WHAT TO DO ABOUT THE SUBMARINES

Canada has invested a lot of diplomatic capital in its plans to purchase nuclear-powered submarines from either France or Britain. Choosing between them is proving difficult; choosing neither will leave Western allies distinctly unhappy.

BY SHARON HOBSON

ONE OF THE TOP ITEMS ON the new government's agenda is the nuclear-powered submarine. The $8 billion mega-project has already been delayed nearly nine months – in part because the political stakes are so high. Canada is the first to buy a complete nuclear-powered submarine design from another country, and further delays would raise eyebrows in the international community.

This is not a simple matter of deciding whether the French or British design is best suited to the navy's requirements; the government's decision also has to take into account other factors, diplomatic and economic. Britain and France, for example, are two of Canada's most important trading partners. Last year, two-way trade with Britain was $7.2 billion, and $2.5 billion with France. Canada and France also have negotiations underway that could be affected by the outcome of the submarine competition. For example, Canadair Limited is trying to sell water-bombers to the French government. Also, France and Canada are negotiating over fishing rights in the vicinity of St. Pierre and Miquelon off Newfoundland's coast.

But Canada owes Britain a favour. The British have cancelled plans to impose legislation calling for all fur products to carry a label stating if the animal involved was caught in a leg-hold trap. Ottawa feared the repercussions for its fur industry, and especially the effects on Canada's native people, if Britain passed that legislation. Just before Prime Minister Thatcher attended the seven-nation economic summit in Toronto, her government dropped the proposal.

Canada and Britain have close naval ties: their submarine officers train together, and Canada's current fleet of three Oberon-class subs was designed and built in Britain. Both navies operate in the North Atlantic and both specialize in anti-submarine warfare. Within NATO, a British and an American commander coordinate all submarine movements in the North Atlantic and Canadian subs work closely with these two main players. France is not integrated into the alliance's military structure. These differences in alliance participation have been exploited by the British in their lobbying for the Canadian contract.

BRITAIN'S VICKERS SHIPBUILDING and Engineering Ltd. (VSEL) has proposed its Trafalgar-class nuclear-powered submarine design for the Canadian fleet. The Trafalgar is generally acknowledged as the most effective nuclear-powered attack submarine currently in operation, and has a proven under-ice capability, but it will not necessarily win the design competition.

It is up against the Amethyste-class boat being offered by French companies under the auspices of SNA Canada Inc. The Amethyste is seen as a more modern, automated submarine, incorporating new silencing techniques and advanced operating technologies. That does not necessarily make the Amethyste a better submarine. It would have to go a long way to beat the large, fast, silent, and deep-diving Trafalgar. But the Amethyste does have an edge – the French government owns the technology and none of it has to be approved for sale by a third country.

Because the Trafalgar's reactor is based on US technology transferred to Britain in 1958, and despite the fact that the 1980s reactor bears little resemblance to the original design, the US, through two bilateral agreements, holds a veto over whether or not Britain can sell the Trafalgar design to Canada. A 1958 agreement between the US and Britain has been amended to allow Vickers to sell nuclear-powered subs to Canada, but a 1959 agreement between Canada and the US still threatens to nix the sale. The 1959 agreement prohibits the export of US nuclear fuel and technology to Canada – and the British submarine uses nuclear fuel enriched in the US. (Trafalgar uses ninety-five percent enriched uranium. Britain is not able to enrich it to that level so it buys that service from the US.)

This past June, Canadian and American representatives negotiated an amendment to the 1959 Treaty which does not put any extra constraints on Canada's purchase of Trafalgar-class submarines, other than those imposed by Britain. Now the amendment has to be passed by Congress. Not all members of that institution are happy at the thought of Canada acquiring nuclear submarines, and it is widely expected that hearings will be held on the issue. In essence, there will be an American investigation of Canadian defence policy – something Ottawa would find galling.

France not only owns the technology in its Amethyste-class submarine, but is also able to provide Canada with the enriched uranium fuel. The Amethyste's reactor uses only six percent enriched uranium, and France has the enrichment facilities to do this for Canada, thus cutting the US out of the fuel-cycle loop. Buying the French boat would not leave Canada hostage to American whims or pique.

The Amethyste is also cheaper. However, the design will have to be modified to Canadian specifications – lengthened by seven metres to accommodate the navy's weapons system of choice, the Mark 48 torpedo; and ice-strengthened and equipped with an "ice-pick" in order to meet the Canadian requirement of being able to break through up to one metre of ice.

WHAT REMAINS AN UNKNOWN, IS how much all these changes will push up the unit price. At the moment, the French estimate the new, modified Amethyste will cost approximately $380 million per boat. That compares favourably to the $453 million estimated cost of a Trafalgar-class submarine. With a project ceiling cost of $8 billion (all figures in 1986-87 dollars), the Department of National Defence (DND) would be able to buy twelve French submarines as compared to a maximum of ten British.

The Trafalgar is of an earlier design than the Amethyste, but both boats will have to undergo various, expensive updates over the coming years if Canada's submarine fleet is to be effective into the twenty-first century. Although the project budget of $8 billion includes some money for technological upgrades, it is likely that sum will be insufficient and DND will be faced with some unpleasant choices as technological need runs up against budgetary constraints.