

HMCS *Onondaga* Makes its Last Voyage

Annemarie Bourassa

Very few people are aware that Canada has been employing submarines for nearly 100 years (although we have not owned them continuously!). However it was only during the Cold War that Canada added a permanent submarine force to its navy. The Cold War, which divided the world into spheres of interest, was marked by an intensive arms race leading countries to invest in military technology and acquiring offensive and defensive weapons. Soviet submarines were cruising near (and sometimes *in*) Canadian waters and the country had to equip itself for its defence.

It was in this context that Canada acquired from the United States two submarines for service on the West Coast: HMCS *Grilse* from 1961 to 1969 followed by HMCS *Rainbow* from 1968 to 1974. Furthermore, the Canadian government contracted the construction of three *Oberon*-class submarines in Great Britain. When they arrived, the submarines were named *Ojibwa*, *Onondaga* and *Okanagan*, and their home port was Halifax, Nova Scotia.

HMCS *Onondaga*'s construction started in 1964. The submarine was launched on 25 September 1965 and was commissioned on 22 June 1967 during Canada's Confederation centennial celebrations. From this start, HMCS *Onondaga* went on to become the submarine with the longest active lifespan in the history of the Canadian Navy – it was in service for 33 years. *Onondaga* logged more than 500,000 nautical miles, the equivalent of circling the globe 23 times, half of it under water. It visited more than 53 ports in 12 countries and had 25 Commanding Officers throughout her career.

Like most Canadian ships, throughout the Cold War HMCS *Onondaga* carried out patrol missions and exercises at sea, exercises that could involve dozens of ships and aircraft from several NATO countries. During those exercises, submarines were tasked to 'sink' targets while avoiding detection by surface units. Even as it participated in exercises with a variety of Canadian and allied



HMC Submarines *Ojibwa*, *Onondaga* and *Okanagan*.



Onondaga nears the end of a seven-day tow from Halifax to Rimouski in July 2008.

surface ships, it was clear that the career of a submarine is very different from that of a surface ship. In particular, a submarine requires much more maintenance and *Onondaga* was no exception. In fact over its 33 years of service, it spent more than 10 years undergoing refits and major work periods. A submarine is a very sturdy machine but it is also complex and sophisticated. It is therefore crucial to ensure a regular maintenance and repair schedule of all its components and structure. A submarine major refit – and *Onondaga* had three major refits over its lifetime – usually takes two years during which all components are taken apart, inspected and often replaced before being reintegrated during the reconstruction phase.

HMCS *Onondaga* was the last Canadian *Oberon*-class submarine in service. Its sister boats, *Ojibwa* and *Okanagan*, were decommissioned in 1998. You may wonder what happened to *Onondaga*. It was decommissioned in July 2000, and the new *Victoria*-class submarines were brought into service. In this article I will outline how *Onondaga* went from serving as a working submarine to its current position as an attraction at Site historique maritime de la Pointe-au-Père (SHMP) near Rimouski, Quebec. SHMP was founded in 1980 by divers who dove the wreck of *Empress of Ireland* which sank in the St. Lawrence River in May 1914 with a loss of over 1,000 lives. SHMP began with artefacts and stories from that wreck. Since that time, the site has added a focus on the Pointe-au-Père Lighthouse Station and *Onondaga*, and has become a major tourist attraction.

Birth of the Project

When *Onondaga* was decommissioned in 2000, Louis Hébert, a friend of SHMP, quipped that SHMP should get the submarine and bring it to Pointe-au-Père. The idea slowly took root among the members of the direct-

ing staff of the corporation. Following some enquiries we discovered that *Onondaga* was to be relocated near the future Canadian War Museum in Ottawa. A study about the cost and feasibility of relocating the submarine had been undertaken, and found that it was possible and not prohibitively costly. However, once the site for the museum was changed from Rockcliffe to LeBreton Flats, which was approximately 80 feet higher than the original location, the Canadian War Museum decided that the cost had at that point become prohibitive. In 2003 the War Museum gave up its rights on the submarine which was then placed under the responsibility of Crown Assets Distribution.

Following its own feasibility study and after confirming that various organizations which could potentially finance this type of project were interested, SHMP presented a purchase offer in the amount of four dollars! Why four dollars? Well, based on government rules, the submarine could not be given away for free, so some money had to be offered. As a result, the four permanent employees present at the office of SHMP that day agreed to invest the colossal amount of one dollar each. Surprisingly, the offer was accepted by Public Works and the news was officially announced at a press conference 15 November 2005 involving Commander Larry M. Hickey, one of *Onondaga*'s 25 Commanding Officers. Not surprisingly, when news of this got out, there was some attention to the fact that a submarine could be purchased for four dollars. A Halifax newspaper, for example, ran an article with the headline “A Canadian submarine bought for less than a 6-inch submarine sandwich at Subway.” This marked the start of a great but difficult adventure.

Buying a submarine for four dollars sounds like a good deal but it cost much more to tow it from Halifax to Rimouski, set it up in Pointe-au-Père and transform it into the only

submarine museum in Canada. After having purchased the submarine, SHMP had to begin searching for funds to finance this three million dollar major regional project.

Following huge effort and the premature greying of some hair, one of the major potential sponsors finally decided to participate. On 16 May 2008, Jean-Pierre Blackburn the then Minister responsible for the Economic Development Agency of Canada, travelled to Pointe-au-Père to announce a contribution from the federal government of \$1.6 million into the project. The Quebec government soon followed with its own contribution. Work could now start on preparations to receive *Onondaga* at an old pier that had recently been strengthened.

Like all the stages of the project of getting *Onondaga* settled into its new home, towing the submarine proved to be difficult. After several delays, it finally began on 11 July 2008. It was not a good beginning as the tow line broke right after departure from Dartmouth. Then, weather conditions forced an unscheduled stop in the Strait of Canso. *Onondaga* finally made it to the Port of Rimouski on 17 July 2008 under the watchful eyes of a large crowd.

The next step involved getting the submarine ready for towing from Rimouski to Pointe-au-Père – a distance of about 10 kilometres – scheduled for the beginning of August 2008. This was to take place during a period of high tides as the towing slip had been designed to use the



Photo: Jean Albert

Crews work in heavy fog to prepare *Onondaga* for the final leg of its journey.

In the meantime *Onondaga*, which was still alongside in Dartmouth across the harbour from Halifax, had been maintained by the Department of National Defence (DND) to prevent its deterioration during this long period of inactivity. Following the official announcement by Minister Blackburn, a team from SHMP went to Halifax to plan the 1,000 kilometre tow to Rimouski. By chance, and as luck would have it, British-based Windfall Films Production Company started filming an episode of the series “Monster Moves” to be aired later on Discovery Channel. This meant that the move, in all its troubles, was recorded for posterity.

tidal effect to reduce the weight of the ship (1,400 t) as much as possible. On 31 July an unusually strong wind and rain storm forced the operation to be delayed. To gain more leeway and to increase the opportunities to carry on the operation, the towing slip was modified in order to make use of the 14-foot high tides instead of waiting for the higher but less frequent 15-foot tides. The new target date was now the end of August.

On 29 August *Onondaga*, with the tow boat *Épinette II* leading the way, left its berth in Rimouski for Pointe-au-Père. However, the sudden rupture of the tow line led

to some cold sweat for the team aboard the submarine. Happily that was fixed, and the towing operation soon recommenced. Again, a large crowd was on the shore at Pointe-au-Père to await the submarine. On arrival, the boat was temporarily anchored and positioned to be hauled out of the water that night at high tide. Watching this massive submarine of nearly 1,400 t being hauled on to the shore by giant tow trucks was quite a spectacular show. In spite of the boat's imposing size, the operation required the utmost precision. As happens frequently in this part of the country, a fog bank suddenly rolled in complicating further an already complex operation.

Very soon the outgoing tide forced a recess until the following day. After the second night the boat had advanced 37 metres or one-third of the total distance. Having made this much progress, however, the work abruptly came to a half. The following morning daylight uncovered a disheartening scene. While everyone was resting after two nights of intense work, the submarine had slowly keeled over on to its starboard side. The sole witness, the "Monster Moves" camera which had been left on site, recorded every second of the drama. The problem originated with an error of alignment of the boat on to the chariots of the towing slip when the fog set in on the first day. The misalignment precluded the proper positioning of the submarine on the fifth and last chariot. When the water receded with the outgoing tide, the weight distribution caused the boat to lose its balance.

This was a problem that had to be corrected quickly. Time was short, fall was approaching and, with it, the perspective of high tides combined with winter storms! Before the boat could reach its new home, it had to be straightened up. A first tentative attempt failed in mid-September but it was decided to give it another try. Unfortunately a second attempt at the beginning of October also failed. Winter and ice formation were now looming on the horizon. There were two periods of high tides left in October and November, but the return of the submarine to Rimouski for winter was becoming more and more probable. The security of the boat, the conditions of its wintering where it was in Pointe-au-Père and, above all, the safety of the workers, everything had to be taken into account.

Even returning the submarine to Rimouski first required it to be returned to an upright position. Work recommenced and in mid-October the boat was finally set right. The tow boat *Épinette II* was waiting to pull *Onondaga* out to sea and take it under tow back to Rimouski. It was a heartbreak decision for the team members because it meant they would have to postpone the opening of the submarine to the public to the 2010 season. Having made the decision to move *Onondaga* back to Rimouski, however, the boat, which at first was reluctant to come out of the water was now refusing to budge to go back into the water. While trying to pull the boat back into the water, the tow line broke and the submarine again fell on to its starboard side in front of a crowd of spectators.



Hauling *Onondaga* ashore in Pointe-au-Père proved a long and arduous task.

It is difficult to forget the feelings of frustration and helplessness of that day, 17 October 2008.

The following day, at low tide, the team went on to the slip to check the extent of the damages but quite a surprise was awaiting them. While trying several times to pull *Onondaga*, the tow boat had caused the submarine to shift position on the rail, now making possible what had been impossible until then. The boat was now lying across the hauling ramp. It was therefore feasible to straighten it up, reposition it and resume hauling, this time on to dry land!

By this time, numerous repairs had to be carried out on the towing slip in order to get the job done. The season's worsening weather made the job more difficult. Finally, notwithstanding many obstacles, the hauling operation restarted at the end of November. On 30 November after three strenuous but successful days, the submarine had progressed close to 30 metres. Victory at last! At the end of the third day, one of the chariots carrying the boat fell off its rollers but luckily remained on the rail. The boat was still a few dozen metres short of the original objective, but it was decided that perhaps the objective could

be changed. The submarine was resting in a good position, at a correct angle and demanding to be left alone! It was therefore much safer to leave it where it was even if it meant making some adjustments to the layout of the site. At last, this great adventure had almost reached its closure.

Another chapter was about to begin! Soon, the first visitors would cross the gangway leading them to the wonderful and mysterious submarine world! But there was still a lot to be done! Over the next months much work was done to make *Onondaga* at home. The boat was opened to the public on 13 June 2009. Visiting a submarine is not a very common event. The SHMP team did its best to give visitors the opportunity to discover the exceptional way of life of an exceptional group of people, the submariners.

As far as the physical layout is concerned, the submarine is fully fitted, all of its equipment is onboard and several pieces of equipment are working, based on simulated models created by Multi-Électronique Inc. of Rimouski. Visitors can explore a control room that is similar to what it was throughout the submarine's operational life. Some



A visitor listens to an audio-guide in *Onondaga*'s engine compartment.



The *Onondaga* pavilion at Site historique maritime de la Pointe-au-Père.

modifications were made to ensure the safety and comfort of visitors, including gangways and doors for easier access. Five of the seven masts (including the two periscopes) remain in the hoisted position for an improved visual effect.

For the visit itself, each visitor is given an audio-guide. Throughout the tour of *Onondaga*, the individual listening device allows the visitor to hear crew members describing various aspects of the vessel, how it functioned, its technologies and the daily routines onboard a submarine. The content of the audio-guide is divided into 23 subjects related to numbered stations identified throughout the boat. Fortunately SHMP was assisted by several submariners without whom it would not have been possible to obtain the information necessary for the production of the audio-guide. Visitors enter the submarine through a gangway to the 'After Ends' compartment and go the length of the boat to the Forward Torpedo Room, along the way discovering HMCS *Onondaga*, the only submarine museum in Canada.

Success

In 2009, the first season that *Onondaga* was open for viewing, 92,000 visitors explored this warrior of the Cold War era. In 2010, the number was 80,000 visits. The

visitors originate from all walks of life and come from various areas. Their comments have been very positive. The tour of *Onondaga* is set up to convey the feeling of going through a functioning submarine!

At last, after several years of hard work, the SHMP team can be rightly proud of a job well done. Instead of being sold for scrap or sunk, we have saved a piece of Canadian history. The navy often claims that Canadians suffer from 'maritime blindness,' because they don't appreciate how Canada is affected by and relies on the oceans. The navy's work is undertaken at sea far from view – and, even more than surface ships, submarines are beyond public view for their working lives. Perhaps having *Onondaga* on display can help cure maritime blindness and allow a curtain to be drawn back on what the navy does. As well, the economic spin-off from the project means an entire region is benefiting. ☺

Annemarie Bourassa is the Assistant Director at the Site historique maritime de la Pointe-au-Père near Rimouski, Quebec.

Photo: Serge Guay