expensive and Canada can afford only a very limited number of them. Submarines and long-range patrol aircraft are much more affordable, and can be as effective as surface vessels in every ASW role except close convoy escort. Submarines can provide barriers and, in sufficient numbers, can also provide sanitized zones. Canada should purchase all three types of ASW platforms and not focus on one type to the point where it becomes impossible to pay for adequate numbers of the others.

Another, less costly possible alternative to the use of ASW frigates in the escort role is to create escort merchant ships, that is, container ships equipped to carry a number of ASW helicopters and, perhaps, some weaponry against air and missile attacks. They would be the modern equivalent of armed merchant cruisers. The British demonstrated in the Falklands that helicopters could operate from such ships. The USN has been experimenting with a program called ARAPAHO, whose object is to develop containers which could be rapidly fitted to the decks of container ships so as to provide them with a flight deck, protective weaponry, accommodation for up to five helicopters and their crews, as well as the necessary stores and test equipment. The Canadian government might give some consideration to requiring CN Marine, for example, to maintain continually under Canadian registry a small number of suitable container ships to be employed in trade in peacetime, but with this particular wartime use in mind.

(c) Surface encounters.

More attention must be paid to countering the danger of surface threats than has traditionally been the case in Canadian defence thinking. This should take into account the full range of possible, eventual threats, such as gunboat diplomacy over a fisheries or boundary dispute, or attempted amphibious landings, as well as the current and concrete capabilities of the Soviet navy discussed in chapter I.

The existence of actual or potential surface threats requires a range of available responses: surface vessels to neutralize attempts by another country to intimidate Canada through the positioning or passage of surface units in Canadian waters; small missile-carrying fast patrol boats designed to operate in restricted waters such as the Gulf of St. Lawrence and the straits of the West coast; submarines for use in the case of open hostilities or as a powerful deterrent; and, in light of the successes of Argentine aircraft in the Falklands campaign, missileequipped, shore-based, attack aircraft. With this kind of force for operations against surface warships, MARCOM would also have an increased capability for dealing with enemy merchant shipping and fishing vessels in the event of hostilities.

(d) Mine countermeasures.

As emphasized elsewhere in the report, the potential danger posed by mines, and by the substantial stocks of mines and mine-laying capabilities of the Soviet forces, demands that Canada have a mine-countermeasure force. Tactics currently being developed by nations with MCM forces suggest that the most costeffective course is to combine a small number of highly sophisticated minehunting vessels with a larger number of fairly simple minesweepers. Each minehunter would direct and co-ordinate the efforts of several minesweepers.