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U.S. FORWARD MARITIME STRATEGY AND SOVIET SSBNS:
OPTIMUM TARGETTING OR ESCALATORY DILEMMA

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U.S. FORWARD MARITIME STRATEGY AND SOVIET SSBNS:
OPTIMUM TARGETTING OR ESCALATORY DILEMMA

As we enter the 1990s, there is increasing attention focused on the US force structure required to meet the Soviet strategic threat. Although current events reflect a changing Europe and the viability of the Warsaw Pact is suspect, Soviet strategic forces still constitute a significant threat to our nation. SSBNs in particular, operating from oceanic patrol areas, in port, or from Arctic bastions, provide the Soviets with a capability that is not easily countered. George Lindsey, in his paper "Strategic Stability in the Arctic," argues that NATO SSNs should be used to put pressure on Soviet SSBNs and their Kola Peninsula bases using torpedoes and SLCMs. He also describes the risk to carrier strike groups operating near Arctic bastions as unacceptable. This paper will address these issues and US strategy options.

Background

Since the late 1950s, the US strategic nuclear arsenal has consisted of a triad of weapons systems--land based ICBMs, bomber aircraft, and SLBMs--with an inherent synergy that "guaranteed" our nuclear deterrent strategy. The Soviet Union, however, with a clear lead in heavy rocket development, put the bulk of their nuclear weapons in ICBMs. In the early 1960s, the Soviets expanded their nuclear forces

with SLBM carrying Yankee-class submarines. Soviet submarine forces continued to expand in the 1970s under Admiral of the Fleet Sergei Gorshkov. To date, four classes of Delta SSBNs have been produced along with the Soviet Typhoon, the world's largest submarine. Open sources indicate that as many as 38 Deltas and 6 Typhoons are currently in service, some of which may be in port or undergoing repair at any given time.

When the West deployed its SOSUS underwater detection system in the 1970s, it compounded evasion problems for the relatively noisy Soviet submarines. Accordingly, the Soviets modified their SSBN employment strategy to operate in bastions closer to home. These bastions, in the Sea of Okhotsk and the Bering Sea, provide ideal cover for Delta IV and Typhoon boats that can either operate under the Arctic ice pack where aircraft and surface fleets can't get at them or stay below an umbrella of Soviet air and ASW protection.

US Objectives and Strategy

One of the foremost US objectives since the 1950s has been to contain Soviet aggression. At the strategic level, containment evolved into a strategy of deterrence provided by effective and survivable nuclear forces with the ability to wreak unacceptable destruction on Soviet society should deterrence fail. Since we are neither suicidal nor comfortable with the Soviet philosophy on the utility of nuclear weapons, an implied objective of our strategy is to also hold Soviet strategic systems at risk, thereby

decreasing the potential for damage to our homeland.

When the Soviets shifted their SSBNs to bastion operations, high-level attention was focused on developing an effective counter to this strategy. A popular option with the US Navy has been to forward deploy carrier task forces with the capability to promptly strike Soviet SSBNs or Soviet and Warsaw Pact land based targets. This strategy, however, could so threaten the Soviets that they might launch a preemptive strike on these carriers. In addition, if our forces attacked a Soviet SSBN in the course of a conventional confrontation, we might put the Soviets in a so called use-or-lose mode which could escalate to central strategic warfare. These scenarios highlight the importance of crisis stability in any strategy that involves strategic assets.

Capabilities Against the Bastions

Tracking the newer, quieter Soviet SSBNs near and under the Arctic ice pack has become an increasingly difficult problem. Just as we are busy evolving technology to improve our detection capabilities, we can assume that the Soviets are hard at work to develop technology and tactics to frustrate our efforts. Shallow water and irregular ice formation make it very difficult to locate targets underwater in either active or passive detection modes. In addition to poor acoustic conditions, Admiral J. R. Hill, in his book "Anti-Submarine Warfare", postulates that Soviet SSBNs might operate in concert with protecting Alpha and Victor III

submarines. While the "boomers" remained well under the ice pack behind ice ridges, Soviet SSNs could lurk near the edge of the ice and strike US carrier groups or submarines as they approached Arctic waters.

In the other bastion, the Sea of Okhotsk, massive air and naval armadas in this "Soviet bathtub" make it impossible for US surface and air assets to penetrate. Although we could flood this area with attack submarines, it's shallow depths would make SSNs easy targets. We could station ASW forces on a perimeter from the Straits of Korea to the Kamchatka peninsula, but the Soviets could then launch from within this perimeter and range the US with their SLBMs.

The Soviet View

After many years of strong defense spending, the Soviet military has lost funding to Mikhail Gorbachev's view of a kinder and less aggressive appearing Soviet Union. Current Soviet economic and political problems have overtaken military needs and caused force cutbacks and withdrawals from Eastern Europe. Although, the Soviets have presented many START and CFE initiatives, their objective is to reduce Western force numbers while upgrading the quality of their own systems. Their latest offerings include a reduction in maritime forces, removal of nuclear weapons from surface assets and elimination of the SLCMs. As they seek to trim the US lead in maritime capability, some sources think that the Soviets would readily trade their SSBNs for US carriers.

The Soviets are well aware of the vulnerability of their fleet elements when operating far from friendly shores and when attempting to gain access to the North Atlantic. The GIUK gap is relatively easy for the West to watch, and the Bering Straits access to the Pacific is very narrow, shallow, and icebound for more than half of the year. Soviet inability to escape detection in transit to Oceanic patrol areas has been somewhat offset by improved SLBM ranges that allow launch from bastions or home port. In any case, at the outbreak of hostilities, the Soviets can be expected to go after NATO airbases in Iceland, Norway and Scotland, and cut SOSUS arrays to improve their breakout potential.

The Soviets expect NATO naval forces to forward deploy to attack SSBNs and key land targets in wartime. Soviet combined forces are designed to attack these fleet elements with assets such as ALCM-equipped Backfire Regiments and submarine or surface launched cruise missiles. Soviet ASW forces would be assigned to target NATO SSBNs and attack submarines. It is important to note here that the Soviets see nuclear weapons as "another arrow in their quiver" and one can easily imagine Soviet first use of tactical nuclear weapons against forward deployed naval forces, even though Lindsey feels the Soviets would fear US escalation to land attack. Although the US and Soviets signed an agreement in 1971 to prevent such first use, forward maneuvering NATO naval forces could be considered sufficiently provocative to void this arrangement.

With the dissolution of most Eastern European Communist governments, Non-Soviet Warsaw Pact (NSWP) support of Soviet warfighting comes into question. NSWP naval forces constitute a relatively small portion of the assets to be deployed against NATO and, with the current state of democratization and anti-Soviet sentiment, it is doubtful that they will be effective during wartime. In addition, as ethnic problems continue within the Soviet Union, the Soviets may find it difficult to control minority crewmembers on Soviet ships. Although the Soviets tend to man submarine forces with a relatively small number of ethnic minority crewmen, this could become a factor in a wartime scenario if ethnic Lithuanians, for example, decided to desert or mutiny.

A Changing Europe

Although the US supplies the majority of forward deployed naval forces, NATO members, particularly the British, Norwegians and Dutch, do contribute and have responsibility for ASW in the North Sea. As the reunification of Germany moves forward and Eastern European governments dissolve, the future of NATO and its role in a forward maritime strategy becomes more uncertain. Although strategic escalatory connectivity is essential to a NATO defense strategy, if NATO dissolves, one wonders which European nations, besides the British, would provide naval assets to combat the Soviets.

Currently, NATO nations only seem interested in reducing their military forces, and moving towards a purely European economy. Forty years of allied deterrence have been forgotten by a generation that did not participate in WWII, and sees "peace breaking out everywhere." Although the French and British seem prepared to execute nuclear war against the Soviets if attacked by either conventional or nuclear means, other European nations might opt for "Finlandization" if the stakes became higher.

Dimensions of Escalation

When considering the escalatory aspects of any targetting strategy, good questions to ask are: what value is put on the target by the owner, what are you striking it with, and where is it located. In his article, Lindsey discusses the escalation potential of using nuclear weapons to strike targets at sea. These targets can be struck with little collateral effect, using either conventional or nuclear weapons. Accordingly, it would seem reasonable to use our most effective weapons against submarines in bastions--probably nuclear or conventional torpedoes launched from SSNs. Using the same logic, it would make sense for the Soviets to strike elements of our forward deployed maritime forces with nuclear weapons. Neither of these instances should be automatically escalatory by themselves, but may promote horizontal escalation. The nature of targets struck, however, adds a factor of uncertainty to strategy. By

striking Soviet SSBNs, either with nuclear or conventional weapons, we reduce the Soviet offensive capability by a significant amount (one Delta IV carries 16 SS-N-23 missiles with up to seven RVs each). This act, or a threat to commit this act by positioning strike forces nearby, could be very provocative. From the US perspective, a Soviet nuclear strike on a forward operating carrier task force would remove key national assets and kill several thousand troops assigned to those ships. Thus, the potential for an escalation event seems to be highest as forces position themselves for either the removal or protection of Soviet SSBNs.

Alternate Strategies

As we examine alternate strategies to counter Soviet SSBNs, two criteria seem to have particular value in making our selection. Our strategy should provide an effective method to put Soviet SSBNs at risk since we feel that they are a significant danger to our homeland. In addition, this strategy should not provide the Soviets with incentive to attack forward deployed maritime forces or initiate central strategic war. We will address alternatives that consider: arms control restrictions to SSBNs, technology initiatives, and barrier operations.

Arms control strategies would work against Soviet SSBNs by reducing their numbers and eliminating MIRVed missiles, thereby reducing the number of warheads available and the importance of a given target. This strategy would obviously

mean reduction of like US systems and might require NATO allies to "ante up". Another arms control initiative would put SSBNs in operating areas where they would be more vulnerable. This option, however, would promote crisis instability and thus be undesirable. US naval advocates have strongly condemned all maritime arms control proposals--especially ship reductions, removal of nuclear weapons from surface assets, and elimination of SLCMs. Lindsey, however, notes that it is difficult to verify whether a SLCM is conventional or nuclear, and whether it will be used for anti-shipping or land attack. This author believes that SLCMs, when used in an offensive mode such as land attack or forward ASW, contribute to crisis instability and are accordingly, a prime candidate for mutual elimination.

The US leads the submarine technology race, but maintaining our edge will continue to be expensive. However, the effort to develop submarine weapons such as a long distance, remotely controlled torpedo, for example, must continue if we are to have an effective warfighting counter to SSBNs. We should also work on the next generation attack subs such as the SSN21 Seawolf Class, and stealth/prompt kill capabilities. SDI technology, on the other hand, seems to have questionable value in countering SSBNs. In addition, the employment of SDI would be extremely destabilizing, prompting the Soviets to consider a preemptive strike before the system was operational, against either the CONUS or our space-based components. Limiting our SDI efforts to R&D will

keep our options open without "opening a new can of worms."

We can defend against an SSBN attack conventionally by sowing mines in their operating areas and transit routes or by setting up ASW barrier operations. Unfortunately, such strategies are not helpful when SSBNs can launch from home port and can hide under nearby Arctic ice or in deep fjords. Some defense experts suggest that an SDI barrier could defend against incoming SLBMs. The cost and stability issues of this option have been discussed above, and SDI would not provide a leak proof barrier against the hundreds of SLBM RVs that would be launched in a nuclear exchange. Similarly, to develop space weapons which could strike SSBNs as they began their launch sequence, would create arms race as well as crisis instability.

A strategy using NATO SSNs operating in Soviet bastions does have potential, however. Our quieter attack boats could shadow SSBNs, ready to strike them on command or as the SSBNs began a launch sequence. This strategy, however, involves some risk of provoking a Soviet attack on our SSNs and causing a serious escalatory incident. If we were willing to accept the risk, in the event of war this strategy might provide an element of surprise against SSBNs, even those operating in home ports or under the ASW protection of the Sea of Okhotsk. Even so, the results would not be satisfactory as hundreds of warheads would be launched by each boat that was not countered.

Conclusions

The purpose of this paper was to find a strategy to counter the operation of Soviet SSBNs in bastions, as described in George Lindsey's article. A forward maritime strategy, using US or NATO surface elements near Soviet bastions, offers limited potential against SSBNs and also creates grave instability. Even after the outbreak of war, the risk to US maritime surface forces when positioned near Soviet borders or bastions overrides the potential gain. Such forces could be more effectively employed in the protection of Atlantic and Pacific SLOCs where they would guarantee our long lines of resupply and protect attacks on the US homeland. The US should begin an unannounced strategy of keeping provocative surface assets well clear of bastion areas in peacetime, and use them primarily for SLOC defense in wartime. We would leave the role of countering Soviet SSBNs to our SSNs using torpedoes. With these actions, the Soviets will continue to designate significant naval forces to counter US submarines and fleet assets in the anticipation of a forward maritime strategy. This ties up Soviet forces that could be employed elsewhere and that is obviously good.

The strategy considerations described above, reflect the significance of the Soviet SSBN as a threat to nuclear deterrence and US warfighting capability. A strategy which provokes a Soviet attack does not serve either political or

military objectives. Accordingly, the US should move out with arms control initiatives that reduce the number of MIRVed systems and enhance crisis stability. We recognize the Soviet potential for breakthrough in submarine warfare, and we should continue pressure to maintain our technological lead, particularly in the areas of detection and prompt kill capability. SSBNs were developed as a means to put respective societies at risk with a relatively secure and destructive system. As George Linday notes, a forward naval surface strategy is not the right counter for this threat.