MV ASTERIX

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Because navy ships operate out of sight, we forget that they need supplies just like we do at home – fuel in particular. Not surprisingly, oceans have very few gas stations. So, how do ships top up their tanks? There are generally two options available to ensure that you have enough fuel before crossing vast ocean expanses: have extremely big fuel tanks; or take along your own gas station (a third option is that you could have nuclear propulsion, but that's a different story). Naval forces often have agreements with allied states that allow them to visit ports and buy fuel, but often there is no convenient ally in the neighbourhood. And in sparsely populated regions like the Arctic (and Antarctic), fuel supplies can be a major concern. As a big country, with a small population, Canada's navy has fuel needs that are different from the navies of other smaller states located in well-populated regions (Europe, for example).

This is where supply ships come in. Most of the medium to large navies have ships that provide fuel – and materials like spare parts, water and food – to other ships while they are away from home port. They are referred to as Auxiliary Oil Replenishment (AORs) ships, and they conduct what are called replenishments-at-sea. This is a delicate exercise whereby the AOR and the ship needing fuel position themselves close to each other in parallel (keep in mind that this is happening on an ocean where there are waves and wind, and while the ships are underway!). Once they are in parallel, a long hose is sent from the AOR to the other ship, and the AOR pumps fuel through the hose to fill up the ship's tanks. At the same time solid cargo can be transferred via a heavy steel wire cable.

Until recently, the Royal Canadian Navy (RCN) had two AORs – HMCS *Protecteur* and HMCS *Preserver*. The problem is that both of these ships, which had been in service since the late 1960s/early 1970s, had to be retired because of continuing problems associated with their age, one in was retired in 2014 and the other was officially retired in 2016. That left the RCN with no AORs and relying on allies for refueling at sea.

There have been plans in the works to build new supply ships for the Royal Canadian Navy (RCN) since 1999 when they were called the Afloat Logistics Support Capability (ALSC). In 2005 there was a name change – to Joint Support Ships – and planning continued for new supply ships. The project has faced a variety of delays, and the ships have not yet been built. In a positive sign of progress, the JSS ships are included in the 2010 National Shipbuilding Strategy (see Briefing Note #6 for details of the NSS) and are being built at Vancouver Shipyards/Seaspan. Two ships are to be constructed (see Briefing Note #26 for details of the JSS).

But what was the RCN to do while it waited for the Joint Support Ships to be built? In January 2015 the RCN held a briefing indicating that it was seeking to lease 'At Sea Support Services' while it waited. A number of companies submitted proposals. The proposal by Federal Fleet Services, which suggested converting a commercial container ship into an AOR as an interim solution, was the one selected. Instead of building a new ship, the idea was to convert an existing ship at Chantier Davie Shipbuilding in Quebec, and instead of it being a naval ship, it would be leased by the government. MV *Asterix*, a container ship constructed in 2008, was

selected to convert to the *interim* supply ship, and it arrived at the shipyard in 2015. The ship was reportedly purchased for $20 million.[1]

On 20 July 2017 Davie Shipbuilding unveiled *Asterix* in a public ceremony with the traditional breaking of a bottle of champagne.[2] Sea trials were held in November, and the ship arrived at Halifax, Nova Scotia, on 27 December 2017. It completed more sea trials and was formally accepted into service with the Royal Canadian Navy in early March 2018. As Davie Shipyard happily points out, it was built on time and within budget. *Asterix* is the first new supply ship to be received by the navy in almost 50 years!

The plan was for the federal government to lease the ship for five years, at an estimated cost of $65-75 million per year,[3] while the new Joint Support Ships were being built. The contract was signed in 2018 and was to expire in 2023. The problem, however, is that delays in the JSS build mean that the first ship won't be delivered until at least 2025, and the second ship won't arrive until 2027. Beginning in July 2022, discussions began to extend the lease of MV *Asterix* until January 2025. In February 2023, it was announced that the government had confirmed a two-year extension to its contract for MV *Asterix*. If it so chooses, the federal government has the option to purchase the ship at the end of the lease, but thus far it has chosen to continue leasing the ship.

The ship is operated by Federal Fleet Services, a subsidiary created by Chantier Davie for this purpose, and has a crew which is a mix of civilian and military personnel. The crew consists of 36 civilian personnel and up to 114 military personnel, with a 67-person detachment specifically aboard for replenishment duties.[4] The RCN personnel who serve on *Asterix* are referred to as Naval Replenishment Units (NRU) *Asterix*. The Federal Fleet Services personnel operate and maintain the ship, provide food and cleaning. The RCN personnel take care of replenishments-at-sea, security, helicopter operations and decide on what operations will be undertaken. It is a cooperative system that apparently has worked very well.

It is a big ship – the biggest in the RCN – at 182.5 metres long and displacing 26,000 tonnes.[5] It can handle both liquid (diesel, aviation fuel, water) and solid cargoes (food, spare parts, equipment for missions, including ammunition and vehicles). It can hold up to 28 shipping containers that could be used in a response to a natural disaster or for humanitarian assistance. It has a helicopter flight deck and is certified to accommodate Sea King, Cyclone and Griffon

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[1] "Davie Set to Start Box Ship to Fleet Oiler Conversion," Marine Log, 14 October 2015, available at https://www.marinelog.com/index.php?option=com_k2&view=item&id=9899:davie-set-to-start-box-ship-to-fleet-oiler-conversion&Itemid=223.

[2] See Davie Shipyard, Press Release, "Davie Shipbuilding Unveils the Largest Naval Ship Ever Delivered from a Canadian Shipyard," 20 July 2017, available at https://www.newswire.ca/news-releases/davie-shipbuilding-unveils-the-largest-naval-ship-ever-delivered-from-a-canadian-shipyard-635682443.html.

[3] Murray Brewster, "Future Government on the Hook for Navy Supply Ship," CTV News, 18 August 2015. Tim Page, president of Seaspan, "Opinion: Shipbuilding, not ship-leasing, is the right choice for Canada," *Montreal Gazette*, 29 January 2018, available at https://montrealgazette.com/opinion/columnists/opinion-shipbuilding-not-ship-leasing-is-the-right-choice-for-canada.

[4] Chamber of Shipping, "Asterix," *Shipping Matters*, 17 February 2023. Feb 17 - Asterix - Chamber of Shipping (shippingmatters.ca)

[5] Resolve Class Auxiliary Oiler Replenishment (AOR) Vessel, Naval Technology.com, available at https://www.naval-technology.com/projects/resolve-class-auxiliary-oiler-replenishment-aor-vessel/; Joetey Attariwala, "MV Asterix: Bringing a New Supply Ship Capability Back to Canada's Navy," *Canadian Defence Review*, Vol. 24, Issue 4 (July 2018), p. 47.

helicopters. As well it has a small but well-equipped hospital, complete with the personnel for a surgical suite, X-ray and dental facilities. This is not to serve only its own crew but also the ships which *Asterix* is accompanying. And, finally, the ship can accommodate up to 350 passengers if necessary. It has, therefore, significant capability to respond to natural disaster/humanitarian relief incidents.

One thing that is important for the ability of *Asterix* to visit ports is that it has a double hull, which provides extra protection to the ship and cargo in case of collision or grounding.[6] This is a feature that the previous AORs did not have and prevented them from refueling in some ports and/or operating in the national waters of some states.[7] As well, *Asterix* has equipment which enable it to meet modern environmental standards.

Due to the civilian nature of its design, *Asterix* is limited in its ability to participate in combat, and even survive damage sustained in combat. The ship also lacks any installed self-defence weapon systems, although there are provisions for them should the need arise. These factors prevent the ship from being deployed to hazardous combat areas.[8]

MV *Asterix* had a busy first year. It was deployed virtually all of 2018. According to Federal Fleet Services, the ship maintained 100% utilization, travelling 51,062 nautical miles (to Hawaii, Australia, the South China Sea, Vietnam, Guam, among other places), performing 138 supply operations with nine allied navies, and delivering 20 million litres of fuel at sea.[9] Not bad for a first year. In early 2020 some maintenance work was done, but after that *Asterix* participated in a number of exercises, for example in October 2020, it participated in Exercise Joint Warrior, the largest military exercise in Europe. *Asterix* has continued to be deployed regularly. In September 2021, the ship participated in Exercise Cutlass Fury organized by Canada off the East Coast. In March 2023, *Asterix* left Halifax with HMCS *Montreal* headed for the Pacific. The ship will likely be kept very busy until the Joint Support Ships are built.

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[6] This was not done out of environmental altruism. The International Maritime Organization adopted the regulation that all tankers built after 6 July 1996 must be double hulled. Because it was built after 1996, the ship was double hulled when Davie received it.

[7] Bill Curry, "Canadian Navy's Ships Risk being Banned from Foreign Ports," *The Globe and Mail*, 5 August 2010, available at https://www.theglobeandmail.com/news/politics/canadian-navys-ships-risk-being-banned-from-foreign-ports/article1212835/.

[8] Lee Berthiaume, "Canadian Naval Supply Ship Can't Go into War Zones," *Times Colonialist*, 20 February 2018, available at https://www.timescolonist.com/business/canadian-naval-supply-ship-can-t-go-into-war-zones-1.23180292. Note that Davie disputes the claim that the ship can't go to war/combat zones. See David Pugliese, "Defence Bureaucrats Rejected High-tech Guns for New Supply Ship Because They're Expensive," *National Post*, 22 February 2018, available at https://nationalpost.com/news/politics/defence-department-rejected-putting-guns-on-navy-supply-ship-because-of-cost.

[9] See Federal Fleet Services, Press Release, "Canada's new Naval Support Ship returns to Canada after a Flawless One-year International Deployment," 18 December 2018, available at https://www.newswire.ca/news-releases/canadas-new-naval-support-ship-returns-to-canada-after-a-flawless-one-year-international-deployment-703048731.html.