



## JOINT SUPPORT SHIPS

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Canada’s guiding naval strategy, *Leadmark 2050*, highlights the Royal Canadian Navy (RCN) role as a ‘blue-water navy’<sup>1</sup> and notes that the RCN is a “globally deployable” force.<sup>2</sup> Canada is a trading state and virtually all non-US imports and exports are transported by sea. Canada, therefore, benefits from global stability underpinned by a rules-based international order. Recent challenges to this order, such as Russia’s annexation of Crimea in 2014 and China’s activities in the South China Sea, have highlighted the importance of deterrence and global presence for Canada and its allies. Canada has a lot a stake in maintaining the international maritime order, and thus requires a blue-water navy to help defend this global system.

In order for the RCN to deploy globally, it needs support. The support element is an often under-appreciated but essential element of a blue-water navy. The RCN has maintained its global reach with the Auxiliary Oiler Replenishment (AOR) ships. Described as a “floating grocery store, gas station, repair shop and helicopter hangar,” an AOR travels with RCN warships to replenish food, marine and aviation fuel, ammunition, and other vital stores, keeping them fed, fueled and operating far from Canadian shores.<sup>3</sup>

Until recently Canada had two AORs – HMCS *Preserver* and HMCS *Protecteur* – which were built in the late 1960s. Both ships have now been retired because it was easier and cheaper to decommission them than to repair them – *Protecteur* experienced a fire in February 2014, and *Preserver* had problems with its electrical system and so much corrosive rust that it was confined to harbour and officially paid off in 2016. This meant that Canada had a gap in its capability – it could no longer provide fuel to RCN ships. That’s a problem for any navy. This shortfall was overcome by arrangements with allied navies to fuel from their tankers, plus leasing an AOR capability from Chile to service the West Coast fleet, and from Spain to service the East Coast fleet. But it was clear that something needed to be done so that Canada would not have to rely on others for naval operations. The solution was to convert a commercial container ship into a supply ship to fill the gap until the new AORs are completed. The interim supply ship *Asterix* came into service in early 2018 (for more information on *Asterix*, see Briefing Note #11).

Plans to build new supply ships have been in the works since 1999 when the project was dubbed the Afloat Logistics Support Capability (ALSC). That plan was shelved as the Department of National Defence balked at the cost of the vessels. Since 2005 there has been a name change – to Joint Support Ships (JSS) – and a capability reduction, but the plan for new supply ships has kept moving forward. When the National Shipbuilding Strategy was announced in 2010, on the list were two (with the option of a third) JSS to be constructed at the Seaspan shipyards in British Columbia with a project budget of \$3.4 billion.<sup>4</sup> In June 2013, the design of the Joint Support Ships was made public. The new ships are to be based on the German *Berlin*-class design.

Initially, the plan was to name the vessels the *Queenston*-class, but in 2017 the RCN returned to the former *Protecteur*-class designation, and the ships will have the same names – HMCS *Protecteur* and HMCS *Preserver* – as their predecessors.

Construction is far behind the original schedule which was to have the ships achieve full operational capability in 2019. Part of the problem was the sequencing of the ships being built at

Seaspan. As originally envisioned in the National Shipbuilding Strategy (NSS), the JSS would be built *after* the construction of the Offshore Fisheries Science Vessels and the Offshore Oceanographic Science Vessel (for more on the NSS, see Briefing Note #6). To improve the schedule and mitigate a production gap within the shipyard, construction of large segments of the first AOR, known as early blocks, commenced in June 2018. But juggling shipyard capacity was difficult, and schedules were slipping, so in early 2019 the government decided to change the construction sequence of the JSS and Offshore Oceanographic Science Vessel (OOSV). Under the revised sequencing, the first AOR, the future HMCS *Protecteur*, was given priority, followed by the Offshore Oceanographic Science Vessel, and the second AOR, the future HMCS *Preserver*, coming afterwards.

Progress has been made on the first JSS. The keel of the future HMCS *Protecteur* was laid down in January 2020.<sup>5</sup> The first ‘grand-block’ was assembled in November 2019. (A ‘grand-block’ is formed when four large blocks are joined together.) According to Seaspan, as of spring 2021 construction of the first JSS is well advanced, with over 90% of the ship’s blocks currently in production. One of the 1,500-tonne grand blocks was recently moved into final position in the shipyard, and the major blocks that make up the ship’s bow section are also being integrated. The main engines have been delivered and Seaspan is now preparing for their installation. It is expected that the first ship will be completed by 2023 (and the second JSS to be completed in 2025).

Once complete, the new JSS will be the largest naval ship ever built in Canada. At just over 173 metres long and 24 metres wide, the two ships will have a cruising speed of about 15 knots, a top speed of about 20 knots, and a range of about 10,800 nautical miles – enough to sail from Halifax to Australia. Unlike the interim vessel *Asterix*, the new Joint Support Ships are being built to military standards, and will feature sophisticated damage control and self-defence systems, allowing them to conduct a full range of military operations in high-threat environments.<sup>6</sup> In addition to underway support to Canadian or NATO task forces, these operations could include maintenance of helicopters, and the ability to respond to chemical, biological and nuclear threats. In humanitarian operations the JSS will also offer medical facilities, a mobile command post and some limited sea-lift capacity.

While garnering less attention than the fighting fleet, the RCN’s AORs have long played a crucial role in maintaining Canada’s blue-water capability and global deployability. The future Joint Support Ships will carry on a proud tradition and keep the RCN looking outwards.

*The original of this Briefing Note was written in 2020 by Chris Yurris, an undergraduate student at St. Francis Xavier University majoring in Political Science. The Briefing Note has since been updated.*

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<sup>1</sup> A blue-water navy is a navy that operates in the open ocean as compared to a brown-water navy that operates in rivers or close to coastlines, or a green-water navy that operates close to the coastline but *can* operate in the open ocean if necessary.

<sup>2</sup> Royal Canadian Navy, *Leadmark 2050*, 2016, p. vi.

<sup>3</sup> Michael MacDonald, “Last of Royal Canadian Navy’s Supply Ships to be Retired,” *CTV* (21 October 2016).

<sup>4</sup> Canada, “Canada’s National Shipbuilding Strategy: 2018 Annual Report,” 2018, p. 25.

<sup>5</sup> “Seaspan Shipyards Hosts Ceremonial Keel Laying for HMCS *Protecteur*,” *Naval Technology*, 17 January 2020.