

# River-class frigates background

The River-class frigate was designed by William Reed of Smith's Dock Company of South Bank-on-Tees. Originally called a "twin-screw corvette", its purpose was to improve on the convoy escort classes in service with the Royal Navy at the time, including the Flower-class corvette. The first orders were placed by the Royal Navy in 1940 and the vessels were named for rivers in the United Kingdom, giving name to the class. In Canada they were named for towns and cities though they kept the same designation. The name "frigate" was suggested by Vice-Admiral Percy Nelles of the Royal Canadian Navy and was adopted later that year.

Improvements over the corvette design included improved accommodation which was markedly better. The twin engines gave only three more knots of speed but extended the range of the ship to nearly double that of a corvette at 7,200 nautical miles (13,300 km) at 12 knots. Among other lessons applied to the design was an armament package better designed to combat U-boats including a twin 4-inch mount forward and 12-pounder aft. 15 Canadian frigates were initially fitted with a single 4-inch gun forward but with the exception of the HMCS Valleyfield, they were all eventually upgraded to the double mount. For underwater targets, the River-class frigate was equipped with a Hedgehog anti-submarine mortar and depth charge rails aft and four side-mounted throwers.

River-class frigates were the first Royal Canadian Navy warships to carry the 147B Sword horizontal fan echo sonar transmitter in addition to the irregular ASDIC. This allowed the ship to maintain contact with targets even while firing unless a target was struck. Improved radar and direction-finding equipment improved the RCN's ability to find and track enemy submarines over the previous classes.

Canada originally ordered the construction of 33 frigates in October 1941. The design was too big for the shipyards on the Great Lakes so all the frigates built in Canada were built in dockyards along the west coast or along the St. Lawrence River. In all Canada ordered the construction of 60 frigates including ten for the Royal Navy that transferred two to the United States Navy.

# HMCS *Penetang* (K676)



HMCS *Penetang* was a River-class frigate that served in the Royal Canadian Navy from 1944–1945 as a convoy escort during the Second World War. She fought in the Battle of the Atlantic as a convoy escort. She was recommissioned and served as a Prestonian-class frigate from 1954–1956. She was named for Penetanguishene, Ontario.

*Penetang* was ordered in June 1942 as part of the 1942 River-class building programme. She was laid down as *Rouyn* on 22 September 1943 by Davie Shipbuilding & Repairing Co. Ltd. at Lauzon and launched 6 July 1944. Her name was changed and she was commissioned as *Penetang* into the RCN at Quebec City on 19 October 1944 with the pennant K676.

## War Service

After working up in Bermuda in November 1944, *Penetang* was assigned to Escort Group 9 of the Mid-Ocean Escort Force (MOEF) as a convoy escort on trans-Atlantic supply convoys. She served the remainder of the war with the group, returning to Canada in June 1945. Upon the end of hostilities in Europe, *Penetang* was used as a troop-carrier between St. John's and Quebec City. She was one of the few new River-class frigates not to be sent for a tropicalization refit. She was paid off into the reserve at Shelburne, Nova Scotia on 10 November 1945. In December 1945 she was sold to Marine Industries Ltd.

## Post-war Service

### *As Prestonian class Frigate*

*Penetang* was chosen as one of the River-class frigates to undergo conversion to a *Prestonian*-class frigate. She was reacquired from Marine Industries Ltd. and underwent conversion in 1953–1954. She was recommissioned with pennant 316 on 1 June 1954. She remained in service until 2 September 1955, when she was paid off again.

### **Royal Norwegian Navy**

*Penetang* was loaned to the Royal Norwegian Navy on 10 March 1956 where she was renamed HNoMS *Draug*, after the revenant Draugr from folklore. *Draug* was purchased outright in 1959 and served with the Norwegian navy employed on fishery protection duties. She served with the Norwegian navy until she was decommissioned and scrapped in 1964.



KNM "DRAUG"

# HMCS *Prestonian* (K662)



*HMCS Prestonian* was a River-class frigate that served with the Royal Canadian Navy during the Second World War and as a Prestonian-class frigate from 1953–1956. She saw action primarily as a convoy escort. She was named for Preston, Ontario, however due to possible confusion with HMS Preston, her name was altered. In 1956 she began service with the Royal Norwegian Navy as *Troll*.

*Prestonian* was ordered on 1 February 1943 as part of the 1943–1944 River-class building program. She was laid down as *Beauharnois* on 20 July 1943 by Davie Shipbuilding and Repairing Co. Ltd. at Lauzon, Quebec and launched 22 June 1944. Her name was changed to *Prestonian* and she was commissioned on 13 September 1944 at Quebec City.

## War service

Due to her late entry into the Second World War, *Prestonian* did not see much action. Upon arriving at Halifax, she underwent major repairs and it was not until January 1945 that she began working up at Bermuda. After she returned she was assigned to EG 28, a local convoy escort group working out of Halifax. She remained with this unit until the end of the war in Europe. In preparation for service in the Pacific Ocean, *Prestonian* began a tropicalization refit at Halifax completing on 20 August 1945. However the plans to send her to the Pacific had been cancelled and she was paid off 9 November and sold to Marine Industries Ltd.

## Postwar service

*Prestonian* was reacquired by the RCN to undergo conversion to a *Prestonian*-class ocean escort as part of the need to expand the anti-submarine force within the navy. This meant a flush-decked appearance aft, with a larger bridge and taller funnel. Her hull forward was strengthened against ice and the quarterdeck was enclosed to contain two Squid anti-submarine mortars. As the first ship to complete the conversion, she gave her name to the new class. She was recommissioned 22 August 1953 with pennant 307. She served three years with the RCN in her new role before being paid off on 24 April 1956 and loaned to the Royal Norwegian Navy.

## Royal Norwegian Navy

*Prestonian* was loaned to the Royal Norwegian Navy in 1956 and renamed HNoMS *Troll*. She was employed primarily for fishery protection duties. In 1965 she was reclassified as a submarine depot ship and renamed HNoMS *Horten*. She served in this capacity until 1972 when she was discarded.



KNM "TROLL"

# HMCS *Toronto* (K538)



**HMCS *Toronto*** was a River-class frigate that served in the Royal Canadian Navy from during the Second World War and as a Prestonian-class frigate from 1953-1956. She was named for Toronto, Ontario. She was later acquired by the Royal Norwegian Navy and renamed ***Garm*** and then again in 1965 as **HNoMS *Valkyrien*** .

*Toronto* was ordered 1 February 1943 as *Giffard* (after Giffard, Quebec) as part of the 1943-1944 River-class building program. She was laid down on 10 May 1943 by Davie Shipbuilding & Repairing Co. Ltd. at Lauzon and launched 18 September 1943. Her name was changed to *Toronto* and she was commissioned into the RCN on 6 May 1944 with the pennant K538

## War service

Following extensive work-up exercises in the vicinity of Bermuda, *Toronto* was assigned to escort group EG 16 which operated out of HMCS *Protector* at Sydney, Nova Scotia. It was during this time *Toronto* saw service in the Battle of the St. Lawrence for which the ship was awarded the Battle Honour "Gulf of St. Lawrence - 1944." On 14 October 1944, *Toronto* was escorting ONS 33G when HMCS *Magog*, a fellow escort, was torpedoed by *U-1223*. *Magog* suffered significant damage from the attack but managed to stay afloat and *Toronto* took her in tow. However while towing *Magog*, the other GNAT, an acoustic German torpedo, detonated in *Toronto*'s wake. *Toronto* handed off the towing duties to HMCS *Shawinigan* (K136) after she recorded a contact and departed to chase it down unsuccessfully.

Following that she served with Halifax Force as a local escort until May 1945. In May she was assigned to HMCS Cornwallis as a training ship. On 27 November 1945, *Toronto* was paid off and placed in reserve at Shelburne, Nova Scotia.

## Postwar service

As part of the planned reactivation of 21 frigates to combat the Soviet submarine threat, *Toronto* underwent conversion to a Prestonian-class frigate in 1952. This meant a flush-decked appearance aft, with a larger bridge and taller funnel. Her hull forward was strengthened against ice and the quarterdeck was enclosed to contain two Squid anti-submarine mortars. *Toronto* was recommissioned with pennant number 319 on 26 November 1953.

## Royal Norwegian Navy

*Toronto* was paid off by the RCN on 14 April 1956 and loaned to the Royal Norwegian Navy as HMNoS *Garm*. *Garm* was purchased outright in 1959 and was employed primarily for fisheries protection duties. She was renamed in 1965 to *Valkyrien* and re-designated a torpedo boat depot ship. She served in this capacity until she was sold and scrapped by the Royal Norwegian Navy in 1977.



KNM "GARM"