



HOUSE OF COMMONS  
CANADA

# **PROCUREMENT OF CANADA'S VICTORIA CLASS SUBMARINES**

**Report of the Standing Committee on  
National Defence and Veterans Affairs**

**Pat O'Brien, M.P.  
Chair**

**April 2005**

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# **THE STANDING COMMITTEE ON NATIONAL DEFENCE AND VETERANS AFFAIRS**

has the honour to present its

## **FIRST REPORT**

Pursuant to Standing Order 108(2), your committee reviewed the acquisition of the Victoria Class submarines by the Canadian Forces.

Your committee heard evidence on this matter, the result of which is contained in this report, which provides its input on the acquisition of submarines by the Canadian Forces.





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## EXECUTIVE SUMMARY

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Following the fire aboard HMCS *Chicoutimi* on October 5, 2004, the Standing Committee on National Defence and Veterans Affairs decided to examine Canada's acquisition of four Upholder class submarines from the United Kingdom. The Committee examined issues related to this acquisition including the assessment of the equipment needs of the Canadian Forces, how the submarines were purchased, the decision-making process, and the training given to Canadian submariners.

The Committee heard the testimony of a number of academics, military officers, and government officials, as well as former ministers of National Defence and other individuals in order to piece together the history of this acquisition project. This testimony shows that in the early 1990s, the government and the military, faced with the need to replace the old Oberon submarines, decided that Canada should acquire replacement submarines. However, given the end of the cold war and cuts in federal government spending, notably on defence, the proposed project faced a number of hurdles. These included opposition from some Canadians to such an acquisition as well as the higher priority given to other military equipment projects by the *1994 Defence White Paper*. Nevertheless, the White Paper stated that the option of acquiring existing submarines at a good price, given qualified support by the 1994 report of the Special Joint Committee of the House of Commons and the Senate on Canada's Defence Policy, would be explored.

The option explored was the acquisition from the United Kingdom of four Upholder class diesel-electric submarines withdrawn from service with the Royal Navy in 1994. According to testimony and the documents obtained from the Department of National Defence, the Navy evaluated the British submarines in 1995 in preparation for their imminent acquisition, but the Cabinet decision to go ahead was delayed. Concerned about competing demands on the federal treasury during a period of fiscal restraint and the possible public reaction to the announcement of such a military equipment purchase, Prime Minister Chrétien delayed approving the project at that time. Months of delay turned into years and the project was finally approved by the Cabinet only in 1998.

The Committee heard concerns about the effects of such a long delay on the condition of the submarines. These effects complicate the evaluation of the extent to which Canada received good value for the money paid for this acquisition. There are also differing perceptions on the importance of these submarines to Canada's defence capabilities. Some witnesses highlighted the extent to which these submarines can contribute to surveillance operations in Canadian waters, including those in the North to a limited extent. Others questioned the necessity of equipping the Navy with submarines given the changing nature of the threat faced by Canada and its allies. A consensus on the importance of these submarines to Canada's

military capabilities may only be possible when this country's defence priorities, set in 1994, are updated.

The evaluation of the purchase of the submarines was not helped by the confusion which existed over the costs of the acquisition project and how the contractual arrangements were carried out. Government announcements in 1998 concerning the submarine acquisition emphasized the low costs of the \$750 million project compared to those for the construction of new submarines. They also highlighted the possibility of a barter arrangement where some of the costs of leasing the submarines would be in exchange for the funds paid for the use by British forces of training facilities in Canada. The impression that at least some of the costs were covered by the barter arrangement lingered on until a few weeks after the fire aboard HMCS *Chicoutimi* when it was revealed during testimony that the barter arrangement did not materialize. The Committee is concerned that the government did not take action to correct this perception.

The Committee is also concerned by all the problems experienced during the reactivation of the submarines in the United Kingdom and the preparations here in Canada to bring the submarines, renamed the Victoria class, to full operational status. The problems involved in preparing Canadian submariners for the transition to the new type of submarines and in Canadianizing the vessels to ensure interoperability with other Canadian warships and those of allied countries appear to have been underestimated. Delays in the reactivation process caused delays in training and the Canadianization process did not escape the effects of perhaps overly optimistic expectations about how smoothly the acquisition process would proceed. Some of the problems have been overcome and progress is being made on others. However, more rigorous risk analysis might have helped avoid some of the problems. The lessons learned could help the Navy face the significant challenge of operating the only examples of this class of submarine in the world.

# **LIST OF RECOMMENDATIONS**

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## **RECOMMENDATION 1**

The government provide a comprehensive update of Canada's defence policy at least every four years and report to Parliament in order to clearly identify Canadian defence priorities and the capabilities and equipment the Canadian Forces need to meet their commitments.

## **RECOMMENDATION 2:**

The government inform Parliament when any significant changes are made in the planned expenditures or methods of payment for all major military equipment acquisition and related support projects which have received effective project approval from Treasury Board.

## **RECOMMENDATION 3:**

The Canadian Navy undertake an immediate review of its submariner training program to ensure that it can sustain a cadre of qualified submariners and provide the required amount of at-sea experience on an operational submarine. The Chief of the Maritime Staff should provide a report on this review to the Standing Committee on National Defence and Veterans Affairs.

## **RECOMMENDATION 4:**

The training time at sea on an operational submarine provided for initial and refresher submariner training should be maintained at the currently planned level and increased if the review of the navy's submariner training program deems it necessary.

## **RECOMMENDATION 5:**

The Navy review the firefighting training provided to all naval personnel on submarines and ensure that the simulated fire situations used for training submariners are as realistic as possible to illustrate the conditions that could be encountered during a fire aboard a submarine.

## **RECOMMENDATION 6:**

All major crown projects valued at more than \$100 million proposed by the Department of National Defence be reported to

the Standing Committee on National Defence and Veterans Affairs for possible examination, as previously recommended in this committee's June 2000 procurement study.

**RECOMMENDATION 7:**

Parliament examine ways to increase the resources and the time available to the Standing Committee on National Defence and Veterans Affairs to carry out the examination of major crown projects proposed by the Department of National Defence.

**RECOMMENDATION 8:**

The recommendations of recent reports and updates of the Office of the Auditor General concerning the procurement process of the Department of National Defence be reviewed for potential implementation as quickly as possible and reported to this committee.

**RECOMMENDATION 9:**

All major equipment acquisition projects undertaken by the Department of National Defence be the subject of rigorous and detailed risk analysis, in keeping with the recommendations of the Office of the Auditor General, with a report to this committee.

**RECOMMENDATION 10:**

Information on the status of major military equipment acquisition projects be added as an integral part of the Part III — Plans and Priorities of the Estimates documents for the Department of National Defence, instead of just an internet link. Furthermore, the Department, in consultation with the Treasury Board, should review the possibility of adding more information on the rationale for these acquisitions in these documents.

**RECOMMENDATION 11:**

The Office of the Auditor General consider undertaking a review of all major updates and refits of the Victoria class submarines which may be undertaken over the course of their operational service.

**RECOMMENDATION 12:**

The Standing Committee on National Defence and Veterans Affairs is disappointed and angered by the inertia and systematic obstruction of the Department of National Defence in

producing the bilingual documents required for the Committee to function smoothly. This has frustrated the Committee in doing its work. On a number of occasions they have proposed tabling English-only versions of documents requested by the Committee. The reasons given for the delay in providing bilingual documents centred on prohibitive costs and inadequate time for translating technically complex material. Whereas this has led to a marked slowdown in the Committee's work, and whereas documents as important as the contract, the list of deficiencies in the submarines and the list of corrective measures took four months to be tabled and certain other requested documents have still not been tabled, it is recommended that the Standing Committee on National Defence and Veterans Affairs file a letter of complaint to the Minister of National Defence and report our concern about easy availability of translated documents to the Commissioner of Official Languages.





# INTRODUCTION

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Canadians were once again reminded of the dangers Canadian Forces personnel face while carrying out their duties when fire broke out aboard HMCS *Chicoutimi* on October 5, 2004. The last of the four Upholder class submarines acquired by Canada from the United Kingdom had just begun its voyage across the Atlantic Ocean to its new home when the fire started. The crew members of the *Chicoutimi* had to react quickly in order to save their lives and their vessel, but some of them suffered injuries, including Lieutenant Chris Saunders who died after being evacuated to a hospital. The tragic loss of life and the dramatic situation faced by the remaining crew members until the crippled submarine could be towed back to its port of departure caught the attention of all Canadians.

Shortly after the incident aboard the *Chicoutimi*, this committee undertook a study of the acquisition of the four British-built Upholder class submarines, called the Victoria class in Canadian service. While the Board of Inquiry established by the military investigated the fire aboard the *Chicoutimi*, this committee examined the broader issues related to the acquisition of the submarines such as the assessment of the equipment needs of the Canadian Forces, the particular process through which the submarines were purchased, the way decisions concerning priorities are taken, and the training provided to Canadian submariners to ensure safe and efficient operation of the vessels. The Committee heard the testimony of a number of witnesses including not only senior officials from the Department of National Defence, but also retired military and government officials, including former submariners, and former ministers of National Defence. The goal was to examine the decisions taken over the last 15 years to acquire the four Upholder class submarines to replace the old Oberon class vessels and the problems encountered while trying to bring them up to full operational status within Canada's maritime forces.

The incident aboard the *Chicoutimi* was the latest and most tragic in a long series of mishaps, delays, and problems that have plagued the acquisition and operation of Canada's new class of submarines over the last decade. Some witnesses questioned the Committee's decision to review the submarine acquisition at this time given that similar parliamentary studies had not been undertaken in the past whenever Canadian military personnel had been killed or injured in accidents.<sup>1</sup> Others may have wondered why the Committee waited years after its announcement to look into the submarine acquisition in some detail, forgetting that Committee members have raised questions about the project during past studies of

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<sup>1</sup> The Committee held a number of meetings in the early 1990s on CF-18 operations when a series of accidents involving CF-18s occurred in the space of a few weeks. The Committee has also examined the treatment of military personnel injured during various types of operations or accidents on a number of occasions, notably during the 1998 study on the quality of life of members of the Canadian Forces.

military readiness and other issues. Indeed, parliamentarians and other Canadians knowledgeable about the military equipment procurement process became increasingly frustrated by the long delays experienced by this acquisition project. It took too long to decide whether or not to proceed with the acquisition and then it took too much time to reactivate the submarines and to bring them up to full operational status once they had been transferred to Canada. The fire aboard the *Chicoutimi* inevitably prompted strong reactions, especially since there were now also growing concerns about the safety of our submariners.

Thus, the Committee decided to hear testimony from a number of government officials, military personnel, and other witnesses in order to piece together the arguably torturous history of this lengthy and troubled acquisition project. The Committee also had the opportunity to hear the views of Canadian submariners during its visit of one of the submarines and naval facilities in Halifax. Unfortunately, a long drawn out acquisition process has become the norm for almost every new piece of equipment provided to the Canadian Forces. There are many examples, including the maritime helicopters and the introduction of new combat uniforms, where new equipment is delivered to the military a decade or two after the acquisition process has started. However, the acquisition of the submarines has been especially complicated, both in terms of process and technological issues. Some of the questions raised during Committee meetings may sometimes appear to be fundamental, but this is the type of information Canadians, most of whom are not experts in military affairs and submarine technology, are seeking in order to judge the value of this project.

Some academic studies and media reports had already described the major decisions taken during the course of the acquisition process. However, by questioning military and government representatives, as well as academics and retired military and other officials, the Committee was able to confirm some of the known facts while discovering some details which shed new light on the way decisions were taken and implemented. To assist the research process, the Committee requested a series of documents from the Department of National Defence, including the contracts for the acquisition and support of the submarines. However, while we recognized that meeting our demand involved time and effort, our examination of the issues was seriously hampered by delays experienced in obtaining from the Department the originals of the documents and the translated version necessary to proceed with the distribution of the documents to all members of the Committee in a timely fashion. The Committee decided to proceed with the drafting of its report despite these delays and those caused by the reconvening of the military Board of Inquiry examining the incident aboard the *Chicoutimi* because Canadians are waiting for answers about the acquisition project. The findings of the Board of Inquiry may or may not raise new questions about the submarine acquisition, but the fact remains that the Committee's mandate was to examine the broad issues including the rationale for this acquisition, the decision-making process, and the management of the project. Thus, while it would have been useful to know the findings of the Board of Inquiry during drafting, the Committee believes

that it has sufficient information to draw valid conclusions about this acquisition and leaves the door open to the tabling of additional reports on this project if in its judgement the findings of the Board of Inquiry report or new revelations make this necessary.



# CHAPTER 1: THE DECISION TO MAINTAIN CANADA'S SUBMARINE CAPABILITY

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## Plans to Replace the Old Oberon Submarines (1980-1994)

Canada decided to replace its old Oberon submarines basically because military and government officials believed that maintaining a submarine capability was an important element of this country's defence and its ability to protect its interests. In order to understand why this became an issue in the 1990s and why it is still an issue in 2005, it is necessary to review the origins of this capability and the long process which led to the signing of contracts with the United Kingdom for the acquisition of four submarines.

Canada's Navy has a long history of submarine operations, but these have never been its main focus. The Navy operated a few submarines during the First World War and while it did not have submarines of its own during the Second World War, except for some captured enemy vessels in the final weeks of the war, some Canadians served aboard the submarines of the United Kingdom's Royal Navy. The cold war prompted Canada's Navy to acquire a few submarines in the 1960s, initially through leasing arrangements with the United States Navy for two Second World War vessels and then through the purchase from the United Kingdom of three new Oberon class submarines.<sup>2</sup> Adding submarines to the fleet of surface vessels and maritime patrol aircraft was in keeping with the use by other NATO navies of a multi-layered approach to anti-submarine warfare to counter the threat posed by Soviet submarines. The naval battles of the Second World War had demonstrated the value of using air and naval forces combined to detect submerged submarines. However, as Martin Shadwick of the York Centre for International and Security Studies pointed out to the Committee, the Oberons were used for much of their operational life mainly to provide anti-submarine warfare training for air and surface ships. There was more emphasis on their surveillance and anti-submarine capabilities during the last years of operational use.<sup>3</sup>

By the 1980s, when submarines were a well-established capability within the fleet, the Canadian Navy started planning for the replacement of the three Oberons which were expected to be close to the limit of their safe operational lifespan by the end of the 1990s. The original plans called for new submarines with a propulsion system similar to the diesel-electric one used in the Oberons.<sup>4</sup> However, there was

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<sup>2</sup> Canada purchased a fourth Oberon submarine in 1989, but HMCS *Olympus* was moored to a wharf and was used only for training.

<sup>3</sup> *Evidence*, Meeting No. 19, February 10, 2005.

<sup>4</sup> Most conventionally-powered or non-nuclear submarines have a propulsion system where diesel engines drive generators which power the electric motor used to turn the propeller and recharge the batteries.

a brief hiatus when, as indicated in the *1987 Defence White Paper*, Canada announced its intention to buy nuclear-powered submarines and to expand its fleet to as many as 10 or 12 vessels. Various arguments were used to justify the proposed acquisition including the necessity to increase naval capabilities in order to assert sovereignty in Canadian waters, especially in the Arctic, and to make an effective contribution to allied maritime operations during the cold war. However, the proposed acquisition of nuclear-powered submarines was questioned because of the costs involved and concerns about the use of a propulsion system relying on nuclear energy, whatever its operational advantages under the polar ice cap and elsewhere.<sup>5</sup> In 1989, when it became evident that the cold war was coming to an end, the Progressive Conservative Government announced the cancellation of these controversial plans as well as the first of what became a long series of cuts in Canadian defence spending made during the last decade of the last century, the effects of which are still being felt by the Canadian Forces today.

Thus, in the early 1990s, the Navy again found itself looking for a replacement for its old Oberons. Vice-Admiral (Retired) Peter Cairns, who was the commander of Maritime Forces Pacific and later commander of the Navy prior to his retirement in 1994, confirmed in his testimony to the Committee that between 1989 and 1993, the Navy examined many types of conventionally powered submarines as possible replacements for the Oberons. The candidates included the Walrus class submarine produced in the Netherlands, the German Type 209 and the British-made Upholder class then entering service with the Royal Navy. The Navy favoured submarines with enough range and other capabilities to operate in the oceans far from their home port rather than those designed more for coastal defence. This was due to the fact that in addition to the protection of Canadian waters, the Navy was also involved in naval operations in the North Atlantic and elsewhere as part of Canada's commitments to NATO. Another reason for the search for a replacement submarine was the looming termination of a contract for spare parts for the Oberon. At that time, the United Kingdom was the main source of spare parts for the British-built Oberons operated by Australia and Canada as well as the Royal Navy. According to Brigadier-General (Retired) Darrell Dean, then-commander of the Canadian Defence Liaison Staff (London), British officials alerted Canada to this effect in 1992.<sup>6</sup>

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<sup>5</sup> While any submarine operations under the polar icecap involve some risks, nuclear-powered submarines can count on an almost endless flow of electrical power thanks to their nuclear reactor. Submerged diesel-electric submarines are dependent mostly on the finite power provided by batteries and cannot venture too far under the polar ice cap since they may have to break through the ice and surface to operate the diesel engines and recharge the batteries. Air Independent Propulsion (AIP) systems have been or are being developed which can replace or supplement the diesel engines with fuel cells or other sources of energy not dependent on air, but under ice operations by submarines with this type of equipment would still have to be carried out with caution. Limited under ice capability is only one of the advantages offered by AIP technology. See for example Karen Winzoski, "Taking the Plunge: Should Canada Use Fuel Cell Technology to Make the Victoria-class Submarines More Stealthy?" *Canadian American Strategic Review*, May 2003.

<sup>6</sup> *Evidence*, Meeting No. 8, November 15, 2004.

The Navy's plans to replace the Oberons were stated in the Department of National Defence policy statement entitled *Canadian Defence Policy* made public in April 1992. This document was issued at a time when Canada was still adjusting the size and capabilities of the Canadian Forces in light of the collapse of the Soviet Union and the end of the cold war. Among other things, it noted that submarines "greatly enhance the flexibility of maritime forces and increase our ability to carry out surveillance and enforcement in our maritime areas of responsibility." The statement added that in "a project continuing beyond the end of the 15-year planning period, the Navy will replace its three Oberon Class submarines with up to six modern conventional submarines, in order to provide an underwater capability in both the Atlantic and Pacific."<sup>7</sup> This was a commitment to replace the old submarines, but the government of the day was not necessarily ready to proceed quickly with the actual acquisition of replacement submarines. There were other defence priorities at this time, including a contract, subsequently cancelled, for the purchase of EH-101 helicopters to replace the Sea King maritime helicopters, a project which was becoming more and more controversial because of, among other things, questions about the need for modernized anti-submarine capabilities in the post-cold war era. Besides, as the policy statement pointed out, the government intended to use the limited funds available for new military equipment projects "frugally on the highest priority items."<sup>8</sup> These and other factors may explain why the Progressive Conservative Cabinet of the day deferred a final decision on the acquisition of replacement submarines.<sup>9</sup> However, the need to replace the old submarines became more acute as the Oberons decreased in efficiency.

### **British Upholder Submarines Become Available for Acquisition (1993-1994)**

In the early 1990s, Canada was by no means the only NATO country adjusting the size and capabilities of its armed forces to the realities of a post-Cold war world. The United Kingdom was engaged in a similar process and took a number of decisions concerning military equipment, one of which had a significant impact on Canada's plans to replace its old submarines. In 1993, the British Royal Navy had a submarine fleet composed of nuclear-powered (SSNs) and diesel-electric (SSKs) attack submarines, used mainly for anti-submarine warfare, and nuclear-powered submarines (SSBNs) carrying Intercontinental Ballistic Missiles (ICBMs).<sup>10</sup> Given the collapse of the Soviet Union and the significant reduction in the threat to international peace, the U.K. government announced on July 5, 1993, in a defence white paper, a series of reductions in the force levels of

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<sup>7</sup> Canada, Department of National Defence, *Canadian Defence Policy*. April 1992, p. 22.

<sup>8</sup> Ibid., p. 12.

<sup>9</sup> Julie Ferguson, *Deeply Canadian. New Submarines for a New Millenium*. Port Moody, B.C., Beacon Publishing, 2000, p. 185.

<sup>10</sup> The Royal Navy's nuclear-powered submarines carrying ballistic missiles (SSBNs) was the U.K.'s nuclear deterrence force. In the early 1990s, the U.K. was in the process of replacing its SSBNs with Polaris missiles with new ones (the Vanguard class) with Trident missiles. In other words, the U.K. had other submarine projects underway at this time besides the Upholder project.

British military forces. With regard to the Royal Navy, the U.K. Secretary of State for Defence, Mr. Rifkind, stated that “the rapid decline in the size and operational activity of the former Soviet submarine fleet means that there is no longer the same need to sustain the current level of anti-submarine operations in the North Atlantic;...” Therefore, he announced a reduction in the fleet of attack submarines to 12 SSNs and the withdrawal from service of the 4 Upholder class of diesel-electric submarines by 1995.<sup>11</sup> The Upholders were at that time basically new submarines since construction of the first of the class began in late 1983 and the others were built during the last half of the 1980s. They completed the usual initial sea trials and began their operational service only when they were commissioned between 1990 and 1993, so they were not used extensively in operational terms before being withdrawn from service in 1994. The Upholders utilized some features similar to those found on nuclear-powered submarines such as an advanced hull design covered with anechoic tiles on the exterior surfaces so that they would be more difficult to detect. They were a new generation of submarines with a number of advantages over the Oberons and their 1960s technology.

However, the sea trials in the 1980s of the first vessel of the class, HMS *Upholder*, revealed problems including flooding in the original torpedo tubes and the loss of power when the main propulsion system was rapidly reversed during a performance test for an extreme situation sometimes encountered by submarines. The numerous months of delays caused by the teething problems experienced during the initial sea trials and the resulting controversy prompted the Defence Committee of the United Kingdom House of Commons to undertake a study of the Upholder project. In paragraph 34 of its 1991 report, the British committee noted the statement made by officials of the Ministry of Defence that it was not surprising that problems had occurred because the “first of class is always subjected to particularly rigorous sea trials.”<sup>12</sup> While concerned about the problems causing the delays, the report basically shared that view and was optimistic that the Upholders “will prove to be excellent submarines” following correction of the faults identified during the initial trials.<sup>13</sup> As demonstrated in paragraph 28, the report was more preoccupied by the manner in which the Ministry of Defence had managed the procurement project than by the design of the submarine. It questioned the decision of the ministry to take responsibility for the integration of the various elements of the submarine such as the equipment, propulsion, and weapons systems rather than letting the company which built the vessel do it. The propulsion equipment and the Weapons Handling and Discharge System apparently worked fine when tested at the factory, but experienced problems once they were installed in the submarine. The British report suggests that some of these interface problems between different systems could have been avoided if the integration had been carried out differently. Solutions to these problems were found and many of the required modifications were carried

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<sup>11</sup> United Kingdom, House of Commons, *Debates*, July 5, 1993.

<sup>12</sup> United Kingdom, House of Commons, Defence Committee, *Procurement of Upholder Class Submarines*, July 17, 1991.

<sup>13</sup> *Ibid.*, paragraph 57.



out during or shortly after the British parliamentary study. However, like other newly constructed naval vessels in their first years of operations, the Upholders were not necessarily completely free of problems when they were withdrawn from service in 1994.

The British committee report also briefly explored the potential for export sales of Upholder class submarines. In 1991, the focus was on the possible construction of additional Upholders rather than on the disposal of the four submarines constructed for the Royal Navy. In paragraph 16, the report stated that Canada had been identified as early as 1990 as a potential customer. When the United Kingdom decided to withdraw the Upholders from Royal Navy operations, Canada was again viewed as a potential customer, but this time it was the existing submarines which were offered for sale. British officials contacted the commander of the Canadian Defence Liaison Staff (London), Brigadier-General (Retired) Dean, in the fall of 1993 to see if Canada was interested in acquiring the submarines.<sup>14</sup> Although the U.K. spent a few billion dollars to develop and build the four submarines, it was willing to sell them to a major ally at a fraction of the total costs instead of scrapping them. According to testimony and published sources, various countries including South Africa, Portugal, Greece, and others expressed interest, but, for a variety of reasons, including close cooperation between the Canadian and British navies over the years, the U.K. apparently gave Canada the right to first refusal. According to Mr. Ray Sturgeon, the Senior Assistant Deputy Minister (Materiel) of the Department of National Defence in the period between 1992 and 1994, he went to the U.K. in March 1993 with Vice-Admiral (Retired) Cairns, then-Commander of Maritime Command. With the consent of the Minister of National Defence, they wanted to “launch preliminary discussions” with British officials to let them know that “we might be interested.”<sup>15</sup> Mr. Sturgeon indicated that the meeting with British officials, “given the circumstances at the time,” did not involve the Canadian Defence Liaison Staff (London) which, as noted above, was contacted officially by a British official, the First Sea Lord, later in 1993.<sup>16</sup>

### **Debate in Canada and Cabinet Examination of Proposed Acquisition (1993-1996)**

The possible acquisition by Canada of the four Upholder submarines became public knowledge in 1993-1994. This period was marked by, among other things, the transfer of power from a Progressive Conservative government to one formed by the Liberal Party following the October 1993-elections. The new government initiated a full scale review of Canadian defence policy which led to the tabling in the fall of 1994 of a report by the Special Joint Committee of the House of Commons and the Senate on Canada's Defence Policy. The Special Joint

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<sup>14</sup> *Evidence*, Meeting No. 8, November 15, 2004.

<sup>15</sup> *Evidence*, Meeting No. 9, November 22, 2004.

<sup>16</sup> *Evidence*, Meeting No. 8, November 15, 2004.

Committee was composed of Members of Parliament from the Liberal, Reform, and Bloc Québécois parties and Liberal and Progressive Conservative Senators. There was no member from the New Democratic Party. In one of its recommendations, the Special Joint Committee stated that it could not support a full-scale acquisition project costing \$4 to \$6 billion for new submarines built in a foreign or Canadian shipyard on the premise that Canada's treasury could simply not bear such an expense. However, the Committee added that the government should seriously consider the acquisition of three to six modern diesel-electric submarines on a basis that was "demonstrably cost-effective" or, in other words, that "could be managed within the existing capital budget" of the Department of National Defence.<sup>17</sup> In a dissenting report, the Bloc Québécois members of the Special Joint Committee stated, among other things, that they were "completely opposed to the purchase of submarines for Canada's Navy as envisaged in the majority report. Regardless of whether submarines are available on the market at low prices, we believe that purchasing such a system would inevitably result in related costs (purchases of torpedoes, maintenance and personnel training costs, operating expenses, increase in inventory systems upgrading, etc.) which would inflate the budget expenditures of the Department of Defence."<sup>18</sup>

The Special Joint Committee majority report influenced the *1994 Defence White Paper* which responded to the report's recommendation regarding submarines by noting that the United Kingdom was selling its Upholder submarines and that the government intended to "explore this option."<sup>19</sup> It was clear that the government was going to pursue the matter, but the White Paper also identified equipment purchases which were given a high priority, such as new armoured personnel carriers for the army and a new search and rescue helicopter to replace the Labradors. Furthermore, it announced cuts in military personnel and in the defence budget in keeping with deficit reduction measures applied to federal government spending in general. Given these cuts, the context was not ideal for a speedy replacement of the Oberons, but the White Paper's emphasis on maintaining a multi-purpose combat-capable force gave some urgency to the project because the Oberons were approaching the end of their service life and were less and less capable because of their age and safety considerations. This was yet another situation where Canadian Forces personnel had to continue operating old equipment amid some concerns about safety and readiness levels.

The replacement of the submarines was only one of a number of military equipment projects being considered at this time and it did not attract much public attention. There were no major announcements by government and military officials

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<sup>17</sup> Report of the Special Joint Committee on Canada's Defence Policy, *Security in a Changing World*, October 1994, p. 38.

<sup>18</sup> Dissenting Report by the Bloc Québécois Members of the Special Joint Committee on Canada's Defence Policy in Report of the Special Joint Committee on Canada's Defence Policy, *Security in a Changing World*, October 1994, p. 81.

<sup>19</sup> Department of National Defence, *1994 Defence White Paper*, p. 47.

concerning the project in the months immediately following the publication of the *1994 Defence White Paper*. Indeed, the Senior Assistant Deputy Minister (Materiel) of the Department of National Defence from July 1994 to April 1996, Lieutenant-General (Retired) Robert Fischer stated that in terms of the acquisition process, “little, if any, substantive activity” on the Upholder file occurred during this period.<sup>20</sup> However, there was in fact a flurry of activity, especially in December 1994 and in January 1995, before the acquisition process ground to a halt. In his testimony, Mr. Dean stated that the recently appointed Minister of National Defence, Mr. David Collenette, and the Deputy Minister at that time, Robert Fowler, were briefed on the availability of the Upholders during a stopover in London. After being advised that the approval process for the acquisition might take a long time, British officials nevertheless requested a letter from the Canadian minister to their minister to confirm Canada’s interest in the acquisition. In his letter dated December 10, 1994 to Malcolm Rifkind, U.K. Secretary of State for Defence, Mr. Collenette stated that in the wake of the White Paper’s support for the recommendations of the Special Joint Committee report, he had directed his staff to “explore more comprehensively” with British officials “the details of an acquisition plan” for the four Upholders. Mr. Dean stated that although he never saw a copy of the letter, it set in place the “lease-for-purchase barter” arrangement whereby the submarines could be leased and then purchased for a nominal fee in exchange of funds spent by the U.K. for the training of their forces at facilities in Canada.<sup>21</sup> However, the text of Mr. Collenette’s letter actually only states that Canadian and British officials will work to confirm “the possibility of innovative financial arrangements.”<sup>22</sup>

Mr. Collenette’s letter paved the way for the January 1995 visit to the Upholder submarines in the United Kingdom by a team of Canadian military and departmental officials.<sup>23</sup> Mr. Fischer and Mr. Dean mentioned in their testimony that some Canadian military personnel went to the U.K. in the mid-1990s either to visit the submarines, to receive training, or to participate in an exchange of military personnel between Canada and other allied countries, a practice which still exists today. At least one Canadian naval officer served aboard an Upholder class submarine as part of the crew during an exchange tour in the early 1990s. The information gathered earlier on the Upholders likely served to prepare the delegation for its January 1995 visit. British military and corporate officials gave technical briefings on the mechanical and electronic systems of the Upholders to the Canadians and apparently responded to most of their questions. It is clear that the Canadian delegation examined the submarines with the perspective that Canada

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<sup>20</sup> *Evidence*, Meeting No. 9, November 22, 2004.

<sup>21</sup> *Evidence*, Meeting No. 8, November 15, 2004.

<sup>22</sup> A copy of this letter was provided to the Committee with the other documents requested from the Department of National Defence.

<sup>23</sup> A copy of the report was part of the documents provided by the Department of National Defence in answer to the Committee’s request for British and Canadian lists identifying the deficiencies of the Upholder class submarines.

was clearly interested in acquiring the submarines and was on the brink of taking a decision, perhaps as early as April 1995, to proceed with the acquisition.

While instructed not to engage in financial discussions, the delegation's task was to compare the Upholders with the Oberons and identify equipment and training issues that had to be addressed in order to bring the newer submarines up to operational status within the Canadian fleet. Some of these issues had already been identified by the British parliamentary committee study and the Canadian military officers who visited the Upholders in the early 1990s. The 1995 report basically confirmed the consensus among Canadian naval personnel that if Canada obtained the Upholders, one of the major items would be the modification of the weapons system so that the torpedoes used by all Canadian warships, the U.S.-made MK 48 torpedo, could be used instead of the British torpedoes. This is the origin of one of the main elements of the "Canadianization" process undertaken when the Upholders were eventually transferred to Canada from the United Kingdom starting in 2000. It appears that the MK 48 torpedoes and especially the kind of fire control system used or being developed for the Canadian Oberons at that time were judged superior to the British equivalent. The changes concerning the torpedos, not to mention those for the communications systems, were likely proposed in order to ensure a high level of interoperability with allied naval forces. Some elements of the Upholders such as the propulsion and sensor systems were considered to be similar enough to those on the old Oberons to facilitate the training of the crews making the transition from the old vessels to the Upholder class. The advanced technology of the Upholders also promised to improve the operational effectiveness of Canada's naval fleet. Some of the problems that have been mentioned in news stories since 2000 when the submarines started being transferred to Canada, such as those concerning the diesel exhaust hull and back up valves, were recognized in 1995 as issues requiring attention. Other issues which have more recently attracted attention, such as the insulation of electrical wiring, were not raised.

Overall, the 1995 delegation apparently had a positive attitude towards the Upholders and considered the condition of the submarines, which had already been moored for many months, to be better than expected. However, the condition varied from one vessel to another, as indicated in one of the report's annexes. The general condition of HMS *Upholder* (later HMCS *Chicoutimi*), the first and oldest of the class, was described as being generally good, although it required a major period of work. The second vessel built, HMS *Unseen* (later HMCS *Victoria*) was considered to be in the best condition of all four. The condition of the third vessel built, HMS *Ursula* (later HMCS *Corner Brook*) was judged to be fair and there was some concern about how the machinery spaces were being cared for. The condition of HMS *Unicorn* (later HMCS *Windsor*), the newest vessel, was good although, as in the case of HMS *Ursula*, no specific defect list had been provided by British officials. It was clear that some work was required in order to bring the Upholders back to full operational status, but this did not appear to be an obstacle to the acquisition process. The fact that these used submarines were by this time basically the only

option available to the Navy to replace the Oberons may have influenced the way senior naval officials interpreted the conclusions reached by the 1995 delegation.

Armed with the information gathered during the January 1995 visit of the Upholders, the Minister of National Defence of the day, David Collenette, was presumably convinced that the condition of the British vessels was good enough to meet Canada's requirement and that the price asked by the British was within the limitations identified by the *1994 Defence White Paper*. Thus, he argued the case for proceeding with the acquisition at a meeting of the Cabinet in April 1995. As Mr. Collenette told the Committee, the Cabinet more or less gave its approval to the project, but Prime Minister Jean Chrétien had second thoughts.<sup>24</sup> Many sectors of Canadian society including social and health programs as well as defence were starting to feel the effects of the cuts in federal government spending which the Liberal Cabinet believed necessary in order to reduce the national deficit. The Prime Minister was apparently concerned about the way the Canadian public would perceive the purchase of submarines at a time when many social and health programs were being cancelled or reduced. Further action on the acquisition project was delayed pending a better political climate for the announcement of yet another military equipment project on top of the purchase of new armoured personnel carriers and the replacement of search and rescue helicopters announced in the White Paper. Mr. Collenette's testimony confirmed the speculation among journalists and academics that Prime Minister Chrétien had been directly involved in the decision to delay the acquisition.<sup>25</sup>

The Navy had no option but to wait and hope for an improvement in the political climate for the acquisition to proceed. It was already facing the stark reality that it either obtained the Upholder submarines at a good price or it abandoned its submarine capability once it was no longer safe to operate the old Oberons. Now, there was no certainty if and when the acquisition project would actually go ahead. It is from this point on that the submarine project really entered into its period of "little, if any, substantive activity" as described by Mr. Fischer. Nevertheless, the Navy apparently remained resolved to replace the Oberons with the Upholders and the Committee did not see or hear much evidence that it or the Department reassessed the requirement for submarines during this period. However, the fact remains that by April 1995, most of the Upholders had been tied to a wharf for many months and, except for the electrical power fed from shore to demonstrate the electronic systems to prospective customers, the vessels were just soaking up the sun and the salt water. Both the Prime Minister and the Navy should have been concerned at this

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<sup>24</sup> Evidence, Meeting No. 15, December 13, 2004.

<sup>25</sup> In her book, Julie Ferguson indicates that the decision concerning the submarine acquisition was delayed by Prime Minister Chrétien, but that this happened in the spring of 1996. See Julie Ferguson, *Deeply Canadian. New Submarines for a New Millenium*. Port Moody, B.C., Beacon Publishing, 2000, p.156. However, on page 185 as well as on p. 156, Julie Ferguson indicates that in 1995 British officials were irritated by the decision to delay the acquisition and ended Canada's right to first refusal.

time about the effects of long periods of inactivity on the machinery aboard complex vessels like submarines.

### **Cabinet Approval for the Acquisition of the Upholders (1997-1998)**

When Art Eggleton became Minister of National Defence in 1997, the Department was still awaiting Cabinet approval for the acquisition of the Upholder submarines. Shortly after becoming minister and receiving information on the proposed acquisition from military and departmental officials, Mr. Eggleton visited the submarines in the United Kingdom in June 1997. Mr. Eggleton told the Committee that there was no undue amount of pressure from British officials for a quick decision, although they were certainly anxious for a final decision since other countries continued to express interest in the submarines.<sup>26</sup> He noted that the issue of Canada's payment of penalties after the cancellation in 1993 of the EH-101 helicopters contract, which involved some British companies, had been settled by the time he became minister and was therefore not a factor in the submarine acquisition. Furthermore, by this time, other equipment priorities had been taken care of, such as the replacement of the Labrador search and rescue helicopters. However, Mr. Eggleton pointed out that it was still necessary to find extra funding within the defence budget for the submarines at a time when the Department of National Defence, like other governments departments, faced significant cuts in its expenditures. These funds were made available by withdrawing from service some of the old surface ships waiting to be replaced by the new frigates and two of the old Oberons. The already scheduled refit of one of the Oberons was also cancelled. As for the possibility of a barter arrangement where Canada "could offset the expenditure to the U.K. by the incoming revenue we get from the U.K.", Mr. Eggleton confirmed that the issue had been raised before he became minister.

Mr. Eggleton stated that he made a major presentation on the submarine acquisition to the Cabinet which finally gave its approval on March 31, 1998. The Department of National Defence issued a news release and a backgrounder on April 6, 1998 announcing the acquisition of the Upholder submarines.<sup>27</sup> These documents indicated that the total costs would not be more than \$750 million (later adjusted to \$812 million to take inflation into account). They also stated that the financing arrangements included an eight-year, interest-free, lease-to-buy arrangement, a bartering "of Canadian lease payments on the four submarines for the costs charged to the U.K. for continued training of British Forces in Canada at bases in Wainwright, Suffield and Goose Bay" (according to the backgrounder), and a nominal sum at the end of the lease of one pound Sterling to purchase each submarine. The Department issued another press release on July 2, 1998 which

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<sup>26</sup> *Evidence*, Meeting No. 11, November 29, 2004.

<sup>27</sup> Canada, Department of National Defence, "Submarines For Canada's Navy," News Release NR-98.018, April 6, 1998; "Submarine For Canada's Navy," Backgrounder BG-98.017, April 6, 1998.

announced the signing of the two major contracts.<sup>28</sup> One contract was with the Government of the United Kingdom for the lease-to-purchase of the four Upholders and the purchase of training equipment and a technical data package.

The other was signed with Vickers Shipbuilding and Engineering Ltd. (VSEL) for the initial equipment spares and the training of Canadian crews.<sup>29</sup> The press release concerning the contracts again made reference to an arrangement involving “an innovative eight-year, interest-free, lease-to-buy agreement in which Canada’s submarine lease payments will be bartered for the British forces’ use of training facilities” in Canada.

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<sup>28</sup> Canada, Department of National Defence, “Submarine Contracts Signed,” News Release NR-98.052, July 2, 1998.

<sup>29</sup> In the following months, the name of the company changed a number of times. It was called Marconi-Marine (VSEL) Ltd. and then Marconi Naval Systems before changing to its current name, BAE Marine Systems, one of the many elements within the BAE Systems corporation. BAE Systems was established in 1999 when British Aerospace (BAe) merged with Marconi Electronic Systems.





## CHAPTER 2: A GOOD DEAL FOR CANADA?

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### Arguments Supporting View That the Acquisition Was a Good Deal

Almost four years after the *1994 Defence White Paper* more or less gave the green light for the replacement of the Oberons and three full years after Mr. Collenette made his presentation to the Cabinet in 1995, the Cabinet finally approved the acquisition of the Upholders. Unfortunately, Canadians are used to long delays in government decisions concerning new equipment for Canada's military, but the three year delay in the Cabinet decision process experienced by the submarine project is one of the worst examples. It is surpassed perhaps only by the delays in the replacement of the Sea King helicopters. It should not be forgotten that by 1995, almost a decade's worth of planning and preparations had taken place before the submarine project even reached the stage where contracts were signed. Whether one agrees or not with the need for such equipment, it is frustrating to see so much time and effort deployed to prepare the acquisition of a piece of equipment only to see a question of political timing determine when Canadian military personnel will be able to use it. In any case, the Committee hopes that the procurement process will be shortened and made more efficient by the measures which the Department's Assistant Deputy Minister (Materiel), Alan Williams, told us have been taken.<sup>30</sup>

As for the relevance of the capabilities provided by the submarines in a rapidly changing world, the protracted route taken to reach a decision on the acquisition of the Upholders raises a number of questions about the decision-making process. The Special Joint Committee and the *1994 Defence White Paper* gave qualified support for maintaining Canada's submarine capability, as long as it was done at the lowest cost possible.<sup>31</sup> However, there was still hesitation on the part of government to go ahead with the acquisition process more because of the possible effects on public opinion than because of any changes in the international context. Meanwhile, the Navy appeared to be determined to maintain a submarine capability at any cost. If this meant taking over the British Upholders, whatever their qualities and deficiencies, this was viewed as the only option. As Dr. Richard Gimblett, Research Fellow at Dalhousie University's Centre for Foreign Policy Studies, pointed out, a navy with many different types of platforms (surface ships, submarines, coastal patrol ships) gives the government a variety of options whenever Canada is called upon to contribute to multinational operations

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<sup>30</sup> *Evidence*, Meeting No. 21, February 17, 2005.

<sup>31</sup> The parliamentary input was provided by the majority report of the Special Joint Committee on Canada's Defence policy, although as noted in Chapter One, the Bloc Québécois issued a dissenting report. The Special Joint Committee of 1994 was composed of Members of the House of Commons from the Liberal, Reform, and Bloc Québécois parties and Liberal and Progressive Conservative Senators.

dealing with, for example, an international security crisis.<sup>32</sup> In some types of operations, such as the enforcement of sanctions imposed by the United Nations on a rogue state, surface warships are ideal for the interception and inspection of cargo ships while in others, stealthy surveillance by submarines of naval units posing a threat to coalition forces would be more suitable. The wide choice of capabilities made available is in keeping with the commitment stated in the *1994 Defence White Paper* to provide multi-purpose combat-capable forces.

Thus, some argue that despite the time it took to obtain Cabinet approval and the delays the project subsequently experienced, the acquisition of the four Upholder class submarines is a good buy for Canada. The former ministers of National Defence who testified before the Committee and others maintain that for a country like Canada with a long coastline and dependent on maritime transport for an important portion of its international trade, providing Canadian maritime forces with multiple capabilities is a necessary step. Submarines are viewed as a versatile element of maritime forces because of their ability to carry out surveillance operations in a stealthy manner, whether to monitor the presence of foreign submarines close to Canadian waters or the activities of foreign fishing boats and other vessels potentially harmful to Canada's resources and interests. They are also considered the most effective platform for anti-submarine operations because they operate in the same environment as the intruding submarine. The mere existence of a submarine fleet is seen as part of an effective deterrence against any activities in Canadian waters, including those in the north, by some countries wishing to challenge Canadian sovereignty and hamper Canada's ability to protect its natural resources and environment. The various occasions when submarines have been used in the past to monitor and gather evidence of overfishing or other illegal activities by foreign boats, such as Operation Ambuscade in 1993 where an Oberon class vessel located U.S. scallop draggers in Canadian waters in Georges Bank and monitored their activities, are given as proof of the value of submarines in peacetime surveillance.

The fact remains that submarines are essentially combat capable systems and as defence analysts such as Martin Shadwick and Richard Gimblett have pointed out, they can play an important role in protecting Canadian naval ships participating in multinational security operations far from Canada. In the past, multinational naval operations in areas such as the Arabian and Adriatic seas, including those supporting peacekeeping operations, have monitored the presence of foreign submarines which posed a potential threat to or hindered manoeuvres by allied ships. Even if Canada's submarines are not part of a multinational operation, some experts have noted that they could be used sometime in the future by Canadian, U.S. and other allied air and naval forces to train in anti-submarine warfare prior to the deployment by the coalition task force to a world trouble spot. Indeed, some of the witnesses referred to messages of support from the U.S. military for Canada's acquisition of submarines given the possibility of their

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<sup>32</sup> *Evidence*, Meeting No. 20, February 15, 2005.

availability for training exercises with U.S. naval forces. The U.S. Navy operates nuclear powered submarines but, according to many defence analysts, it recognizes that diesel-electric submarines can pose a serious threat to its surface fleet, especially in littoral operations. Training exercises with foreign diesel-electric vessels are therefore considered of great value in honing the skills of the crews of patrol aircraft and surface ships. The proponents of the submarine acquisition point to the value of submarines in anti-submarine warfare as well as the firepower they can bring to bear during anti-shipping operations as proof that submarines are a necessary element of a balanced naval fleet. The fact that many countries, big and small, throughout the world operate submarines has been used to support this argument. By the same token, the existence of so many submarines around the world is highlighted in order to illustrate the serious threat Canadian and other allied surface ships could face during multinational operations.<sup>33</sup>

For some of those who accept the premise that submarines are an important element of any multi-purpose combat-capable force, obtaining such a capability at a favourable price is proof that it was a good buy. The lease-to-buy arrangement identified in the contract signed by Canada and the United Kingdom on July 2, 1998 was expected to cost no more than \$750 million, later adjusted to \$812 million to take inflation into account.<sup>34</sup> Thus, for some \$800 million, Canada obtained four relatively new Upholder class submarines with an advanced design which some defence experts and naval officers compare favourably with similar submarines currently operated by navies around the world. The Upholders have sufficient range to operate for long periods of time in or near Canadian waters or to undertake long deployments in the world's oceans to reach and operate in distant trouble spots. As Mr. Gimblett pointed out, some of the other types of diesel-electric submarines available on the market today are more suited to coastal operations and, compared to the Upholders, would not meet many of Canada's requirements in terms of submarine operations.<sup>35</sup>

The supporters of the acquisition point out that the significant submarine capability provided by the Upholders was obtained at a fraction of the costs Canada would have incurred if it had purchased new submarines from a foreign shipyard or had contracted a Canadian company or a consortium of companies to construct them in this country. The option chosen by Australia which involved the selection of a foreign hull design, in this case Swedish, the construction of the new vessels in Australia, and the design and manufacture by Australian companies of the electronic and other equipment installed in the submarine, with all the integration

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<sup>33</sup> Anti-submarine warfare continues to be an important NATO capability as illustrated by the exercise Noble Marlin 05 held in March 2005 in the Mediterranean involving ships, submarines, and aircraft of 10 NATO countries including Canada.

<sup>34</sup> The costs of some submarine-related projects have recently been added to the acquisition costs and Treasury Board has approved a new ceiling for the Submarine Capability Life-Extension project of \$897 million, as discussed later in this chapter.

<sup>35</sup> *Evidence*, Meeting No. 20, February 15, 2005.

problems this entailed, has often been cited during the Committee's meetings on the acquisition. As in Canada, Australia's acquisition of submarines is very controversial, but for different reasons. Australia has constructed six new Collins class submarines at a total cost of over A\$5 billion, but the planned expenditures for 2003-2004 included another A\$773.7 million for additional work to correct the shortcomings identified in initial trials and in an Australian government report.<sup>36</sup> Indeed, Australia is also receiving help from the U.S. Navy to rectify some of the problems. Thus, Australia has acquired six new submarines at a cost of almost A\$1 billion each while Canada acquired four relatively new vessels for \$800 million.<sup>37</sup> For the advocates of the Upholder acquisition, the low costs of the purchase compared to the significant sums being paid by Australia and other countries to build new submarines from scratch highlights the advantages of this purchase. The problems encountered by the Australians have also been used to illustrate the potential pitfalls of constructing new submarines and the complexity of submarine technology, if only to show that Canada's submarine problems are not unique.

The acquisition of the Upholders is viewed favourably by its advocates even though these submarines have a very limited ability to operate under large expanses of ice in Canada's northern waters. When the Canadianized Victoria class vessels become fully operational, these submarines will bolster to some extent the limited Canadian military presence in Canada's Arctic waters. This could be especially important in the Northwest Passage where Canadian sovereignty could be seriously challenged in the coming decades by countries which view the passage as an international sea lane. Shipping through the Passage is expected to increase in the future since the effects of global warming will likely reduce the extent of the ice blocking navigation and the period of time when it does so. While diesel-electric submarines like the Canadianized Victoria class can perhaps travel submerged under the edges of the ice cover, they cannot venture too far under the polar ice cap without running ever-increasing risks. Much research has been undertaken, notably here in Canada, on fuel cells and other sources of energy which could be used for Air Independent Propulsion (AIP) technology in submarines. Vice-Admiral (Retired) Cairns confirmed that AIP research was undertaken in the early 1990s when the Navy was again looking for a replacement for the Oberons after the cancellation of the proposed purchase of nuclear-powered submarines.<sup>38</sup> However, even if AIP technology was developed to a point where it could be installed in the Canadianized Victoria class submarines, something which might be considered in the years to

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<sup>36</sup> The first Collins class submarine was commissioned in 1996 and the sixth was commissioned in 2003, but it is only in March 2004 that the Royal Australian Navy accepted the "operational release" of the six submarines. This means that the submarines can be used operationally, although upgrades to correct some deficiencies are being carried out.

<sup>37</sup> The value of the Australian dollar is currently almost on par with the Canadian dollar.

<sup>38</sup> *Evidence*, Meeting No. 6, November 1, 2004.

come, the vessels would still have a very limited ability to operate safely while submerged in waters covered with ice.<sup>39</sup>

## **Arguments Against the Acquisition of Submarines**

While some consider the limited ability of the Victoria class submarines to undertake under ice operations and the possibility of some improvements in under ice capabilities with the installation of an AIP system sometime in the future as an advantage, others view this as another example of the questionable value of these submarines. They remain unconvinced that Canada needs submarines and their limited under ice capabilities, with or without AIP technology. In any case, they do not consider submarines an important asset for asserting Canadian sovereignty in northern waters. The critics argue that the assertion of sovereignty requires a visible military presence in the Canadian North and see little advantage in Canada having submarines which, in any case, would operate most of the time submerged and out of sight. They believe that visible platforms like surface ships and aircraft are a more effective display of this country's capacity to monitor activities in Canadian waters, although there is concern that the Canadian Forces currently do not have enough resources in northern regions.

The advocates of the acquisition respond by noting that since Canada operates submarines, it is therefore advised by the navies of other countries whenever their submarines must transit in or navigate close to Canadian waters. Such notification is carried out in order to reduce the risks of collisions between Canadian and other submarines. The advocates argue that such an arrangement helps Canada to assert its sovereignty because it is made aware of the presence of any foreign submarine in its waters. However, some of the critics are not convinced that Canada should be part of the club of countries operating submarines simply to be informed about the deployment of foreign submarines close to our waters. Besides, in their view, new technology including uninhabited aerial vehicles (UAVs) could provide improved surveillance capabilities over the wide expanses of Canadian territorial waters for perhaps less than the operating and acquisition costs of the four submarines. However, some defence analysts such as Professor Shadwick cautioned that UAV technology is still in the early development stages and that more work needs to be done to improve their surveillance capabilities.<sup>40</sup>

In any case, the critics of the acquisition project question the extent to which foreign submarines pose a threat to Canada's interests, either close to Canadian shores or in distant areas where Canadian ships may be operating as part of

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<sup>39</sup> The installation of an air independent propulsion system might involve cutting the hull of a submarine in order to add a plug or extension of the hull containing a fuel cell or similar power source and welding the hull back together again. Tests and similar installations done in some countries have demonstrated that these modifications are feasible.

<sup>40</sup> *Evidence*, Meeting No. 19, February 10, 2005.

multinational forces. As Peter Langille asserted, there may have been a number of Soviet submarines close to or possibly in Canadian waters during the Cold war, but the submarine threat is not as significant today.<sup>41</sup> Besides, the critics of the acquisition believe that surface ships and maritime patrol aircraft have sufficient anti-submarine warfare capabilities to detect any submarines intruding in Canadian waters or in the zone of operation of a multinational naval force. In their opinion, Canada does not need its own fleet of submarines to detect intruders in Canadian waters while multinational naval forces can rely if necessary on submarines from other allied countries to provide protection. They also find wanting the evidence brought forward to demonstrate the value of submarines in the surveillance of the activities of foreign fishing and other boats in Canadian waters. The critics conclude that it would have been possible for Canada to decide not to replace its old Oberons and thus avoid all the implications of maintaining a submarine capability including the operating costs in addition to those for the surface fleet and the complex infrastructure, including a training system, needed for their safe operation. Some critics are willing to argue that in order to cut its losses so to speak, Canada should abandon submarine operations altogether and get rid of the four submarines acquired from the United Kingdom.

Some criticize the submarine acquisition project because they have a different perspective of what Canada's defence priorities should be. They question the purchase of submarines when so many demands have been placed on the Canadian Forces during the last decade in terms of participation in international peacekeeping missions. Some if not all of the funds earmarked for the submarine acquisition, albeit not as significant as those which would have resulted from the construction of new vessels in Canada, could have been better spent, they argue, on the deployment of additional Canadian soldiers for peacekeeping operations and on the support provided to these operations by air and naval units. Other critics suggest that buying additional combat vehicles or heavy lift transport aircraft vital to the success of peacekeeping operations would have better served Canada's interests and those of the international community than the acquisition of submarines. A number of critics also argue that too much was cut from defence spending during the 1990s and that this put the land, air, and naval capabilities of the Canadian Forces at risk. From their point of view, the debate should not be on whether or not Canada would have been better served if it had purchased additional armoured personnel carriers instead of submarines. The debate should rather be on whether or not defence spending is sufficient to provide the Canadian Forces with all the capabilities they believe necessary to fulfil their commitments and if the policy guidelines are clear enough to guide their selection of equipment.

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<sup>41</sup> *Evidence*, Meeting No. 20, February 15, 2005.

## **Submarines and Canadian Defence Priorities as Outlined in the *1994 Defence White Paper***

It was not the mandate of the Committee's study to determine whether or not Canada should keep the submarines. In any case, it is difficult for the members of this committee to reach a consensus on whether or not the acquisition of the submarines was the best use of resources in the absence of a clear and up-to-date defence policy. Much has changed in the world since the publication of the *1994 Defence White Paper*, even though the government insists that the essential elements of Canadian defence policy remain the same as in 1994. Determining the extent to which newly introduced equipment provides the capabilities required for a "general-purpose combat-capable force" is complicated when it is not clear what kind of military force Canada needs in the first decade of the twenty-first century. Canadian parliamentarians and analysts have been demanding a review of Canadian defence policy for many years. After long delays, this review has been undertaken and Parliament will have the opportunity to examine the new policy. The fact remains that a full decade after the *1994 Defence White Paper* was published, Canada now has the modern submarines which that document more or less called for. However, it is not clear to everyone to what extent Canada needs those submarines in the post-September 11, 2001, world. It is true that Canadians are much more aware of the need to bolster surveillance of the Canadian coastline in response to possible infiltration by terrorists into North America. Submarines can perhaps bolster the surveillance capabilities of patrol aircraft and surface ships, but in 2005, does Canada need submarines to protect its ships during multinational naval operations to the same extent it did in 1995? These are the kind of questions which may be raised during the parliamentary study of Canada's defence policy and its international policy goals.

In the meantime, the submarine acquisition project has apparently proceeded since 1994 without any second thoughts by the Department of National Defence or the government about the necessity of maintaining a submarine capability or the value of the deal being offered. As a result of the decision by Prime Minister Chrétien to delay the acquisition, three years went by between the publication of the White Paper in 1994 and the signing of the contracts in July 1998. Once the contracts were signed, the process of delivering the submarines, modifying them and working up to full operational status encountered more delays. According to Mr. Alan Williams, Assistant Deputy Minister (Materiel), Department of National Defence, and Captain (Navy) Williamson, Project Manager, Submarine Capability Life Extension project, the fleet of Victoria class submarines will not be fully operational (i.e. fully Canadianized and tested) until about 2008, given the delays in the reactivation and Canadianization process.<sup>42</sup> However, while the Canadianization of at least one of the submarines, HMCS *Corner Brook*, was almost complete by the end of 2004, it remains to be seen to what extent the

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<sup>42</sup> Evidence, Meeting No. 4, October 25, 2004 and again repeated by Captain (N) Williamson at Meeting No. 13, December 6, 2004.

temporary withdrawal of the submarines from operations pending the completion of the Board of Inquiry report into the fire aboard HMCS *Chicoutimi* and the repairs to that vessel may cause further delay in reaching full operational status. Since the initial and refresher training of submariners relies to some extent on time aboard an operational submarine, as pointed out by a number of witnesses, the delays in the Canadianization process and the temporary withdrawal from operations will inevitably affect training. Thus, it could be almost 2010 before the submarine fleet can contribute on a full-time basis to Canada's military capabilities, some 15 years after the 1994 policy statement which paved the way for its acquisition.

The Committee would perhaps be more confident about the need for such an acquisition if Canadian defence priorities and the requirement for submarines had been reviewed on a regular basis over this 15 year period. Military planners in Canada and other countries have sometimes been criticized for planning equipment acquisitions based on the last war or on Cold war scenarios rather than on current and future requirements. In the absence of a regularly updated defence policy, military planners may not have the clear guidelines necessary to reassess equipment needs and to make sure that Canada will have the right capabilities at the right time. Now that a review of Canadian defence policy has finally been undertaken, the Committee hopes that the process will provide these clear guidelines for military planners. However, the length of time between the publication of the *1994 Defence White Paper* and the currently estimated date when the submarines can achieve full operational status underlines the need for regular updates of Canadian defence policy. Once the current defence review is completed, this country should not wait another decade or so for an update of its defence policy. Our closest allies make it a regular practice of providing their citizens and their parliaments with updates of military policies and defence expenditure plans over two or three years. The United Kingdom Ministry of Defence has issued a number of policy papers in recent years as part of its Strategic Defence Review including the July 2004 document *Delivering Security in A Changing World: Future Capabilities* which outlined force structure changes and equipment priorities.<sup>43</sup> Australia issued in 2004 the document *Defence Capability Plan 2004-2014* on its capital equipment plan four years after its Defence White Paper, *Defence 2000: Our Future Defence Force* and, between these two documents, it prepared others including a defence update in 2003.<sup>44</sup> Meanwhile, the United States is undertaking in 2005 its Quadrennial Defence Review. Some of the problems encountered with the submarine acquisition project might have been avoided if Canadian defence policy had been updated at a regular interval. It is obviously not sufficient to rely only on Estimates documents and annual departmental performance reports to explain to Canadians to what extent Canada's defence priorities are in tune with the international security situation. We therefore recommend that:

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<sup>43</sup> See the list of policy papers at <http://www.mod.uk/publications/policypapers.htm>.

<sup>44</sup> See the list of reports at <http://www.defence.gov.au/publications.cfm>.



## RECOMMENDATION 1

**The government provide a comprehensive update of Canada's defence policy at least every four years and report to Parliament in order to clearly identify Canadian defence priorities and the capabilities and equipment the Canadian Forces need to meet their commitments.**

### **The Barter Arrangement: A Source of Confusion**

The advocates of the acquisition point out the savings achieved by acquiring the Upholders instead of embarking on a multi-billion dollar project to construct new submarines. However, many critics of the project caution that the full costs of the project must be taken into consideration while evaluating its merits. Mr. Williams, Assistant Deputy Minister (Materiel), stated that it is the United Kingdom which is responsible for the reactivation of the Upholder submarines before their transfer to Canadian ownership.<sup>45</sup> Thus, the United Kingdom has covered much of the costs of the work done to correct the problems or deficiencies identified during the reactivation period. Mr. Williams also explained that the total cost of the lease-to-buy arrangement is still basically the \$750 million initially announced, but the total becomes \$812 million when the adjustments for inflation over the course of the project are taken into account.<sup>46</sup> This total includes the funds paid to the United Kingdom in accordance to the lease payment schedule in the contract for each of the four Upholder submarines, but as Mr. Williams noted, HMCS *Victoria* was bought out earlier than scheduled. However, he also stated that the costs of a number of small projects related to the submarine acquisition (a total of \$85 million), especially in terms of supporting infrastructure, have been added to the total costs for the Submarine Capability Life Extension project, which is the way the project is identified in the Estimates documents such as the Part III — Plans and Priorities for the Department of National Defence.<sup>47</sup> This measure was recommended by the May 2003 report of the Chief of Review Services of the Department of National Defence who was requested to review the submarine project.<sup>48</sup> As a result, Treasury Board approved a new ceiling of \$897 million for the total expenditures for

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<sup>45</sup> Evidence, Meeting No. 4, October 25, 2004.

<sup>46</sup> The Department originally estimated that a total of \$800 million would be required for the acquisition of the Upholders, but given the financial pressures on the departmental budget in 1998, this amount was reduced to \$750 million. See Department of National Defence, Chief Review Services, *Review of the Submarine Acquisition/Capability Life-Extension Program*, 7050-11-33 (CRS), May 2003, p. 7/30.

<sup>47</sup> The status report on major capital equipment projects in the Part III — Plans and Priorities document provides a list of the associated projects totalling \$84.8 million, including those related to East and West Coasts capabilities, on page 10/51.

<sup>48</sup> Department of National Defence, Chief Review Services, *Review of the Submarine Acquisition/Capability Life-Extension Program*, 7050-11-33 (CRS), May 2003, pages 7/30 to 11/30.

the Submarine Capability Life Extension project.<sup>49</sup> However, this is a ceiling and the status report on capital equipment programs in the Part III — Plans and Priorities documents of the 2004-2005 Estimates for the Department of National Defence indicated the currently estimated total costs for the Submarine Capability Life Extension project as \$868,422,000. This total, according to Mr. Williams, includes the lease payments for the four submarines of about \$360 million plus the costs of the training simulators, the technical data package, the Canadianization process, and the support spares.<sup>50</sup>

Some critics note that the costs of operating and supporting the submarines over their lifespan of 20 or more years must also be taken into account along with the acquisition costs. Others point out that the long-term costs are considered when decisions are reached concerning any equipment acquisitions. Mr. Williams said that in the debate on the submarine issue, putting long-term expenditures with those concerning the acquisition is “adding apples and oranges together.”<sup>51</sup> In any case, many factors have to be considered when taking into account the long-term costs of any acquisition and much speculation is inevitably involved in such a debate because it is difficult to predict accurately issues such as the tempo of operations and fuel costs. Besides, as noted above, it remains to be seen to what extent submarines, along with other pieces of equipment, will provide the capabilities the Canadian Forces need to fulfil the tasks determined by the latest and subsequent reviews of Canadian defence policy. This does not mean that the costs which will be incurred in the coming years for the continued operation of the submarines, including those for major refits and the likely modernization of electronic sensors, are not a source of concern for the Committee. **However, the Committee focussed more on what happened with this project rather than on what might happen and is thus in a better position to comment on the acquisition costs than on the long-term expenditures.**

Perhaps the debate on the value of the submarines following the incident aboard the *Chicoutimi* and on the real costs involved would be less virulent if the acquisition of the Upholders had not been portrayed or perceived as a bargain. The emphasis on the possibility of a barter arrangement in the departmental announcements concerning the acquisition of the Upholders left many Canadians with the impression that at least part of the costs would be covered by the funds owed by the United Kingdom for the use of training facilities in Canada by British forces. It may even have given the impression to some Canadians that the barter arrangement guaranteed that the submarines were being obtained at little actual cost to the Canadian treasury, even though the announcements did point out that the submarine project “will cost no more than \$750 million — one-quarter of what it

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<sup>49</sup> Part III — Plans and Priorities of the 2004-2005 Estimates for the Department of National Defence indicates in Table 2a that the Currently Estimated Total Cost of the Submarine Capability Life Extension project was \$868,422,000.

<sup>50</sup> *Evidence*, Meeting No. 21, February 17, 2005.

<sup>51</sup> *Ibid.*

would cost to buy or build new submarines.”<sup>52</sup> There was therefore much surprise when the Committee learned that no barter had actually taken place. Mr. Williams, Assistant Deputy Minister (Materiel), stated that the contract with the U.K. refers specifically to the barter issue in section 27.3 to provide an “accounting efficiency.” However, in actual fact, the barter never became part of the acquisition process because according to Mr. Williams, “at the end of the day people are just allowing each program to operate and be funded on its own.”<sup>53</sup> One of the programs referred to is the acquisition of the Upholders where Canada pays funds to the U.K. while the other involves payments to Canada by the U.K. for the training facilities in Canada utilized by British forces. Mr. Pierre Lagueux who was the Assistant Deputy Minister (Materiel) from 1996 to July 1999 stated that he had the impression, when he left the Department, that the barter was still part of the acquisition arrangement.<sup>54</sup> He did not know why it was not actually used. For his part, Mr. Eggleton stated that he could not recall why the barter arrangement had not been carried out in part or in full.<sup>55</sup> However, he noted that even if the barter had taken place, Canada still would have spent money for the submarines given its expenditures on the training facilities provided to British forces.

In his second appearance as a witness, Mr. Williams explained that various factors made it impractical to use the barter process including the fact that the dates when Canada made payments for the submarines and the date the U.K. made payments for the training facilities did not coincide. It was also suggested that since the barter was not carried out, the funds paid by the U.K. for the use of training facilities and those paid by Canada for the submarines are clearly indicated in the Public Accounts of Canada and the expenditures are more transparent.<sup>56</sup> The fact remains that many Canadians were under the impression that the barter arrangement was being used to cover much if not all of the acquisition costs. Besides, it is somewhat disconcerting to observe a process where Canadian and British officials spent much time and effort in negotiating a contract agreement which, among other things, included the possibility of a barter arrangement, but abandoned the barter option almost as soon as the contract was signed without attaching an amendment or other document noting their decision.<sup>57</sup> While some critics suggested that the possibility of a barter arrangement was used to make the submarine acquisition more acceptable to the Canadian public, others deplored the fact that the absence of the barter arrangement was not announced prior to the revelation in late 2004 during this committee’s study. In hindsight, Mr. Williams stated that the decision not to utilize the barter option should have been announced

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<sup>52</sup> Canada, Department of National Defence, “Submarines For Canada’s Navy,” News Release NR-98.018, April 6, 1998.

<sup>53</sup> *Evidence*, Meeting No. 4, October 25, 2004.

<sup>54</sup> *Evidence*, Meeting No. 9, November 22, 2004.

<sup>55</sup> *Evidence*, Meeting No. 11, November 29, 2004.

<sup>56</sup> *Evidence*, Meeting No. 21, February 17, 2005.

<sup>57</sup> Amendments were made to the contract after July 1998 to indicate changes in the schedule of payments, but no indication was apparently given of the decision not to pursue the barter option.

to avoid the confusion and the controversy which has developed over this issue. However, what really concerns the Committee is that the government did not take any action to correct the perception in the Canadian public that the barter arrangement had been used even in the weeks immediately following the fire aboard the *Chicoutimi*. It is only on October 25 when Mr. Williams testified before the Committee that Canadians found out that the barter option had not been used. The government should have provided this information to Canadians before that date.

If nothing else, the controversy over the barter option illustrates the need for clarity in discussions about the costs of military equipment acquisitions and support contracts. An acquisition project already described in government and departmental statements as a bargain costing one quarter of the costs of constructing new submarines was given the barter option as another prop besides the lease-to-own arrangement to facilitate its acceptance by public opinion. Admittedly, the project was announced during a period of fiscal restraint in government spending and many other military and social priorities were competing for funds. However, trumpeting the costs savings of the project left it vulnerable to criticism when the difficult task of transferring complex military equipment from one country to another encountered even more problems than expected. Thus, the submarine acquisition is a very good example of the necessity of clearly explaining to Canadians the capabilities the Canadian Forces require to fulfil the commitments assigned to them and how the various pieces of military equipment selected can provide those capabilities. This again highlights the necessity for a clear and regularly updated defence policy. It also demonstrates the need for more and better information on the military equipment Canada acquires, not to mention clarity on the costs involved.

At some meetings, including the one on November 3, 2004 when the Minister of National Defence appeared on the Estimates for the Department of National Defence, it was implied that Canadian parliamentarians should have been aware that the costs for the acquisition of the submarines was \$750 million (\$812 million with inflation taken into account), whether or not the barter arrangement was involved. It was stated that the information on the costs of the submarine was indicated in the 1998-1999 performance report for the Department of National Defence and in the Part III — Plans and Priorities documents of the Estimates for the Department in subsequent years. However, departmental performance reports are tabled many months after March 31 when the fiscal year in question ends and it is only in the Part III — Plans and Priorities document for the 1999-2000 fiscal year that some information was provided for the first time on the Submarine Capability Life Extension project, the major crown capital project numbered M2549 dealing with the acquisition of the Upholders. In other words, apart from the announcements in mid-1998 about the acquisition and the signing of the contracts, it was only in the fall of 1999 that the costs of the submarine acquisition were indicated in documents on departmental spending tabled in

Parliament.<sup>58</sup> Furthermore, in the 1999-2000 Part III documents and those in subsequent years, there was no indication of whether or not the barter option had been used. Given the limited information made available on this project in the Estimates documents, it was difficult for parliamentarians to know whether or not part of the expenditures for the acquisition of the Upholders were covered by the funds paid by the U.K. for training facilities in Canada as was suggested in the departmental announcements.

Besides, there are many complex issues involved in trying to monitor the spending of the Department of National Defence or any other department or agency. It may be easy to say after the fact that parliamentarians should have known all along every detail about this or that major capital project, but the submarine project is a very good example of how the implications of a major equipment acquisition for the defence budget and military capabilities can be misunderstood. Besides, there is no guarantee of avoiding similar misunderstandings with regards to other major crown projects since the printed version of the Part III — Plans and Priorities document of the Estimates for the Department no longer contains a full status report on major capital projects since it is only available on line through the Internet.<sup>59</sup> Given the importance of major equipment acquisitions for the effectiveness and transformation of the Canadian Forces and the professionalism and security of its personnel, the information provided on major defence capital crown projects should be substantial. The controversy over the submarine acquisition highlights how important it is to explain the rationale for acquiring major pieces of military equipment and the implications for the defence budget. We therefore recommend that:

## **RECOMMENDATION 2:**

**The government inform Parliament when any significant changes are made in the planned expenditures or methods of payment for all major military equipment acquisition and related support projects which have received effective project approval from Treasury Board.**

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<sup>58</sup> The Supplementary Estimates A, B, and C for 1998-1999 tabled in 1998 or early 1999 made no reference to the submarine acquisition.

<sup>59</sup> See for 2004-2005 [http://vcds-dev.ottawa-hull.mil.ca/dgsp/pubs/rep-pub/ddm/rpp/rpp\\_e.asp](http://vcds-dev.ottawa-hull.mil.ca/dgsp/pubs/rep-pub/ddm/rpp/rpp_e.asp).



## **CHAPTER 3: WAS THE PROJECT PROPERLY MANAGED?**

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### **A Complex Transition From Old to New Equipment**

The transition from old and obsolete equipment to new equipment with the latest technology is one of the major challenges faced by modern armed forces. The success of the transition depends to a large extent on the timely and carefully prepared selection of the new equipment. Various factors must be considered including the military capabilities a country needs to defend itself and protect its interests, the strengths and weaknesses of the various types of equipment put forward as candidates by manufacturers or countries to replace the obsolescent machines, and the affordability of the acquisition of the new equipment and of the support it will need over its service life amid all the other demands on the defence budget. However, another important element in the transition is the training provided to the personnel who operate the new equipment. The crew members aboard new aircraft, ships or combat vehicles must have the level of proficiency required to ensure not only the effective operation of these platforms in their particular environment, whether in a combat or peacetime situation, but also a safe return to base every time the new platforms are used. They must also have the training and the experience necessary to act as a team so that all the various elements of their platform including the propulsion, sensor, and weapons systems work in a well coordinated manner. Significant improvements have been made over the last decades in reducing the workload of the crew members who have to operate and maintain all the systems of an aircraft, ship or vehicle. However, these engines, sensors, and other systems are still complex and those responsible for the operation or maintenance have to be highly trained so that they can be used efficiently in the most demanding of circumstances.

With the acquisition of the Upholder submarines from the United Kingdom, the Canadian Navy embarked on the challenging transition from old to new submarines. Although the recently constructed Upholders have basically many elements of 1980s technology, they still feature many technical advances when compared to the old Oberon submarines with their mainly 1950s and 1960s technology. Except for the propulsion system, they have many similarities with advanced nuclear-powered submarines like the British Trafalgar class. In any case, anything involving submarines, whether diesel-electric or nuclear, implies complexity over and above the already difficult task of converting from old to new equipment. Surface warships like frigates and destroyers are complicated vessels with numerous pieces of machinery including engines, generators, and pumps necessary to navigate in and to withstand the rigours of the open seas. They also have sensors and weapons systems with their own support and maintenance requirements for combat operations. Submarines have all the complexities of

surface warships, but also all the requirements for safe and stealthy operations under the surface of the water including advanced hull designs and well-developed operating procedures. In short, the very nature of submarine operations requires a certain minimum level of serviceability of all the different systems and a high degree of crew training and experience.

There is little doubt that Canadian defence planners and senior naval officers realized that the conversion from the old Oberon submarines to the much more modern Upholders would be a complex task. There are too many examples in the military history of Canada and other countries where numerous bugs had to be corrected in new equipment introduced into the military inventory for anyone to believe that any transition from old to new equipment would be problem-free. As one witness pointed out, there were many articles in the media in the early 1990s about the problems experienced by the new frigates when they were introduced into operational service. The real bugs have long been corrected and the imaginary ones have long been forgotten. Thus, planners and officers likely expected some problems during the conversion from the old to the new submarines.

However, there is much evidence that defence planners and senior officers underestimated the complexity of the transition from the Oberons to the Upholders. Assumptions were made on perhaps incomplete information and sometimes overly optimistic assessments of the condition of the Victoria class submarines, in whole or in part, and of the impact of delays on training and other aspects of the transition. For example, Mr. Williams, Assistant Deputy Minister (Materiel), pointed out that the operational costs of the Canadianized Upholders were originally expected to be about the same as those experienced with the old Oberon submarines. Mr. Williams stated: "That may have been naïve on our part, but that is what we had hoped would happen, partly because one of the benefits of this class, of course, is that it requires fewer staff, or sailors, to sail the boat."<sup>59</sup> The operational costs of the Canadianized Upholders are now expected to be higher than those for the Oberons, possibly some 25% over the original estimates. As a result, the May 2003 report of the Chief Review Services of the Department of National Defence suggested that the number of available operational sea days might have to be reduced unless more operational and maintenance funding could be found.<sup>60</sup> Thus, the availability of the submarines to fulfil the tasks for which they were acquired might be much more limited than expected because the operational costs were underestimated. Even if extra funding to cover the higher operational costs is provided, it might be obtained simply by shifting funds from one part of the Navy's budget to another and downgrading other capabilities and the readiness of our maritime forces. Either way, this would weaken the case for acquiring the submarines because of the added capabilities they can provide to the Canadian fleet.

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<sup>59</sup> *Evidence*, Meeting No. 4, October 25, 2004.

<sup>60</sup> Department of National Defence, Chief Review Services, Review of the Submarine Acquisition/Capability Life-Extension Program, 7050-11-33, May 2003. The report, with severances under the *Access to Information Act*, is available at [http://www.dnd.ca/crs/rpt/reports\\_e.htm](http://www.dnd.ca/crs/rpt/reports_e.htm).



The effects of the long period of inactivity while the Upholders were still in the U.K. were also underestimated, as was the time necessary to correct the deficiencies identified before and after the submarines were transferred to Canada. Captain (Navy) M.F. Williamson, Project Manager of the Submarine Capability Life Extension project, told the Committee that during the preparation or reactivation of the Upholders prior to their handover to Canada, it was planned to deliver each of the four submarines at six-month intervals. However, British officials and contractors “quickly discovered that the amount of work required for the submarines to reach an acceptable standard was more substantial.” Captain (Navy) Williamson added that, with reference to British officials, the “reactivation period was longer than they would have wanted. The reactivation period was longer than we would have wanted, but we never sacrificed safety for schedule.”<sup>61</sup> No one questions the fact that no matter how much delay this may have caused, the reactivation process had to be done properly to ensure that all the submarines and their numerous and complex systems were in good working order to allow a safe transit across the Atlantic Ocean. However, the Committee is concerned by the number of items still requiring repairs or attention that were listed in the Certificates of Acceptance signed by Canadian and British officials for each of the four Upholders when they were handed over to Canada. Some of these problems were identified in 1995 when the delegation of military and departmental officials went to the U.K. to inspect the Upholders. However, as some witnesses familiar with naval operations have pointed out, ships at sea often have various pieces of machinery or electronic equipment that are not in perfect working order. Some equipment is more vital than others to ensure the seaworthiness of a vessel or, for that matter, the airworthiness of an aircraft. Unless the report of the Board of Inquiry on the fire aboard HMCS *Chicoutimi* or other studies provide evidence to the contrary, it appears that the submarines could still go to sea although some issues still require eventual resolution or repairs. In any case, the Committee will examine the findings of the report of the Board of Inquiry with a critical eye. During our study, some members of the Committee expressed concerns about the objectivity of the Navy in its investigation of the incident aboard the *Chicoutimi* given its commitment to the submarine acquisition. As stated in the introduction, this committee may produce other reports on the submarine issue if the Board of Inquiry report is found wanting in any way.

### **A Training Process That Did Not Go According to Plans**

Because of all the unexpected delays in reactivating the Upholders from their dormant state, the last of the four submarines to be handed over to Canada, the *Chicoutimi*, started its voyage across the Atlantic in October 2004, six years after the signing of the contracts in July 1998. The delays in reactivating the Upholders and starting the Canadianization process inevitably caused delays in the training of Canadian submariners. Some concerns have been raised about the level of training of Canadian submariners in the wake of the fire aboard the *Chicoutimi*, but some of

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<sup>61</sup> Evidence, Meeting No. 13, December 6, 2004.

the issues raised deal with specific periods in the conversion process. When the contracts were signed in 1998, provision was made for the training of Canadian submariners in the U.K. to learn the different systems of the Upholders and gain the experience necessary to sail the submarines across the Atlantic to the new home bases in Canada. Once in Canada, the new submarines, after Canadianization, were slated to be used to gain the at-sea experience necessary for Canadian submariners to maintain their proficiency and work up to full operational effectiveness. In the middle of all this, the various simulators used to train the Canadian submariners in the U.K., as stipulated in the contracts, were supposed to be handed over to Canada and transported to Halifax so that the training process could continue. On paper, the training plans were already quite complex and assumed an orderly flow of events. In reality, the whole training process became a long series of missed deadlines, misaligned sequences of events, and long delays.

Because of the delays in obtaining Cabinet approval for the acquisition of the Upholders, there was a decline in the number of trained and experienced Canadian submariners in the Navy during the progressive withdrawal from service of the old Oberon submarines in the late 1990s. A number of experienced submariners left the military during the longer than expected gap between the paying off of the Oberons and the arrival of the Upholders into Canadian service. New submariners had to be trained to provide the numbers expected to undertake the conversion training in the U.K. in accordance with contractual arrangements. It is in this period that some critics of the acquisition process such as Peter Kavanagh, a former submarine captain and retired member of the Canadian Forces, claim that the training of some of the new submariners was lacking, especially in terms of at-sea time.<sup>62</sup> This period has been referred to by some as the dolphin giveaway, the dolphin in this case being the insignia awarded to a new submariner upon completing the required training similar to the wings given to new pilots. There are conflicting claims about the level of training at this stage of the conversion process, but Mr. Kavanagh and other observers believe that the training of submariners has improved since then. Whether or not there was a great rush to train new submariners so that they could undergo conversion training in the U.K., many of the Canadian sailors in the U.K. had to wait for months in that country after completing their training because of the delays in reactivating the Upholders. Because of the delays in the reactivation process and those caused by the time required to fix the identified deficiencies, the Canadianization of the Upholders fell behind schedule. Other factors also had an impact on the Canadianization process such as the heavy demands placed upon the navy and the fleet maintenance facilities as a result of Operation Apollo, Canada's contribution to the war on terrorism undertaken in the wake of the September 11, 2001, attacks. The Navy deployed a number of ships to the Gulf of Oman and the Arabian Sea during this operation. The tempo of operations in the 2001-2003 period was yet another unforeseen development which caused delays. As a result, even though most of the submarines had been handed over to Canada, they were not available for as many sailing hours as expected to provide the time at

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<sup>62</sup> *Evidence*, Meeting No. 17, February 3, 2005.

sea in an operational submarine that trained submariners need to maintain their level of proficiency and that new trainees need to become submariners. It is true that the availability of the simulators makes it possible to carry out much more training at shore installations than in the days of the Oberon fleet. The Committee visited the simulators during its visit to Halifax in November 2004. The fact remains that it took more time than expected to transfer the simulators from the U.K. to Canada. Until they were finally installed and operational in Halifax, there were further delays in the training schedule.

In short, it appears that almost everything that could go wrong in the plans to provide training to new and experienced Canadian submariners did go wrong. However, there were other problems. For example, while the Canadian Navy has a long history of cooperation with the Royal Navy, Canadian planners did not fully understand the implications of the Royal Navy's decision in 1996 to have a private British company, Flagship Training Limited, provide the training for all British sailors, not just the submariners. The conversion training given to Canadian submariners in the U.K. was provided by Flagship. According to one of the documents on training issues provided to the Committee by the Department of National Defence, the navy was used to resolving training issues with the Royal Navy on a navy-to-navy basis, but found there were fewer options available now that it was dealing with a private corporation as well as with the Royal Navy.<sup>63</sup> Other problems arose because the procedures in the Royal Navy were not all as common to those in the Canadian Navy as had been expected and because half a decade after the Upholders had been withdrawn from British operations, much of the expertise and the documentation concerning the operation and training for this class of vessel had been dispersed and was not available.<sup>64</sup>

One of the major differences between buying new and old military equipment is that the manufacturer of the new equipment is usually still producing the items it sells to Canada and can provide by itself or in cooperation with other companies the conversion training required by Canadian military personnel to operate the new equipment. In the case of the submarines, Canada obtained the only four submarines of this class that were built and they had been inactive for some five years. While general submarine training could be provided easily because the Royal Navy still operates nuclear-powered submarines, providing training specific to the Upholders was more problematical. This does not mean that the conversion training was not adequate because the Royal Navy and the Canadian Navy have rigorous standards for submarine operations and the level of training required. However, this episode is another example of the extent to which the complexity of the conversion from the Oberon submarines to the Upholders was underestimated. One of the results of this is more delay in getting what is now called the Victoria class

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<sup>63</sup> Department of National Defence document provided to the Committee by the Department: *Training Timeline. Training Milestones Introducing the Victoria Class Submarine*, second slide of section on Common-to-Fleet Training.

<sup>64</sup> Ibid., slides on Training Documentation.

submarines to full operational status. The Chief of Review Services noted in his May 2003 report that due “to schedule delays and the adverse impact on the CF’s capacity to train submariners, the required manning levels for the Victoria Class submarines will not be achieved before the year 2007 — a delay of at least one year.”<sup>65</sup> There could be more delay given the period of inactivity of the submarines pending the findings by the Board of Inquiry into the fire aboard the *Chicoutimi*. The period of inactivity will likely have an impact on training because there is no operational submarine to provide the required time at-sea experience.

The May 2003 report of the Chief Review Services also noted that an individual needs six weeks training at sea on an operational submarine to qualify as a trained submariner. However, the Committee heard contradictory statements on how much time at sea is required for initial and refresher training of submariners. While simulators are a valuable training tool, they cannot completely replace time at sea. Besides, it appears to be important to pay attention as well to the training of a submarine crew as a team to ensure the effective operation of the submarine. In discussions with submariners in Halifax and elsewhere, the members of the Committee gained the impression that they are highly trained and strongly committed to their tasks. However, given the questions raised about submariner training and the lessons learned during the conversion training in the U.K. and after the submarines were transferred to Canada, the navy should carefully examine its training plans. The Committee therefore recommends that:

### **RECOMMENDATION 3:**

**The Canadian Navy undertake an immediate review of its submariner training program to ensure that it can sustain a cadre of qualified submariners and provide the required amount of at-sea experience on an operational submarine. The Chief of the Maritime Staff should provide a report on this review to the Standing Committee on National Defence and Veterans Affairs.**

### **RECOMMENDATION 4:**

**The training time at sea on an operational submarine provided for initial and refresher submariner training should be maintained at the currently planned level and increased if the review of the navy’s submariner training program deems it necessary.**

Given the incident onboard the *Chicoutimi*, there was some discussion of the firefighting training provided to naval personnel during our meetings on the

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<sup>65</sup> Department of National Defence, Chief Review Services, Review of the Submarine Acquisition/Capability Life-Extension Program, 7050-11-33 (CRS), May 2003, p. 19/30.

submarine acquisition. While such training is no doubt provided, there were some conflicting views concerning the realism of the training. Some basic firefighting training apparently uses simulated smoke and may not illustrate enough the kind of situations naval personnel, especially submariners, can find themselves in aboard a vessel. Over the course of its history, the Navy has experienced a few incidents involving fire and the experience and courage of the crews have prevented serious fires from getting out of hand and causing the loss of a ship. Nevertheless, procedures and training should be reviewed on issues such as firefighting skills which are so important to the survival of a ship and its personnel. The Committee therefore recommends that:

#### **RECOMMENDATION 5:**

**The Navy review the firefighting training provided to all naval personnel on submarines and ensure that the simulated fire situations used for training submariners are as realistic as possible to illustrate the conditions that could be encountered during a fire aboard a submarine.**

#### **The Need for Rigorous Risk Analysis**

While the training process encountered its fair share of problems, it is only one of the various elements which did not go according to plans in the submarine acquisition. The complexities of the conversion from the Oberons to the Upholder submarines were recognized when Canada embarked on this acquisition. However, it is clear that all the risks involved were not taken into account. The Chief Review Services of the Department of National Defence stated it better than perhaps anyone else in his May 2003 report. He states in paragraph 2.8 that this “Project illustrates the importance of rigorous risk analysis and the articulation of corresponding mitigating strategies.”<sup>66</sup> The report adds in a box next to this paragraph that in future projects, an independent third-party analysis can help to better define the risks. The Committee agrees that whatever the merits or disadvantages of the submarine acquisition, the lessons learned during this project must not be ignored in future equipment projects. However, it is very unfortunate that a significant sum of government funds had to be spent to learn these lessons. Some of the problems could have been avoided if Canadian defence policy had been clearer and regularly updated during the period when the Navy considered its options concerning the replacement of its old Oberons. They would have been avoided if the complexities of the acquisition of previously owned submarines had been regularly evaluated. A can do attitude is a very commendable thing, but there should also be an objective reassessment of the pros and cons of pursuing an acquisition when there are signs that problems might become unmanageable or might create significant delays in obtaining the desired capabilities.

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<sup>66</sup> Ibid., p. 6/30.

The submarine acquisition is only one example of the perils of undertaking major equipment projects and not taking into consideration all of the possible implications and all of the risks. Many studies by the Office of the Auditor General have identified problems with the management of major equipment acquisitions. This committee also examined the procurement process in its June 2000 report and many of the recommendations are still valid and merit the full attention of the Department of National Defence, the Department of Public Works and Government Services, which is directly involved in the acquisition process, and the government. With this and other issues in mind, we therefore recommend that:

**RECOMMENDATION 6:**

**All major crown projects valued at more than \$100 million proposed by the Department of National Defence be reported to the Standing Committee on National Defence and Veterans Affairs for possible examination, as previously recommended in this committee's June 2000 procurement study.**

**RECOMMENDATION 7:**

**Parliament examine ways to increase the resources and the time available to the Standing Committee on National Defence and Veterans Affairs to carry out the examination of major crown projects proposed by the Department of National Defence.**

**RECOMMENDATION 8:**

**The recommendations of recent reports and updates of the Office of the Auditor General concerning the procurement process of the Department of National Defence be reviewed for potential implementation as quickly as possible and reported to this committee.**

**RECOMMENDATION 9:**

**All major equipment acquisition projects undertaken by the Department of National Defence be the subject of rigorous and detailed risk analysis, in keeping with the recommendations of the Office of the Auditor General, with a report to this committee.**

**RECOMMENDATION 10:**

**Information on the status of major military equipment acquisition projects be added as an integral part of the Part III — Plans and Priorities of the Estimates documents for the Department of**

**National Defence, instead of just an internet link. Furthermore, the Department, in consultation with the Treasury Board, should review the possibility of adding more information on the rationale for these acquisitions in these documents.**

**RECOMMENDATION 11:**

**The Office of the Auditor General consider undertaking a review of all major updates and refits of the Victoria class submarines which may be undertaken over the course of their operational service.**





## CONCLUSION

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Our examination of the various elements of the acquisition of submarines for the Canadian Forces has highlighted, among other things, the risks involved in acquiring and operating such vessels. Decision-makers in government and the Department of National Defence no doubt recognized that there were risks involved in obtaining from a foreign source existing submarines and in attempting a smooth conversion from the old submarines to the new ones, given all the training and the efforts required to achieve full operational status. However, with hindsight, it is clear that the risks were to a large extent underestimated. The very complex schedule drawn up for the training of the Canadian submariners who went to the United Kingdom to sail the submarines to their new home and for the Canadianization of the vessels fell behind schedule almost from the start. Some persons involved in the planning of the training and Canadianization process may have been concerned by the overly ambitious schedule, but once the acquisition was set in motion, it was not possible to rethink the plans or reassess the reasons behind the acquisition.

The result of this overly optimistic view of how quickly the Upholder submarines would be transferred to Canada and brought to full operational status with the Canadian fleet is the series of delays which have frustrated Canadians. Of course, the submarine acquisition is not the only military equipment project to encounter problems and delays. However, most of the acquisition projects are for new equipment designed or modified to meet Canadian requirements where the manufacturers assist in the training of Canadian military personnel and correct deficiencies under warranty. The acquisition of the submarines had some elements of the usual equipment purchases, but buying used equipment involves some additional risks. When Canada buys a new aircraft for its military, the manufacturer has often sold similar aircraft to the armed forces of other countries and can provide support and issue alerts about deficiencies identified by other operators. With the acquisition of the British Upholder submarines, Canada now has the only examples of these vessels ever built and will be solely responsible for the safe and effective use of this equipment. No other country will be able to offer help and advice during the operational life of the submarines because no other country operates this particular type of vessel. Of course, this is not the first time Canada has operated warships that no other country utilizes. The Navy has considerable experience in operating frigates and destroyers of Canadian design not used by any other navy. However, given the complexity of vessels like submarines, the responsibility for ensuring their safe operation is considerable and the Navy faces a significant challenge in meeting this responsibility during the operational life of the Victoria class submarines.

While the Committee is concerned about the manner in which this acquisition was carried out, this does not put into question the commitment and determination of Canadian submariners. The decision-makers may have been

over-optimistic about many aspects of this acquisition, but the personnel who operate these vessels have had to live with the consequences of the delays in the training process and in the Canadianization of the Upholders once they reached Canadian shores. The members of the Committee met Canadian submariners during the visit to one of the submarines, HMCS *Windsor*, in Halifax and on other occasions. The tour of the submarine and of the simulators gave us a small glimpse of what life aboard operational submarines entails. While surface vessels can face a number of challenges during operations, stormy seas often causing more dangerous situations than encounters with enemy forces, submarines must deal with another set of dangers while travelling submerged under the surface of the sea. The problems which have bedevilled the submarine acquisition project should in no way lead anyone to doubt the courage and determination of Canadian submariners.

Finally, with respect to the work of the Committee itself, the Committee is concerned about the attitude of the Department of National Defence. While cooperation was promised to assist the Committee in its examination of the acquisition project and while the requested documents were provided, the delivery left something to be desired. As mentioned in the Introduction, there were delays in providing the Committee with the requested documentation and more delays in ensuring the translation necessary to permit the distribution of the documents to each and every member of the Committee. There were no doubt costs involved in the translation of complex contracts and other documents, but such expenditures are part of the parliamentary business of reviewing government decisions and expressing the concerns of Canadians. Some of these documents, such as the contracts, should have been available in the first place in both official languages. The Committee issued a statement on February 3, 2005, indicating its concern over the delays and the use of translation costs as an issue for further delay and takes this opportunity to reaffirm its position on this issue. The Committee adopted a motion on April 12, 2005, which is reproduced herein as Recommendation 12:

#### **RECOMMENDATION 12:**

**The Standing Committee on National Defence and Veterans Affairs is disappointed and angered by the inertia and systematic obstruction of the Department of National Defence in producing the bilingual documents required for the Committee to function smoothly. This has frustrated the Committee in doing its work. On a number of occasions they have proposed tabling English-only versions of documents requested by the Committee. The reasons given for the delay in providing bilingual documents centred on prohibitive costs and inadequate time for translating technically complex material. Whereas this has led to a marked slowdown in the Committee's work, and whereas documents as important as the contract, the list of deficiencies in the submarines and the list of corrective measures took four months to be tabled and certain other**

requested documents have still not been tabled, it is recommended that the Standing Committee on National Defence and Veterans Affairs file a letter of complaint to the Minister of National Defence and report our concern about easy availability of translated documents to the Commissioner of Official Languages.



## APPENDIX A LIST OF WITNESSES

<b>Associations and Individuals</b>	<b>Date</b>	<b>Meeting</b>
<b>Department of National Defence</b> General Raymond R. Henault, Chief of the Defence Staff Vice-Admiral Bruce MacLean, Chief of Maritime Staff	20/10/2004	3
<b>Department of National Defence</b> Alan Williams, Assistant Deputy Minister, Materiel Captain(N) M.F. Williamson, Project Manager, Submarine Capability Life Extension	25/10/2004	4
<b>As Individual</b> Vice-Admiral (Retired) Peter Cairns	01/11/2004	6
<b>As Individuals</b> Brigadier-General (Retired) Darrell Dean Ray Sturgeon	15/11/2004	8
<b>As Individuals</b> Lieutenant-General (Retired) Robert Fischer Pierre Lagueux	22/11/2004	9
<b>As Individual</b> Honorable Art Eggleton	29/11/2004	11
<b>Department of National Defence</b> Captain(B) M.F. Williamson, Project Manager, Submarine Capability Life Extension	06/12/2004	13
<b>As Individual</b> Gerry O'Keefe		
<b>As Individual</b> Honorable David Collenette	13/12/2004	15
<b>As Individual</b> Peter T. Kavanaugh	03/02/2005	17
<b>As Individual</b> Professor Martin Shadwick	10/02/2005	19

<b>Associations and Individuals</b>	<b>Date</b>	<b>Meeting</b>
<b>As Individual</b>	15/02/2005	20
Richard Gimblett		
Howard Peter Langille		
<b>Department of National Defence</b>	17/02/2005	21
Alan Williams, Assistant Deputy Minister, Materiel		
Commodore Roger Westwood, Maritime Equipment Program Management		
<b>Federal Government Dockyard Trades and Labour Council (East)</b>		
Dean Reid, President		
Tom Denault, Vice-President		
Lorne Brown, Recording Secretary		
Brian Anthony, Treasurer		

## **APPENDIX B**

### **LIST OF BRIEFS**

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Richard Gimblett





## APPENDIX C — VISIT

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November 17 and 18, 2004

Site visit to HMCS Dockyard, Halifax, N.S. and the Victoria class submarine  
HMCS *WINDSOR*



## REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the Committee requests that the government provide a comprehensive response to the report within 120 days.

A copy of the relevant Minutes of Proceedings (*Meetings Nos. 3, 4, 6, 8, 9, 11, 13, 15, 17, 18, 19, 20, 21, 24, 26, 27, 30, and 31*) is tabled.

Respectfully submitted,

Pat O'Brien, M.P.  
*Chair*



# **STANDING COMMITTEE ON NATIONAL DEFENCE AND VETERANS AFFAIRS**

## **SUPPLEMENTARY OPINION FROM THE BLOC QUÉBÉCOIS**

### **Acquisition of British submarines:**

#### **A senseless purchase**

### **INTRODUCTION**

This supplementary opinion falls within the parameters set by the Standing Committee on National Defence and Veterans' Affairs at the start of its study on submarines. These parameters were to assess:

1. The equipment needs of the Canadian Forces
2. The acquisition process
3. The decision-making process
4. The training of Canadian submariners.

The Committee's recommendations pertain largely to parameters 2 and 4. They can be broken down as follows:

- Training (3 recommendations)
- Acquisition (5 recommendations)
- Defence Policy (1 recommendation)
- Increasing the Committee's resources (1 recommendation)
- Modernization and refitting (1 recommendation)
- Bilingualism (1 recommendation)

It is apparent that the report does not address the evaluation of the Canadian Forces' equipment needs, nor the decision-making process.

Moreover, the report carefully documents the acquisition process in a general way rather than providing the specific details of the study that are of interest to us, i.e., regarding the submarines. The training of submariners is however well documented and articulated.

In this supplementary opinion, the Bloc Québécois insists on evaluating the need for submarines as well as the decision-making process, which goes unnoticed in the Committee's report.

# **EVALUATION OF THE NEED FOR SUBMARINES**

During the study, witnesses testified before the Committee about Canada's need for submarines. The Bloc Québécois wishes to refute those arguments.

## **1- Military necessity**

### **1.1- Anti-submarine warfare**

Some of the witnesses referred to their importance for anti-submarine warfare. The Bloc Québécois rejects this argument. The main submarine threats were from the Soviet Union. Since the end of the cold war, Russia's submarine capability has apparently been in steady decline.

Can it be maintained that our allies pose a threat? We are not convinced of this. The Bloc Québécois seriously doubts that an allied submarine would one day sink a Canadian ship or vice versa.

### **1.2- Submarine network**

Some witnesses mentioned the importance of being part of the submarine network to gather information about navigation plans in Canadian waters. The argument made is two-fold: avoid the risk of submarine collisions and protect the sovereignty of our waters.

We reject these arguments. First of all, if Canada did not have any submarines, there would be no risk of collision. Secondly, with regard to sovereignty, we consider that a visible presence is needed to exercise it, instead than a furtive one, as is the case with submarines.

The Bloc Québécois considers it unnecessary to have submarines to access to information on the presence of foreign vessels in Canadian waters. Canada should require all foreign naval platforms to be report to National Defence as a matter of courtesy.

### **1.3- Anti-submarine warfare training**

Some witnesses mentioned the importance of Canadian submarines in anti-submarine warfare training. As we saw earlier, the Bloc Québécois does not believe in the submarine threat. The argument for an anti-submarine warfare program is not credible in our opinion and it would cost Canadian taxpayers too much to acquire submarines just to train the American navy for this type of warfare.

## **2- Need for constabulary**

Some witnesses sought to convince the Bloc Québécois of the need for submarines to protect our coastal areas and to combat illicit traffic. Let us analyze these two arguments.

### **2.1- Coastal protection**

The Bloc Québécois believes there is a real threat of infiltration of individuals or material that are not welcome. It is also true that with its three oceans, Canada has a vast coastline to protect. In the Bloc Québécois's opinion, however, the solution is to use reconnaissance planes and UAVs (unmanned aerial vehicles) given the tremendous cost of submarines.

The number of submarines (4) and the surface area to be covered, as well as their traveling speed, would encourage any ill-intentioned person to defy the coastal detection system since the probability of detection is next to nil. Using UAVs would be much more effective and much less costly. These vehicles have a much larger radius of action and higher traveling speed than submarines. With a greater number of them, the entire coastline could easily be covered in a short time.

### **2.2 Control of illicit traffic**

The explanation regarding coastal surveillance applies here as well. Undesirable ships, especially on the Pacific coast where just one submarine is in operation, would not consider submarines as a threat to their illicit activities. It would be a different matter however if various UAVs were patrolling the coastline constantly. Their number and operating speed would have a stronger deterrent effect.

## **3. Need to protect sovereignty in the Great North**

There are two schools of thought on this matter. One favours an invisible presence to protect sovereignty, while the other advocates as visible a presence as possible. The Bloc Québécois advocates the second approach. Moreover, the Canadian Forces conduct regular exercises in the Great North to make their presence loud and clear. We consider troop movements and constant reconnaissance flights much more effective in asserting sovereignty than a vague, invisible threat.

Moreover, since diesel-electric submarines do not have an anaerobic capacity,<sup>1</sup> they cannot venture very far south of the polar ice cap.

## DECISION-MAKING PROCESS

### 1. Weak negotiating team

A simple reading of certain provisions suggests that the Canadian negotiation team was amateurish. The negotiators agreed in section 13 that British law would govern this contract. In so doing, they placed themselves on British turf. The negotiators also agreed to section 27.6, which provides that in the event of Canada defaulting on payment, the British government has the right to terminate the lease and demand payment of all outstanding amounts. It is Section 34.1, though, that is especially problematic. It exempts the United Kingdom from having to guarantee the design and construction of the submarines, while Canada acknowledges that the submarine design has been proven. This section leaves little room for potential recourse against the vendor.

### 2. Wavering in government decisions

While the Bloc Québécois acknowledges that the 1994 white paper provided for the purchase of submarines, it should be noted that Bloc Québécois MPs submitted a lengthy dissenting report on this entire policy.<sup>2</sup> The Bloc Québécois was already opposed to purchasing submarines at that time. For a long time, the Bloc Québécois has called for a review of defence policy. If the federal government had taken a long-term view and planned its acquisitions, it would not have wasted close to three quarters of a million dollars of public money on these submarines that even the Australian government did not want!

Equally noteworthy are the negative consequences of the decisions and non-decisions by the Prime Minister and the Cabinet.

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<sup>1</sup> Anaerobic systems allow conventional diesel-electric submarines to remain submerged for longer periods of time. Normally, diesel-electric submarines have to rise to the surface to recharge their batteries using a diesel engine, posing a great risk of detection because the snorkel has to be raised to take in air for the diesel engines and to operate the exhaust system. With an anaerobic system, diesel engines can operate when the submarine is completely submerged, without using a snorkel.

<sup>2</sup> Dissident report by Bloc Québécois MPs belonging to the Special Joint Committee on Canada's Defence Policy, in a report by this committee entitled *Security in a Changing World*, October 1994, p. 92.



Since Cabinet deliberations are secret, we must wonder about various things.

First of all, was it absolutely necessary to acquire submarines to replace the old Oberons? What was Cabinet's assessment of the importance of a submarine capacity?

Did the Canadian navy fully inform Cabinet or was it so obsessed with the need to make this purchase that it closed its eyes to the drawbacks and to the state of the Victoria submarines?

Why only Victoria submarines and why were other submarines from other countries not considered?

Why maintain a submarine capacity when National Defence budgets had been considerably reduced and other priorities were more important?

Why was the possibility of a swap raised, whereby submarines would be received in exchange for using our bases for the training of British troops, when that was not what actually happened? The federal government decided to pay on a schedule of payments spread out over a number of years. The government never set the record straight that the swap never took place.

## **THE LAST \$100 MILLION**

Finally, the Bloc Québécois tried in vain to convince the Committee of the need to retain some bargaining power by holding back the last \$150 million payment for a tentative mutual agreement with the British government. The Bloc Québécois's defence critic even wrote to the Minister of Defence on March 30, 2005, to convince him to come to a mutual agreement with his British counterpart and not pay the \$45 million instalment set out in schedule of payments. That correspondence was not answered. The Bloc Québécois considers that it must renew its appeal to Canada's Minister of Defence to inform his British counterpart that Canada would like to enter into negotiations on a mutual agreement for Great Britain to recognize its responsibility in the dramatic turn of events and accordingly waive its right to collect the last \$100 million.



# MINUTES OF PROCEEDINGS

April 13, 2005  
(Meeting No. 31)

The Standing Committee on National Defence and Veterans Affairs met *in camera* at 4:21 p.m. this day, in Room 362 East Block, the Chair, Pat O'Brien, presiding.

*Members of the Committee present:* Claude Bachand, Hon. Larry Bagnell, Hon. Bill Blaikie, Rick Casson, Betty Hinton, Hon. Judi Longfield, Dave MacKenzie, Hon. Keith Martin, Pat O'Brien, Gordon O'Connor, Gilles-A. Perron and Anthony Rota.

*In attendance: Library of Parliament:* Michel Rossignol, Analyst. *As Individual:* Joseph P. Culligan, Consultant.

Pursuant to Standing Order 108(2) and the motion adopted by the Committee on October 18, 2004, the Committee resumed its study of the acquisition of submarines by the Canadian Forces.

It was agreed, — That the draft report, as amended, be adopted.

It was agreed, — That the report be entitled: Procurement of Canada's Victoria Class Submarines.

It was agreed, — That the Chair, Clerk and researchers be authorized to make such grammatical and editorial changes as may be necessary without changing the substance of the report.

It was agreed, — That the Chair present the report to the House.

It was agreed, — That, pursuant to Standing Order 109, the Committee request that the Government table a comprehensive response to the report.

It was agreed, — That the Committee append to its report a supplementary opinion from the Bloc Québécois provided that it is no more than five (5) pages in length and submitted electronically to the Clerk of the Committee no later than 4:00 p.m. on Friday, April 15, 2005.

It was agreed, — That the Clerk of the Committee make the necessary arrangements for a press conference to be held on Monday, April 18, 2005.

The Committee proceeded to the consideration of matters related to Committee business.

It was agreed, — That the following witnesses: LGen Dumais, Deputy Chief of Defence Staff, VAdm Maddison and VAdm Buck, Vice Chief of Defence Staff be invited to appear in relation to Chapter 4 of the Auditor General's report: National

Defence — C4ISR Initiative in Support of Command and Control.

At 5:07 p.m., the Committee adjourned to the call of the Chair.

Angela Crandall  
*Clerk of the Committee*