

10.1 Considerable surface and subsurface surveillance and Identification capabilities

The Subcommittee recommends that Canadian maritime forces have—or have access to—considerable surface and subsurface surveillance and identification capabilities sufficient to cover the continental margin and such areas of the Atlantic and Pacific Oceans to meet international obligations accepted by the Canadian Government. This capability should be such as to ensure prompt detection and identification of all surface, subsurface and sea bottom maritime activity, whether military, commercial or otherwise in nature.

10.2 Limited surface and subsurface localizing and tracking capability

The Subcommittee recommends that Canadian maritime forces have a limited localizing and tracking capability within the specified areas on the East and West coasts. By limited capability, the Subcommittee explicitly recommends a capability such that a limited number of separate maritime activities (military, commercial or otherwise) can be precisely located and tracked on a continuous basis if and when required.

The Subcommittee has noted that in the past Canadian maritime forces have had a more extensive localizing, tracking and challenge and/or destruct capability than they now have to meet surface and subsurface maritime activity. These forces have been run down in the last decade and the Subcommittee considers this has been justified.

The Subcommittee was informed that it would be feasible to reacquire an extensive localizing and tracking capability for *surface* maritime activity. However, it concluded this is unnecessary, given (1) a considerable surveillance and identification capability with a fairly rapid revisit cycle, (2) the relatively slow movement of surface ships, and (3) the ease with which surface vessels can be redetected.

The Subcommittee further decided that an extensive *subsurface* localizing and tracking capability is economically beyond Canadian means and probably also technically impossible, in view of the potential number of submarines that can be deployed, the vast area involved, and the oceanic environment.

However, the Subcommittee considered that it is important to have a limited subsurface localizing and tracking capability to give warning of any unusual maritime activity.

10.3 Limited surface and subsurface challenge and/or destruct capability

The Subcommittee recommends that Canadian maritime forces have a limited surface and subsurface challenge and/or destruct capability.

In the case of commercial or other non-military violations of Canadian sovereignty or extraterritorial jurisdiction, this capability is necessary as a deterrent and to enforce Canadian laws. This limited capability now exists only with respect to surface maritime activity within Canadian territorial waters and existing fishing zones. Since submarine transport rather than surface transport may become the rule in the waters of the Arctic archipelago, the Subcommittee suggests that the Canadian Government consider and develop appropriate techniques and procedures for a non-military challenge to submarines.

In the case of military threats to Canadian security, the Subcommittee concludes that a limited challenge and/or destruct capability is required, pri-