Canada Looks to US Navy for Non-Developmental EW for CSC

By Richard Scott

Canada has shelved plans to develop a customized electronic warfare (EW) suite for its new River-class destroyers, and will instead procure proven in-service equipment common to the US Navy and previously integrated with the Aegis combat system.

This includes the AN/SLQ-32(V)6 system already delivered into service through the US Navy's Surface Electronic Warfare Improvement Program (SEWIP) Block 2.

A class of 15 River-class ships – based on BAE Systems' Type 26 platform – is planned under the Canadian Surface Combatant (CSC) program. Lockheed Martin Canada was in October 2018 selected as CSC ship design and combat system partner; Irving Shipbuilding Inc. will build the vessels at its yard in Halifax, Nova Scotia, under the National Shipbuilding Strategy.

Production of an initial three ships (known as Batch 1) is due to commence in 2025. The first-of-class, to be named HMCS *Fraser*, is planned to enter service with the Royal Canadian Navy (RCN) in the early 2030, with deliveries of subsequent batches expected to continue through to the end of the 2040s.

MDA Space was in early 2019 contracted as EW suite integrator for the program. Under contract to Lockheed Martin Canada, the company was given responsibility for procuring best-value subsystems for each functional element and providing an advanced EW solution for installation onto each CSC ship.

The solution taken into the program's Definition Phase 2 comprised the ELT Zeus radar-band electronic support measures (RESM) system, Lockheed Martin Canada's Raven multiband onboard electronic attack (EA) system, and Safran's NGDS trainable decoy launcher system. MDA's own laser warner and

countermeasures solution was also baselined.

MDA in February 2021 announced that it has been awarded an initial production contract for the laser warning and countermeasure system. The company has estimated potential revenues of around C$1.5 billion from 2020 to 2040 from the design and integration of the EW system.

However, it has now emerged that the EW suite is one of a number of elements in the River-class above-water combat system re-scoped so as to mitigate program cost and schedule risk, and engineer greater commonality with allies and other RCN platforms. Key to this is the decision to integrate the US Navy's Aegis combat system as the core of the CSC combat system

One consequence of this modified acquisition approach is that the original bespoke EW solution has been dropped from at least the first three ships. Instead, Lockheed Martin's AN/SLQ-32(V)6 RESM system – introduced to the US Navy under SEWIP Block 2 and already integrated with Aegis – is to be acquired through Foreign military Sales (FMS).

In addition, the Raven onboard EA system and the NGDS decoy launcher have also been shelved from the program. Instead, the River-class ships will receive an offboard EA capability through the integration of the BAE Systems Nulka active missile decoy system (again supplied through FMS).

In a statement, the Department of National Defence told *JED:* "While certain decisions have resulted in the removal or replacement of systems due to integration risk, in other cases decisions have led to replacement or deferral of capability to provide time for a developmental system to mature prior to being considered for incorporation later ships or batches (such as elements of the ship's electronic warfare suite)."

JED understands that MDA's laser warner remains part of the CSC baseline, as is re-use of the AN/SRD-506 communications intercept/signals intelligence system currently being rolled out to the RCN's current *Halifax*-class frigates under Project StrongBow.