

# New threat from the frozen north

Last March a civilian research satellite detected some unusual activity in the frozen wastes of the Arctic Ocean. Russian aircraft were closely monitoring three holes in the ice sheet.

The Pentagon, whose own satellites had likely noted the same event, declined comment. Unofficially, U.S. military sources confirmed that Russia had scored an important breakthrough in Arctic operations.

Some late-model Soviet submarines are now able to smash through the Arctic ice cover and fire their missiles at North America. U.S. submarines, lacking specially reinforced superstructures, are unable to do so.

The latest Russian naval missiles, such as the SS-N-8, already have the range to hit North America when fired from Soviet coastal waters. But 30 minutes flight time is required to reach North America, providing ample warning time to U.S. radars and satellites.

However, if Soviet submarines slip under the Arctic ice they can breach an opening off the northern coast of Canada and fire their missiles. By doing so, missile flight time to target will be a matter of only a few minutes. Trajectories will be flatter. Both factors mean less chance of detection and early warning. In short, firing through Arctic ice could bring Russia closer to a devastating surprise attack capability.

Countering Soviet subs under ice will be extremely difficult. There, they are almost invulnerable to detection or attack. As anti-submarine technology advances, the frozen Arctic may offer the only safe haven for submarines.

Under ice, sonar is seriously distorted by high salinity, thermal gradients, echo effects and noise from grinding pack ice. Navigating under ice is extremely dangerous; the prospect of stalking Soviet subs there is a mariner's nightmare.

This new problem is not only confined to nuclear scenarios. The ability of Soviet subs to navigate under

SOSUS system — huge underwater ears that can identify the "signature" of each individual Soviet sub. But to make this system effective, air and naval anti-submarine patrols would have to cover the Strait. This means spending at least \$2 billion for the SOSUS arrays and at least one new air base on either Baffin Island or western Greenland. Ships and aircraft would have to be permanently stationed in the far north.

Washington is asking Canada to contribute to the SOSUS system and to help with anti-submarine operations. Ottawa has, so far, apparently declined to make a decision while becoming increasingly alarmed by this clear threat to its vulnerable northern border.

Once again Canada is facing a historic problem: If it will not pay for its own defence, America may take over this mission. Ottawa is certainly not eager to see U.S. bases established in the Arctic. One also wonders if Ottawa would have the temerity to resist intense Soviet displeasure such action would provoke. Yet while Ottawa ponders, Russian submarines are challenging its coastline. How many and how often remains unknown. Canada utterly lacks the ability to monitor its own maritime border — or any other one, for the matter.

Something will have to be done. Washington is growing impatient and Ottawa nervous. Defending the Davis Strait may become one of Canada's most important military priorities. Coming at a time when continental air defences must also be upgraded, this is very bad news indeed for Ottawa's budget makers.

We have been able to forget about the Arctic, saying, "who wants it anyway." It is now apparent that the Soviets do — and for good reason. Canada will have to act to assure its sovereignty and defences. But from where will the money, planes, men and ships come? How are we to defend the Arctic when we can't even protect Halifax?



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Some polar ice means that a dangerous breach is being opened in NATO's northern defences. Canada is directly affected.

In any war, Russia's huge submarine fleet must break out of its base area in the Barents Sea and reach the open North Atlantic. To do so the Red Fleet has to traverse the narrow passage between Greenland, Iceland and Britain — the GIUK gap. Here, NATO has erected underwater sonar — the SOSUS system — backed by air and naval patrols. In wartime the GIUK would be heavily mined, making passage by Soviet subs extremely perilous. Now Russia appears to have found a way to outflank the GIUK defences.

Navigating under Polar ice, Soviet submarines can move down on the western side of Greenland, through Canada's Queen Elizabeth Islands. The most likely routes would be along the coast of Ellesmere Island or through the Lancaster Sound next to Baffin Island. Russian subs would then enter Baffin Bay that narrows into the Davis Strait. Once beyond this last narrow choke point, they could move into the open waters of the Labrador Sea and North Atlantic.

Canadian and American naval strategists are unfortunately aware of this growing threat. For a number of years top-secret discussions have reportedly been held between Washington and Ottawa over defence arrangements for the Davis Strait.

The U.S. has proposed lining the Strait with a new