



The National Shipbuilding Procurement Strategy and Nova Scotia Boatbuilders

by Tim Edwards & Colin Darlington

The lion's share of the 33 billion dollars budget for Canada's National Shipbuilding Procurement Strategy (NSPS) is allocated for the design and construction of new "big ships" for the Royal Canadian Navy and Fisheries & Oceans Canada. But the relatively smaller budget of 2 billion dollars for the small vessels component of the NSPS is appreciable, and it presents significant opportunities for boatbuilders in Nova Scotia. The value of the small vessels component to provinces should be appreciated by the public, media and government, and attention paid to the awarding and progress of contracts.

Under NSPS, "small vessels" represent those with less than 1,000 tonnes of displacement. These are being procured competitively from other than the shipyards selected to build the large ships, and their affiliated companies. Small vessels include, for the Department of National Defence (DND):

- large tugs
- small tugs

and for the Canadian Coast Guard (CCG):

- search and rescue (SAR) lifeboats
- mid-shore science vessels
- channel survey and sounding vessels
- near-shore fishery research vessels
- specialty vessels
- special navigation-aid vessels

Some of the opportunities have already been realized through successful bids from ABCO Industries, AF Theriault & Son, Rosborough Boats, and Samson Enterprises – all members of the Nova Scotia Boatbuilders Association (NSBA), established in 1998 with the mission to "create and foster an environment that promotes profitable and export-oriented growth for its members." Though focus and building capacity of the members of the NSBA vary, with a limited number capable of building vessels of hundreds of tonnes, the association supports the defense and security market, and members seek appropriate contracts and participate in shows such as the Canadian Defence Security and Aerospace Exhibition (DEFSEC) Atlantic.

The export success of NSBA members over the past 17 years has seen its up and downs, influenced by the value of the Canadian dollar and by an early 20th century US trade restriction that is still in effect and that is known as the Jones Act.

On the other hand, the domestic opportunities of the small vessels part of the NSPS, 2 billion dollars, is good. At one time a figure of 116 vessels to be built was quoted – the reality is that the

contracts are competed depending on the requirements of the government departments, especially of the DND and CCG, so the final number will be something different. Note that the large vessels part of the NSPS will result in contracts for the building of the many boats to be carried aboard those ships; the lead builders of the large ships will contract that work. An interesting build will be the landing craft, vehicle, personnel (LCVP) to be carried by the Harry DeWolf-class Arctic/Offshore Patrol Ships, as the current LCVP of the Royal Canadian Navy are not the right size for the patrol ships, and are probably underpowered for rough Arctic seas.



Samson Enterprises 30 foot jet boat

In July 2015 the government announced contracts for three rigid-hull inflatable boats from Rosborough Boats, and four 30 foot jet boats from Samson Enterprises, for the Department of Fisheries and Oceans (DFO). The boats will be used by officers of the conservation and protection branch of DFO in the Maritimes to monitor fishing areas for compliance to regulations and for proper licensing. Though not announced that these boats were part of NSPS, the awards show that NS boatbuilders have the capabilities to build such small vessels for federal government departments.

For domestic building, NSBA has repeatedly expressed its concern to Public Works and Government Services Canada (PWGSC) over the burdensome paperwork required for assembling eligible bid packages for new small vessels for Canada that are less than 24 metres in length. Companies that bid on the procurement of these small size of vessels are subject matter experts, and the cost of preparing this type of bid is appreciable. The association has repeatedly made the point to PWGSC that the volume of paperwork required in the bid should reflect the size and complexity of the small vessel to be procured.

In 2011, NSBA submitted a list of concerns and suggested solutions to PWGSC for streamlining small vessel procurement, and in December 2012 PWGSC came out with a report that showed there was support for the concerns from boatbuilders across Canada. Yet the relatively recent tender for twelve 19 metre search and rescue lifeboats for Canada that came out at the end of 2014 was an 818 page document!

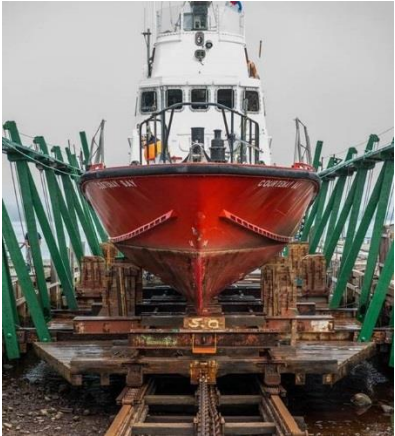
NSBA was encouraged when in July 2015 the Minister of PWGSC pledged to make it easier to do business with the Government of Canada, starting in fall 2015. Progress in this needs to remain an area of attention of governments, the media and the public.

Promoting its 35 boatbuilder members is just one of the things the NSBA does. In its 17 year history the NSBA has also:

- a. established a Boat Builder Apprenticeship Program in partnership with New Zealand and Nova Scotia. This is the first in Canada;
- b. established a Marine Trades Apprenticeship Program in partnership with British Columbia's Quadrant Marine Institute and Nova Scotia;
- c. developed tools such as an ISO-based Quality Management System, and Quality Inspection Program to help its members qualify for Federal contracts;
- d. developed best practices guides for fibreglass boatbuilders; and
- e. developed an occupational health and safety manual for boatbuilders.



Lunenburg Shipyard



Shelburne Diesel

A marine railway, or patent slip, is an inclined surface from shore to water, with a cradle for the vessel and a mechanism to move it in or out of the water. It is a cheaper and easier means to build or repair vessels than dry or wet docks, and allows for handling of vessels of hundreds and thousands of tonnes. The availability and capacity of a shipyard's marine railway is an indication of its capability to build larger vessels, such as the 1000 tonnes of the NSPS small vessels component. Amongst NSBA members, available railways are:

AF Theriault & Son
 Located in Meteghan River: 1 x 600 tonnes & 2 x 300 tonnes

Canadian Marine Engineering
 Located in Sambro: 1 x 300 tonnes

Lunenburg Industrial Foundry and Engineering
 Located in Lunenburg: 1 x 1600 tonnes & 1 x 1200 tonnes

Shelburne Diesel
 Located in Shelburne: 1 x 330 tonnes

Comeau Marine
 Located in Meteghan: 1 x 300 tonnes

Notably, the boatbuilding industry represented by NSBA does not seek or get government support to be eligible to bid on government contracts, or to expand their facilities.

Nova Scotia's capability in support of marine defence and security for Canada is impressive. Below are some examples of Nova Scotia-designed and built small vessels for this segment of the marine market:



30ft patrol boat from Samson Enterprises



High speed patrol boat from ABCO Industries



RCMP patrol catamaran built by AF Theriault & Son, designed by Robert Allan, Vancouver, BC



RoughWater™ Rigid-hull Inflatable Boat (RIB) from Rosborough Boats

The boats used in the examples above, as with all from Canada’s East Coast, are well-designed and well-built by skilled professionals and tradespeople who live and work by the ocean. The slogan used by the NSBA in their promotional material reflects this situation well: “Nova Scotia boats – built for the sea!”

Tim Edwards is a Professional Engineer and a member of the Royal Institution of Naval Architects. He spearheaded the formation of the NSBA, and in 1998 was appointed Executive Director of the association – a position he still holds today. Colin Darlington is a retired naval officer with experience employing small boats at sea and for harbour security. This work is the sole opinion of the authors and does not necessarily represent the views of the Canadian Department of National Defence, the Canadian Armed Forces, the Royal United Services Institute of Nova Scotia, the Nova Scotia Boatbuilders Association or any of its members. The authors may be contacted by email at: RUSINovaScotia@gmail.com.

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Afterword



Not addressed in this paper, but an opportunity of considerable potential and an area of much interest, is the employment of autonomous surface vehicles by the Royal Canadian Navy and by Canadian marine security services. Depicted left is one of many autonomous vehicles built by AF Theriault & Son.