

Second, there is an asymmetry in the Soviet and US programmes. The US programme has emphasized surface-ship deployments while the Soviets have emphasized submarine deployments. Combined with the disparities in range, this difference has important implications for arms control. For example, in October 1985 the Soviet Union proposed to ban all cruise missiles with a range in excess of 600 kilometres, which would have allowed approximately 85 per cent of the Soviet SLCM force to remain, while virtually eliminating the US Tomahawk programme. More seriously, perhaps, in the light of the potential for a sharp increase in long-range SLCMs, a more recent Soviet proposal suggested verifiable ceilings on submarine-launched SLCMs and a ban on ship-launched SLCMs. Though plausible given the difficulties of verification (presumably a counting rule can be devised for submarines but not for surface ships), this approach is also asymmetrical in that it discriminates against US surface strength in SLCM deployment while leaving the Soviet submarine capability largely intact. It follows from this that, in the near term, even on technical grounds alone, there is little chance of superpower arms control agreements which will forestall possible SLCM deployments in the Arctic.

US sources indicate that the Soviets are about to deploy the long-range SS-N-21, the reported characteristics of which suggest that it is from the same engineering family as the AS-15.¹⁴ If so, the range may be 3000 kilometres, implying that, like the AS-15, it could be fired from within the Canadian Arctic archipelago and reach military targets in the northern United States. Although the land-attack capability of the SS-N-21 is likely to be limited for several years, it must be assumed that the accuracies of the US Tomahawk SLCM will eventually be matched, giving it a clear counter-force capability against fixed targets. The SS-N-21 fits the standard Soviet 53-cm torpedo tube, and can be retrofitted into all classes of Soviet submarines. The implication is that the various classes of Soviet SSNs might carry a torpedo/SLCM weapon mix, thus taking advantage of the larger numbers of Soviet hulls (the Soviet Union has 200 SSNs compared with 97 deployed by the United States).

Finally, the Soviet Union is developing a larger cruise missile (the SS-NX-24) which does not fit the standard torpedo tube but is being tested on a converted Yankee SSN and may require a new submarine platform.¹⁵ While longer range may be of value for a number of theatre deployments, the presumed longer range of the SS-NX-24 is particularly important in the context of the Arctic. If the SS-NX-24 could be launched

¹⁴ For a discussion of the significance of the SS-N-21 in the future development of Soviet naval strategy, see Anthony R. Wells, "The North Atlantic and Arctic Theaters of Operations", in ed J.L. George, *The Soviet and Other Communist Navies: the View from the Mid-1980s*, (the US Naval Institute Press, Washington, D.C., 1986).

¹⁵ US spokesmen stress the greater versatility of the Tomahawk, partly because it is fired vertically from submarines. Insofar as the Soviet submarines fire SLCMs through the torpedo tubes, they may have much greater difficulty in ice conditions because of the need for an initial horizontal run by the SLCM. The SS-NX-24 is said to be fired at a different angle from the *Yankee* testbed, which may imply that an entirely new platform and firing angle is under development, possibly more effective in Arctic conditions.