and development. The thing to do about nuclear-weapons submarines, is, in the words of a Cape Breton fisherman, "Leave 'er lay where Jesus flang 'er."

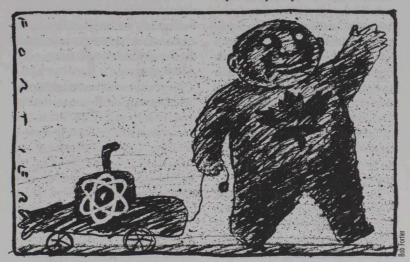
RECONNAISSANCE. In 1940, HMS *Regulus* slipped submerged into Shibushi Bay to photograph the Japanese combined fleet at anchor in the base. (The negatives, with their valuable clues about gun emplacement and the like, only got as far as Singapore where they were found by the Japanese.) This is risky business – as the crew of the Soviet submarine detected in Swedish waters recently discovered – best left to riskless and efficient satellite photography.

COMMERCE RAIDING. The original role of the submarine was to shut down the enemy's fighting capacity by blocking or sinking his shipping, so reducing sea-borne commerce and supply. Here is a strategy for Mackinder's heartland states - the Warsaw Pact - not for Mahan's (and NATO's) oceanic empire. The vulnerability of a container ship or super-tanker to an SSN (or almost any other type of submarine) is incontestable. But, in the foreseeable future, should our H.M.C.S.SSN go after such a vessel, she will be sinking our side's treasure, not the other's.

CHIP BARGAINING. The history of acquiring weapons to use as bargaining chips in an arms control negotiation is dispiriting. Time and again neither side cashes in its chips. Rather, it ups the ante and the game goes on.

But Canada's projected SSN fleet, as yet unbought and unbuilt, could become an exception to this rule, for the bargaining partner would be on our side, this time, not the other – Uncle Sam, not Uncle Ivan. Could Uncle Sam be made to call "uncle" in the on-going dispute between Canada and the United States over whether the Arctic waters of the Archipelago are Canadian, as Ottawa insists, or international, as Washington insists?

I believe there is a way. The key to a negotiated settlement is the United States' known distaste for the proposed acquisition by Canada of nuclear-powered submarines. American officials don't like the idea at all. According to the *New* *York Times*, American officials said "it was possible that a future Canadian government would use the existence of its own submarine force to challenge the passage of American submarines along the protected routes through the archipelago.... The officials suggested that the Canadian proposal...raised questions about where Canada would get the submarines, how... [the Canadian navy] would learn to operate them and whether they would act in concert with the United States." The point about learning to operate them is well taken: it was hard enough in 1915, when the crews of the British Columbia subs *CCl* and *CC2* spent weeks "of learning to live in the strange new warships, of mastering directions which were in the Spanish language, and of practicing diving, firing and surfacing to pick up torpedoes." (The Canadian crews fared better than the fourteen Japanese of IJN *No.6* that in 1910 had sunk in the mud of Hiroshima Bay in only fifty-two feet of water:



RULES OF ENGAGEMENT

What will our sub captains' orders be if a foreign submarine is detected in waters claimed by Canada?

In testimony to the Commons Standing Committee on National Defence after tabling his White Paper, the Minister of National Defence Perrin Beatty addressed this subject in response to questions from Liberal MP Douglas Frith.

Mr. Beatty:In terms of what instructions will be going to the crews of our submarines, exactly the same instructions as go to the crews of our frigates and of our submarines today. We are not during peacetime going to be firing upon vessels in our waters. What we will do, though, is establish a sovereign presence there. We will indicate that intruders are in Canadian waters, and we will protect our sovereignty. Obviously, the picture would change dramatically in times of war.

Mr. Frith: What the Minister is now saying to the committee, Mr. Chairman, is that in order for us to log, in essence, the presence of other submarines from other sovereign nations, it is going to cost the Canadian taxpayer somewhere in the neighbourhood of between \$5 billion and \$16 billion.

Mr. Beatty: Mr. Chairman, I am not saying that. Far from it. The purpose for purchasing the submarines is to meet our security needs as a country. And the reason for purchasing them is to provide for the defence of Canada.

In so doing, we exercise both our rights and our responsibilities as a sovereign nation. We protect our sovereignty as a people. But the purpose of them is to protect our security in exactly the same way as we have CF-18s, whose function it is to intercept foreign aircraft in the Canadian air defence identification zone, to escort them out of Canada, and in times of war, to be able to defend Canada should we come under attack. It is exactly the same principle; and those people who would argue that we should not protect our seas but should protect our air are, I think, very inconsistent. her skipper had time to write his final report expressing his "sincere hope that the accident will give you material to study diligently the problems of submarine design")

THE ELEMENTS OF A SOLUTION TO what Canadian planners persist in regarding as their Arctic security problem are now in place. The solution is to contrive a maritime version of the Canada-United States air defence agreement of 1958, an AWSA alongside NORAD - AWSA for Arctic Waters Sovereignty Agreement. By its terms, the United States would recognize Canada's claim to sovereignty over the waters of the Arctic Archipelago, in exchange for Canada's granting regulated access to American submarines in those waters - they have unregulated access anyway - and foregoing acquisition of her own SNN fleet.

Such a deal would be trebly advantageous for Canada. It would remove an intractable and dangerous irritant from the bilateral agenda. It would provide a facesaving retreat from an unsound commitment. And it would set an example for other states, such as India, whose military establishments are urging the advantages of nuclear-powered over dieselpowered submarines upon governments that can ill-afford either.

Challenge and Commitment brings to three the number of white papers on defence issued within four months by governments of widely separated but closely likeminded countries whose armed forces have fought together in four wars of this century - all (until recently) allies of the United States, two allied to each other, liberal democracies, founding members of the Commonwealth, in straitened economic circumstances. Compared to its New Zealand and Australian counterparts, the Canadian White Paper is as a Bluejay to a pair of dowdy sparrows. Its format and design are striking. There is a lavish use of coloured maps and photos. It could be used as an effective recruiting manual for the armed forces. Its graphics are spiffy. But its polemics are "iffy."