942 and 1944 some 57 were launched in the UK, 70 in Canada and 11 in Australia.

The hull had the raised foreccastle extended well aft, with a low quarter-deck for the depth-charge gear and the minesweeping equipment with which too many useful escorts were cluttered at that time. They were the first ships to be fitted as standard with the Hedgehog anti-submarine spigot mortar which, with new sonar gear, made for a more rapid and accurate attack. The Hedgehog was originally sited well forward and was thus extremely exposed, but later units had the weapon split into two 12-bomb throwers which were sited one deck higher, winged out abaft the forward 101.6-mm (4-in) gun. Longer endurance demanded a larger depth-charge capacity, and up to 200 could be carried, compared with a maximum of 70 on the 'Flowers'.

Though not developed from a mercantile hull form the 'Rivers' were built to mercantile standards, which speeded construction. They featured a flat transom, which not only obviated much of the complex curvature of traditionally-shaped sterns but also actually improved the hull hydrodynamics. It is noteworthy that over half the 'Rivers' were Canadian-built (with more ships coming from Australia) and it is probably all too easily overlooked how magnificent a contribution the Canadian yards and the Royal Canadian Navy made to victory in the Atlantic. Most Canadian-built units had a

HMS Helmsdale was a 'River' class frigate, and as such was a great improvement on previous escort designs. Unlike most 'Rivers', she had her prominent Hedgehog ASW mortar system replaced by the much heavier and effective Squid triple barrelled ASW charge launcher.

twin 101.6-mm mounting forward and a single 12-pdr aft. They also had their full outfit of 14 20-mm weapons, which British-built ships rarely achieved. The machinery was simply that of the 'Flowers' doubled, though drawing steam from more efficient water-tube boilers. Four ships only were built with steam turbines, which were not generally adopted as a result of shortages of components. The 'Rivers' were highly successful, but most of the survivors (seven were sunk in the war) had been scrapped by the mid-1950s. Further 'Rivers', to a slightly modified design, were built by the Americans as the 'PF type'; of these 21 served in the Royal Navy as the 'Colony' class.

Specification

'River' class (original specification)

Displacement: 1,370 tons standard

Dimensions: length 91.9 m (301.5 ft); beam 11.12 m (36.5 ft); draught 3.91 m (12.83 ft)

Propulsion: two sets of 4-cylinder triple-expansion steam engines delivering 4101 kW (5,500 ihp) to two shafts

Speed: 20 kts

Endurance: 12970 km (8,060 miles) at 12 kts

Armament: two single 101.6-mm (4-in) guns, two single 2-pdr and 20-mm AA guns (later replaced by 10 20-mm AA guns), one Hedgehog, and depth charges

Complement: 107



A typically battered Atlantic escort, HMS Spey steams up the line of a convoy during February 1944, when this particular 'River' class frigate sank the Type VIIC U-boats U-406 (on 18 February) and U-386 (on 19 February).

Designed as ocean-going escorts with a range of 12970 km (8,060 miles), the 'Rivers' were at first fitted with almost totally superfluous minesweeping gear. Once this was eliminated from the design, oil storage rose from 440 tons to 646 tons, with a consequent improvement in endurance.

