

Detection and Tracking of Submarines and Surface Ships

Although it would be possible for submarines to launch ballistic missiles against North American targets from positions close to the Canadian coast, there seems little reason for them to do this. The ballistic missiles carried by modern Soviet submarines have sufficient range to reach the strategic targets in North America, even if they are launched from areas close to the coast of the USSR, where they can take cover under ice, park in shallow water, and have the benefit of antisubmarine defence from nearby bases.

However, there are missions for which other types of Soviet submarines would have to come out of their own waters. The most important would be for attack of NATO shipping in the North Atlantic or along the Pacific coast, whether at sea or by mining the approaches to the seaports. Another would be to threaten the egress of American submarines and surface ships from their home bases in the Atlantic and Pacific. A third mission would be to launch cruise missiles against land targets (in North America and Western Europe). In each case, the shortest routes from the great naval bases in the Kola Peninsula into the North Atlantic are through the Greenland-Iceland-United Kingdom gap (the GIUK gap), between Greenland and Iceland or between Iceland and Scotland, as shown on Figure 2. But NATO can concentrate antisubmarine defences on the gap, and would be likely to detect the passage of any significant number of submarines (or surface ships or aircraft). If surprise were desired, the submarines might use other routes from the Kola into the North Atlantic through Davis Strait between Greenland and Canada, or through passages between the islands of the Canadian Archipelago (several of which can be traversed by submarines even when covered by floating ice).⁶ The reason for Soviet submarines to transit right across the Arctic Ocean could be for exchange between the fleet based in the Kola and the one in the Pacific.

⁶G.R. Lindsey, "Strategic Stability in the Arctic", *Adelphi Paper 241*, International Institute for Strategic Studies, London, 1989. pp. 39-44. *Challenge and Commitment*, p. 52.