



Government of Canada



CANADIAN SUBMARINE HISTORY



The Royal Canadian Navy (RCN) celebrated 100 years of submarines in 2014. In that time, we commissioned 15 submarines. Below, the history highlights how our dedicated sailors have used these complex vessels to help defend Canada.

The early years

On August 5, 1914, Canada got its first two submarines. British Columbia Premier Richard McBride bought them from a Seattle shipyard at outbreak of the First World War. His Majesty's Canadian Ships (HMCS) CC 1 and CC 2 had originally been built for the Chilean Navy.

Premier McBride is reported to have acquired the boats to calm his constituents' fears. They had heard reports of a squadron of Imperial German Navy warships in the Pacific. They feared an attack, and the submarines reassured people.

The threat never became real. However, the mere presence of the new submarines was a deterrent for enemy forces. It was an early example of the strategic advantage for Canada of having submarines.

On June 21, 1917, **HMCS CC 1 and CC 2** left Esquimalt. They laid over in Halifax before proceeding on a mission to the Mediterranean. Along with HMCS Shearwater, they were the first war vessels to use the Panama Canal under the White Ensign. Both submarines were eventually paid off (removed from service) and sold for scrap in 1920.

After the First World War

Over the next five decades, the RCN commissioned only four submarines:

- two British H-class **C14 & C15**
- two surrendered ex-German U-boats **German U190 and U889**

Still, RCN submarine expertise survived. Canadian submariners honed their skills by serving in Royal Navy (RN) submarines around the world.

During the two world wars:

- 34 Canadians served in RN submarines.
- Canadian submariners commanded 15 British submarines.

After the Second World War

After the Second World War, we reduced our number of warships and submarines. The RCN was able to maintain its anti-submarine warfare (ASW) capability only by RN submarine loans through formal agreements.

Eventually, American submarines were also available for limited anti-submarine training for RCN ships. Until 1955, RCN ASW training relied on:

- rotating two Royal Navy submarines per year in Halifax
- training opportunities offered by the US Navy (USN) off both coasts

Cold War era

With the Cold War already underway, we re-evaluated the need for a Canadian-based submarine service. The RCN and the RN agreed in March 1955 to create the Sixth Submarine Squadron (SM6). Based out of Halifax, SM6 was made up of mostly RN A-class submarines. RN officers commanded them, and only half the crews were Canadian.

In the early years of the Cold War, ASW was a critical part of NATO maritime strategy.

There was much debate about the value of adding submarines to the RCN fleet. The new St. Laurent-class of destroyer-escorts had excellent ASW capabilities for the period. But it was clear to naval planners that submarines were the best vessels to detect other submarines. They could more fully exploit the underwater environment to maximum tactical advantage.

Surface ships can reduce noise interference from surface activity by towing a submerged sonar array cable. But they cannot eliminate all the surface noise they make. Submarines operate at depth, so they do not create surface noise. In a deadly, unforgiving game, the prize normally goes to the most silent platform. Submarines are clearly the ASW vessels of choice.

Canada got its first Cold War submarine in 1961. Based on the West Coast, **HMCS Grilse** was an ex-USN Balao-class fleet submarine. We got it on a five-year lease agreement.

During its first 16 months of service, Grilse travelled the equivalent of more than twice the earth's circumference in 374 days at sea. It was used exclusively for ASW training.

After seven years of service, Grilse was replaced by another USN fleet submarine. We bought the ex-USS Argonaut in 1968. It was a Tench-class submarine, and we commissioned it into the RCN as **HMCS Rainbow**. It served in the West Coast fleet until 1974.

In March 1962, we got the go-ahead to buy three British Oberon-class submarines. These were the first newly built submarines we bought since the unconventional purchase of CC 1 and CC 2 in 1914. These new submarines formed the Halifax-based First Canadian Submarine Squadron:

- **HMCS Ojibwa**
- **HMCS Onondaga**
- **HMCS Okanagan**

When they arrived in the mid-1960s, the Oberons were among the quietest submarines in the world. Other nations also had Oberons.

In the early 1980s, we upgraded the Oberons, refitting them with:

- Mark 48 torpedoes
 - fire-control systems
- upgraded sonar suites

The Canadian Oberon-class submarines were still relevant as an ASW weapon platform until the last, HMCS Onondaga, was paid off (removed from service) in 2000.

Modern Victoria-class submarines

Plans to replace Canada's ageing Oberon-class submarines began in the early 1980s.

In 1998, the Canadian submarine force was re-energized to hear that Canada would buy four submarines from the United Kingdom. HMCS Victoria was the first to be commissioned two years later.

These submarines were the only four Upholder-class (Type 2400) built by the Royal Navy. The four former Upholders became the Victoria Class as they adopted the names:

HMCS Victoria
HMCS Windsor
HMCS Corner Brook
HMCS Chicoutimi

Before the new submarines could be added to the fleet, they needed an extensive Canadianization package for:

- fire control
 - national communications
- in-service Mk 48 heavy-weight torpedoes

Tragedy struck in 2004, when a fatal fire erupted aboard HMCS Chicoutimi at the start of its voyage to Halifax.

The RCN persisted in its efforts to make the new class of submarines fully operational. The ranks of Canadian submariners continued to fill, as training progressed.

The HMCS Victoria was the first submarine of its class to reach high readiness. It successfully fired a war shot Mark 48 torpedo in 2012. Victoria spent most of 2013 at sea. Its successful deployment on Operation CARIBBE showed how the submarine could excel in a covert role.

The future of Canadian submarines is promising. After overcoming many significant challenges, Canada now has a fully rebuilt and sustainable submarine capability. The Victoria Class submarines are the Navy's "exceptional forces." They are stealthy, well-armed and can patrol over vast distances. Their flexibility allows them to perform a wide range of unique naval missions, including:

- counter-terrorism
 - illegal immigration interdiction
 - support to Special Operations Forces
 - Fisheries and Oceans Canada patrols
- constabulary roles in support of RCMP anti-narcotic operations