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The policy of having no strategic ASW policy is defensible only if both the United States and the U.S.S.R. adhere fully to the Mutual Assured Destruction concept. The United States has begun to move away from the concept and there is no evidence that the U.S.S.R. ever considered it other than an American aberration. The tactical and technological problems of strategic ASW are non-self-solving. A national policy is required. Some reasons and suggestions are offered here.

THE EMPTY SILO—STRATEGIC ASW

by

Hamlin Caldwell

Like a silo that holds no missile, strategic ASW may be an important nuclear warfare policy area devoid of a U.S. policy. The absence of any recent official statement concerning strategic ASW (action to destroy or neutralize strategic missile submarines) indicates that there may, indeed, be a conscious policy not to have a policy.

Nineteen sixty-five was the last time a Secretary of Defense publicly advocated a strategic ASW mission for the U.S. Navy. Then Secretary of Defense Robert S. McNamara included strategic ASW as one of the key objectives of U.S. military policy with the statement:

Our principal active defense capability against submarine-launched missiles lies in our system for detecting, tracking and destroying the submarines before they can launch their missiles.¹

This was the last official proclamation of policy conducting strategic ASW in support of a strategy of damage limitation, i.e. limiting to the extent prac-

ticable, damage to the United States and allies during a nuclear war.²

Although strategic ASW has become an official nonsubject, the damage-limiting policy it would help implement was still alive but pale in 1978 as affirmed by former Secretary of Defense Harold Brown in testimony that:

U.S. strategic forces are not procured for a damage-limiting mission. They are procured for their contribution to deterrence. However, should a nuclear war occur, our forces may be utilized to limit damage to the United States to the extent practicable in addition to being used to destroy resources which contribute to the postwar power, influence and recovery capability of the enemy.³

This dichotomous defense policy in which military force was procured on the basis of a deterrent strategy but would actually be employed in a quite different damage-limiting/warfighting strategy largely explains the past invisibility of strategic ASW policy.

Secretary of the Navy John Lehman has reversed this stale strategy of buying forces for one purpose when they would be used for another by proposing to expand the U.S. Navy from 456 to 600 ships to underwrite a warfighting naval strategy.⁴ A coherent statement of the role of the U.S. Navy in national strategy is being drafted and a clear position on strategic ASW should be part of it.

The United States needs immediately to reexamine strategic ASW policy in light of:

1. Our own more realistic post-MAD nuclear warfare strategy in general and the new aggressive counterforce orientation of the U.S. Navy in particular.

2. Our better understanding of Soviet nuclear warfare strategy and philosophy.

3. The Soviet Navy's apparent Ocean Bastion strategy of withholding and protecting their SSBN force in home waters.

4. Current naval tactics, technology and capabilities.

If deterrence fails the need will exist for a comprehensive strategic ASW plan and it will be too late to sketch one with a stick in the possibly radioactive dirt.

Soviet Policy. An understanding of the Soviet view of warfare and the use of strategic missile submarines must be basic to the formulation of a strategic ASW policy and plan. We have this understanding. The Soviets discuss their views on warfare in considerable detail. There is no reason not to believe them. They outline a practicable, logical, professionally sophisticated approach that represents a clear worst case for the West. Former Secretary Brown said:

Soviet leaders acknowledge that nuclear war would be destructive beyond even the Russian historical experience of the horrors of war.

But at the same time some things Soviet spokesmen say—and, of

even more concern to us, some things they do in their military preparation—suggest they take more seriously than we have done, at least in our public discourse, the possibility that a nuclear war might actually be fought. In their discussion of that prospect, there are suggestions also if a nuclear war occurred, the time-honored military objectives of national survival and dominant military objectives of national survival and dominant military position at the end of the fighting would govern and so must shape military preparations beforehand.⁵

Perhaps Mr. Brown's concern is misplaced. The true cause for concern is not this realistic Soviet position but that the same solid principles have not always shaped U.S. military preparations.

The Soviet Navy SSBN force is a major component of Soviet nuclear warfare capability. The authoritative *Military Strategy* in its 1968 edition placed the SSBN force on par with the Strategic Rocket Force and since then even more resources have been allotted to sea-based strategic forces.⁶ The 950 missile tubes of the 62 first-line operational Soviet SSBNs represent 38 percent of their present 2504 launchers.⁷ This large and relatively new force has three overlapping roles⁸ as a participant in:

- Intercontinental strikes
- Intratheater strikes
- The national strategic reserve

As a powerful and survivable asset, the Soviet SSBN force is useful from deterrence through war to war termination and is a foundation of Soviet nuclear superpower status.

It is helpful to divide Soviet ballistic missile submarines into four operational groups in describing how they would carry out their overlapping war-time tasks:

1. *DELTA*-class SSBNs. The *Deltas* with their 4,500-mile SS-N-8 missiles

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can strike most U.S. and Chinese targets from protected areas in Russian home waters. Most probably the *Delta* SLBMs would be withheld under the direct control of the General Staff as a carefully hoarded national strategic reserve to be used as a heavy counter during the termination phase of a war. They underwrite Soviet credibility at the highest level of nuclear violence, an intercontinental countervalue exchange, and accordingly are a keystone in the Soviet nuclear war plan. The huge new *Typhoon*-class boats under construction will join this operational group.

2. Deployed *YANKEE*-class SSBNs. The visible, or at least somewhat detectable, tip of the Soviet SSBN force iceberg is the approximately five *Yankees* maintaining a standing patrol off the Atlantic and Pacific coasts of the United States. Their 1,500-mile range SS-N-6 missiles can effectively strike relatively soft targets such as SAC bomber bases and SSBNs in port and disrupt the C³ that controls U.S. strategic forces around the world. Although the *Yankee* SLBMs may have a limited hard-kill capability against hardened ICBM silos, pin-down barrages might disrupt retaliatory attacks and hold some *Minuteman* missiles in their holes until arrival on target of flights of accurate, high-yield Soviet counterforce ICBMs. Missiles from forward deployed *Yankees* would have a time of flight of only 5 to 6 minutes to reach U.S. missile fields.⁹ By moving into shallow, close inshore waters (where, incongruously, U.S. ASW may be least effective) Washington and other coastal target complexes can be struck with a warning time so brief that it amounts to no warning at all. The deployed *Yankees* would be a high-leverage asset in a disarming, counterforce bolt-from-the-blue attack. Additionally, they may be a symbolic Soviet counter on the nuclear superpower playing board in position for a countervalue retaliatory snapshot in case of a U.S. first strike.

3. *YANKEE*-class SSBNs in Soviet home waters. The bulk of the *Yankees* are and will be withheld in Soviet home waters. Although they will be unable to strike the continental United States they will be within easy missile range of most theater targets of interest in Europe and Asia. James McConnell of the Center for Naval Analysis postulates that they might be part of an independent Eurostrategic option decoupled from an intercontinental strike and exercised by systems at sea or moved from the U.S.S.R. into Eastern Europe.¹⁰ This interesting option could stress the chronically weak strategic nuclear link of the NATO alliance chain.

At this point the full meaning of the term *counterforce* should be nailed down. William R. Van Cleave and his colleague Roger W. Barnett have stated:

... counterforce is not synonymous with hard-target kill. Some counterforce targets have been hardened to nuclear and blast effects, some have not, and some cannot be. To use counterforce to describe only missile silo destruction is an impoverishment of the term; using it solely in that sense is a distortion.¹¹

They go on to list Soviet nuclear targeting priority based on the number of times each type of target is mentioned in the Soviet literature. Not surprisingly, the West's means of waging nuclear warfare lead the target list. The only countervalue target, political/administrative centers and war-supporting industry, is sixth and last on the list behind purely military counterforce targets. Unencumbered by a strategic bombing doctrine left over from World War II, and keen students of Clausewitz, the Soviets count on disarming and defeating their enemies by destroying their armed forces. Perhaps deceived by kinder history, the United States was long enamored with Mutual Assured Destruction based on cheap countervalue targeting. This illusion of

national security at a bargain price is now fading as the MAD doctrine with its single dimension of city-busting is being edged closer to total bankruptcy.

The *Yankees* and *Deltas* in protected Soviet home waters would share many operational advantages. Shorter distances, less ASW pressure permitting more secure operation at communication depths, easier use of surface and air relay platforms and other factors facilitate rapid, reliable, redundant communications for flexible and precise command and control. Precise navigation, an important factor in SLBM accuracy, can be more easily realized with a variety of local navigation aids including bottom-mounted markers. Split-launch of missile loads would be safer in this less hostile environment. In a sustained counterforce war it may even be possible to bring SSBNs (the classic cold launcher) into isolated anchorages and rearm them alongside the *Lama* and *Orskol*-class missile cargo ships. In addition to increased survivability under the ASW protection of Soviet general-purpose forces, SSBNs in home water ocean bastions could fight a nuclear war more efficiently.

Yankees in home waters could also serve as a survivable theater nuclear reserve. If the war goes well for the Soviets, a delayed escorted *Yankee* sortie through the GIUK Gap after U.S./NATO seapower has been reduced could directly threaten the continental United States and be a convincing war termination factor.

4. Older *Golf*-class SSBs and *Hotel*-class SSBNs. Both are armed with the short-ranged SS-N-5 first generation missile. The noisy nuclear *Hotels* are probably on the way out of commission. The diesel *Golfs* operating in the Baltic and Sea of Japan represent a bargain of sorts. Not counted under SALT they are quiet, cheap to operate and have some effectiveness against theater targets in the NATO Central Region and North-east Asia.

Addressing the Threat. The Soviet SSBN force whose probable wartime operations have just been described presents a clear threat to the United States. There are three general approaches to addressing this threat:

- Our apparent current policy of not having a policy.
- The arms control approach of ensuring the security of the Soviet SSBN force in the hope that the Soviets will mutually accept deterrence.
- A strategic ASW policy directed toward the wartime destruction of the Soviet SSBN force.

The rationale for each of these approaches will be examined.

The "no policy-policy" was perhaps the best position that the U.S. Navy could have defended during the MAD era. There was strong pressure from disarmament groups for introduction of ASW limitations discussion into SALT negotiations.¹² Limiting the numbers of SSNs (nuclear attack submarines), establishment of privileged SSBN sanctuaries and prohibition of SSBN trailing were measures that were discussed. Restricting the number of SSNs would have cut deeply into U.S. capabilities in every naval mission area and the other operational restrictions would have unduly reduced freedom of action. The 1970s were a difficult period for the U.S. Navy when it was hard pressed to cut its losses. There was strong motivation to "go along to get along" on the controversial strategic ASW issue. All ASW was described as tactical ASW (SLOC protection, carrier escort, etc.). This permitted procurement of ASW forces in accordance with MAD guidelines but left the option open to employ them in a damage-limiting/warfighting mode if deterrence failed.

Although no mention was made of seeking out and destroying Soviet SSBNs, VAdm. Daniel Murphy stated that in wartime the Navy, "... would not be in a position of differentiating their attack submarines from their

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SSBNs."¹³ In a similar vein VAdm. Robert Kaufman allowed that, "... in a conventional war all submarines are submarines. They are all fair game."¹⁴ The U.S. Navy was careful to avoid saying that it would either go after Soviet SSBNs or leave them alone. One hopes that the present national security situation is such that this strategic policy issue can be squarely and openly addressed and resolved in the best interests of the United States. This is absolutely necessary because the tactical and technological problems of strategic ASW are too different and complex to be solved by indirection.

Those opposing strategic ASW are sincere, organized and articulate.¹⁵ Their principal argument is that any U.S. capability that threatened the survivability of the Soviet SSBN force would be destabilizing and would encourage the Soviets to launch a first strike. Additionally, credible threat to their SSBN force would discourage the Soviets from shifting more of their strategic offensive power to sea-based systems. Some consider that this seaward shift is desirable because of the dubious assumption that SLBMs are basically countervalue systems with inherent limitations preventing their development as a counterforce weapon. In a stable MAD situation neither side would have enough counterforce capability to disarm the other and both would retain a devastating retaliatory countervalue capability. The Soviet capability to launch a countervalue strike from the sea against the United States under any circumstances would remain assured, not only through their own efforts but would be guaranteed by the United States.

Under the MAD policy, would-be limiters maintain that strategic ASW would also be prohibitively difficult because all Soviet SSBNs would have to be sunk almost simultaneously before they could launch their countervalue strikes. To allow Soviet apprehension

about the survivability of SSBN force, they have variously proposed that the number of SSNs on both sides be limited, safe sanctuaries be set aside for the war and peacetime operation of SSBNs, and that trailing of SSBNs be prohibited. Before the Soviet invasion of Afghanistan it would have been a reasonable assumption that some combination of these proposals might have found their way into SALT III discussions.

The antistrategic ASW stance is valid only if there is a common and total adherence to a MAD strategy by the U.S.S.R. and the United States. This is patently not the case. After 35 years we have not only failed to "educate" the Soviets to accept MAD but have begun to adopt aspects of their more logical (and incidentally, moral) warfighting/damage-limiting strategy. PD-59 in some respects is a codification of this trend and it is doubtful if the United States ever had a pure MAD strategy.

The MAD-based concept of encouraging the Soviets to shift their strategic nuclear weapons to sea because SLBMs are inherently "good" countervalue weapons rather than "bad" counterforce weapons is probably no longer valid on technical grounds. Although our current SLBMs were not designed to strike hardened military targets such as command bunkers and missile silos, *Trident II* will be effective against all targets.¹⁶ If Soviet SLBMs do not now have a full counterforce capability they would soon acquire one with stellar tracking and precision navigation techniques that can be reasonably assumed to be available in the U.S.S.R.

Although strategic ASW is an extremely difficult technical and tactical task, the requirement for the simultaneous destruction of all Soviet SSBNs is unduly stringent and ignores the fundamentals of SLBM employment. Survivability is the primary advantage of SLBMs. They are not a "use or lose" but "shoot anytime" weapon. To

unloose them all in a near-simultaneous first strike would waste this feature. In a warfighting/damage-limiting strategy, destruction of any SSBN is a plus. This, in fact, is the Soviet strategic ASW philosophy that supports any feasible costs to prevent a free shot against their homeland.¹⁷

The third major alternative, an active strategic ASW policy aimed at wartime destruction of Soviet SSBNs would have the following advantages:

1. Damage would be limited in a nuclear war. Protection of the state and its citizens is an armed forces reason for being. Any distortion of this objective obligation in deference to a highly subjective concept such as MAD is basically wrong.

2. Strategic ASW would improve the U.S./NATO war termination position *vis-à-vis* the U.S.S.R. In the running calculation of the factors that determine who would win a war, the number of residual *Poseidon/Trident vs. Yankee/Delta* SLBMs in launch position will be a key statistic. Naval forces of any kind with their autonomy, flexible use, and mobility have always been a hole card in war termination bargaining. This will be particularly true of SSBNs.

3. Strategic ASW would degrade Soviet capability at the highest level of nuclear violence and thus improve U.S./NATO control of escalation. The credibility of nuclear superpowers ultimately rests on the capability to launch a massive intercontinental second, third and subsequent strike. This is the foundation that in the last analysis must support any show of force.

4. Strategic ASW would fix Soviet general-purpose forces in the defense of their SSBNs in home waters. A credible U.S. wartime naval threat to SSBNs and the periphery of their homeland will tie up a sizable chunk of the Soviet gross national product in production of expensive general-purpose naval forces earmarked for defensive missions. Warships, particularly air-capable ones, are

prodigious sinks of engineering talent, steel, high technology production capability, and trained and trainable manpower. *Kiev* and *Kirov* are impressive ships but they may be expensive Soviet mistakes. As formidable as they appear, their ability to operate against a maritime power outside home waters beyond land-based air cover is suspect. More *Backfire* bombers, attack submarines (neither in lavish production) or even T-72 tanks might have been an equivalent investment more menacing to the West.

Arms races are not necessarily bad. A judicious investment tailored to put pressure on Soviet SSBNs in their home waters would force a relatively greater Soviet defensive expenditure at the expense of offensive systems. General-purpose naval forces are of much greater value to the maritime West than they are to the continental U.S.S.R. Although it may sound like heresy in a naval professional journal, the Soviets may have passed the point of diminishing returns in their investment in sea-power. Intensifying a Soviet perception of the wartime vulnerability of their SSBNs will tend to generate a Soviet Navy bought at high cost primarily to respond to U.S. initiatives. Strategic ASW capability can be a powerful lever to keep the Soviet Navy firmly pinned on the defensive side of the oceans.

All of the advantages cited for a positive strategic ASW policy would be directly reflected in the continuous Soviet calculation of what they interminably refer to as the "correlation of forces." This win/lose, "howgozit" calculation is the strongest ultimate determinant of how great a risk of general war they are willing to incur by aggressive action. Few, if any, states in history have initiated a war that they have believed they would lose. There is reason to believe that the U.S.S.R. has not and will not be an exception to this observation. A risk-averse Soviet leadership would perceive a credible threat to

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their SSBN force, with its considerable war and war termination potential, as a strong deterring factor in their calculation of the correlation of forces.

Strategic ASW. Because naval strategy, like politics, is the art of the possible, it is necessary to determine if strategic ASW is technically and tactically feasible and how it would be conducted. Most past discussion has focused on ASW technology in isolation from the tactical considerations of complexly interlinked sea, air and ground campaigns of a global war. Strategic ASW goes far beyond the detectability of submarines and must be examined as an integral part of overall national security strategy.

The hectic action-reaction cycle between submarines and countering forces sometimes seems to have a life of its own, unguided by any coherent scheme of human foresight and planning. In peacetime, navies (as would any other human organizations) tend to tailor the problems they address to organizational essences and their solution is a function of self-perpetuation and professional satisfaction. If any slack is available this perfectly natural practice may carry over into war. Most nations have cast submarine/antisubmarine warfare problems in the most convenient terms until their survival has been seriously threatened. Because of this tendency, submarines have been a major factor in the conduct of two World Wars and are now a key element in the nuclear strategic balance—all more or less by accident. We cannot afford the consequence of the major differences in the anticipated and actual nature of submarine/antisubmarine warfare that have occurred and probably exist now. We must address the real strategic ASW problem that may not march our set of ASW solutions based on the relatively happier world of tactical ASW.

The submarine became a serious

weapon when it was married to the diesel engine shortly before World War I. Earlier submarines powered by gasoline engines were operationally equivalent to risky, submersible coastal torpedo boats. The diesel engine made the submarine a reliable long-range weapon of sea denial and in many respects was as significant a breakthrough as nuclear propulsion. The submarine could be used where the surface of the sea and the air above it was controlled by an enemy and became the classic *guerre de course* weapon of inferior naval powers.

After World War I, the major naval powers—the United States, Britain and Japan—attempted with limited success to work submarines in close harness with their surface battle fleets. Having lost control of large areas of the ocean, Britain and the United States were forced to cut their fleet submarines loose for independent operations in World War II. The Japanese did not make this adjustment and their submarines were never a significant operational factor. In World War II the submarine continued to be used by both the superior and inferior naval powers as an essentially independent sea denial weapon in hostile waters controlled by the enemy. Submarines depended upon their own stealth for protection and fought their tormentors only as a desperate last resort.

The pattern for the U.S. Navy of unopposed ASW was reinforced by the Korean and Vietnamese wars in which our use of the sea was not contested. We have, with very few exceptions early in the Battle of the Atlantic, never conducted ASW in a multithreat environment.

While ASW is a means of achieving sea control, it is also greatly facilitated by control of the sea surface and airspace in the ASW area. Attack submarines and mining can perform an ASW function in hostile waters but even these operations are significantly limited by the absence of sea control in

the conventional sense of the term. The conduct of ASW in the face of coordinated air, surface, submarine, and mine opposition is a difficult problem that the U.S. Navy has not faced in the past.

This opposed ASW problem is at the core of strategic ASW. For nearly 10 years the most perceptive students of the Soviet Navy have maintained that the Soviets will withhold a large part of their SSBN force in home waters under the protection of general-purpose forces. Soviet naval construction, deployment and doctrinal statements tend to confirm this Ocean Bastion strategy. Admiral of the Fleet Sergei Gorshkov alludes to part of this strategy in his comment:

Diverse surface ships and aircraft are included in the inventory of our Navy in order to give combat stability to the submarines and comprehensively support them, to battle the enemy's surface and ASW forces and to prosecute other specific missions.¹⁸

Official U.S. Navy acceptance of a Soviet pro-SSBN mission is mirrored in the 1978 edition of *Understanding Soviet Naval Developments*:

Another aspect of maritime security is Soviet countering of the considerable ASW forces of the U.S. Navy and our Allies. The Soviets are thus concerned with the protection of their own SSBNs and have developed forces to attack Western ASW forces in a defense in depth concept.¹⁹

This Soviet Navy's preoccupation with the maritime security of its coastal seas both for the defense of the homeland and the protection of its SSBN force is a reflection of the pessimistically cautious Russian attitude toward security in general. Comdr. Kenneth R. McGruther comments:

... the Russian assumes that if he does not protect what he has (whether it is his life, his job, his homeland or his SSBNs) sooner or later somebody is going to take it away from him.²⁰

The strategy is in line with both the Russian psyche and traditional Czarist/Soviet continental naval policy based on geography, naval inferiority, caution and inshore orientation. The concept of home water "naval positions" that were the focus of active defense using mines, submarines, light forces and shore-based aviation was advanced in 1924 by Professor M. Petrov, an ex-Czarist naval officer on the faculty of the Frunze Higher Naval School.* Eventually Petrov was executed for his tactical theories but then, in an evenhanded way, so were the people who opposed them.²¹ Tactics for protection of the Soviet SSBN force in home waters are probably an updated variant of the "naval positions" concept that runs through Russian naval history.

Toward a Strategy. In spite of Secretary Lehman's recent, "firm commitment to go into the highest threat areas and defeat the Soviet naval threat," the U.S. Navy may not have the appropriate ASW force structure, tactics or technology to hold the Soviet SSBN force at risk in its home water bastions. Decades of mindset and preparation for unopposed ASW in deep midocean waters has poorly prepared the U.S. Navy for this daunting task. The problems of conducting forward strategic ASW are a subset of the linked overall problems that must be solved to ensure success of the aggressive new U.S. naval counterforce strategy. Strategic ASW should be part of an integrated campaign of sequential and cumulative operations to fix and destroy the Soviet Navy. We must realistically assess the problems and get on with a coherent solution now.

*Under several names the Frunze School is the oldest naval academy in continuous existence in the world and had many ex-Czarist officers on its faculty through WW II. Nick Shadrin has recalled the culture shock when his classes there were addressed as "Gentlemen" and not "Comrades." There is strong continuity through all Russian navies, Czarist and Soviet.

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The United States now has 74 nuclear attack submarines and is projecting a force level of 90. This slim SSN force will certainly bear the brunt of early strategic ASW operations in Soviet waters. It has been designed primarily for open ocean, deep water, one-on-one ASW and the \$600 million *Los Angeles*-class SSNs are an expensive solution to that particular problem. Technical emphasis has been on propulsion system safety and reliability and the characteristics to achieve long-range detection using passive sonar. Tactical emphasis has been on establishing and maintaining covert trail of noisier Soviet submarines. Our SSNs do all of this extremely well. Unfortunately, taking the war to the Soviet Navy in the Barents Sea may require other strengths.

Firepower is the primary deficiency of the U.S. Navy attack submarine force. All of our first-line SSNs have only four torpedo tubes (compared with ten for WW II fleet boats) and based on estimates of the volume of the torpedo room carry about the same total number of weapons as their WW II predecessors. Quick fixes are in the works to fit a limited number of SLCMs external to the pressure hull in the forward ballast tanks of some of our SSNs. The problem remains, however. Our attack submarines float like a butterfly and sting like a butterfly.

The discouraging part of this serious lack of firepower is that the Soviet Navy, including its facilities ashore, is potentially very vulnerable to SSN attack. The propulsion, detection and personnel excellence of our SSN force cannot now be appropriately translated into tons of warhead on target. It has been aptly said that propulsion systems can't be used to kill people.²² To make strategic ASW and a forward strategy work we need a true tactical missile attack submarine that can carry and quickly launch a lot of weapons at a wide range of targets afloat and ashore.

Our nuclear submarines are significantly quieter than Soviet nuclear submarines and our sonar systems are superior to theirs. This decided acoustic advantage unfortunately counts for less in shallow Soviet home waters (where SSBNs may be) where all sonar performance is degraded and our margin of relative superiority shrinks proportionately. In passing, shallow water ASW remains a U.S. weakness where until a few years ago it was the only type of ASW practiced by the Soviets.

Long-range detections cannot always be converted into covert attacks, even in deep water one-on-one situations. In penetrating the layered defenses of an SSBN haven, sophisticated long-range detection and localization tactics may not be appropriate to the ensuing series of short-range torpedo brawls. As the U.S. Air Force has discovered in their illuminating AIMVAL/ACEVAL exercises, there are tactical situations in which qualitative superiority can only buy limited advantage and exchange ratios are relatively low. This may be true of strategic ASW in Soviet home waters.

Additional factors complicating offensive SSN operations are the presence of a large, relatively modern Soviet diesel submarine force and a capability of mining the approaches to SSBN havens. As long as diesel boats do not have to make long transits, can count on air superiority, and have a relatively short patrol line they can tactically exploit their significant acoustic advantage over nuclear boats. All these tactical conditions favorable to defending diesel boats are inherent in the Soviet Ocean Bastion strategy.

Mine warfare is a traditional Russian area of strength.* Much of Soviet home waters are minable. Judiciously placed

*A cynic might wonder if this reputation is at least partially based on a history of lackluster performance in most other facets of naval warfare.

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mine barriers could act as an efficient force-multiplier by augmenting Soviet submarine barriers and pose a significant real and psychological hazard to penetrating U.S. attack submarines.

Air ASW forces are an increasingly effective but very soft U.S. asset. They are unable to operate either inside the SAM envelope of hostile ships or without nearly perfect friendly control of the air. This problem neatly illustrates the interlocking nature of strategic ASW and complementary operations against Soviet general-purpose forces in home waters. The underlying theme is to start where we can (probably SSN operations) and expand our initiatives by putting pressure on any part of the Soviet Navy that is vulnerable. The initial objective is to start an unraveling process that will permit the use of more types of forces in shrinking and penetrating the Soviet defensive perimeter.

A calculated and carefully linked sequence of offensive naval operations to defeat the Soviet naval threat, reduce their SSBN force and put direct pressure on their homeland must be at the heart of our naval planning. To make any plan credible we must have the appropriate force structure, tactics and technology to fight the Soviet Navy in their home waters.

The deployed Soviet *Yankee*-class SSBNs present a different problem than the SSBNs withheld in home waters. Our ASW efforts against them will be essentially unopposed but time-critical. The crux of the situation is being able when the political situation dictates to be continuously able, with economy of force, to destroy each *Yankee* as soon as hostilities commence or as soon as they initiate any missile launch sequence. An ideal technical solution would be to have a platform in continual contact that could both destroy any missiles launched in their boost phase and destroy the *Yankee* before its remaining missiles can be launched. Any approach will be fraught with technical and

political difficulties but the disarming consequences of not having an approach are grave.

Conclusions. The United States must have a clearly stated and understood strategic ASW policy for the wartime destruction of the Soviet SSBN force. This positive strategic ASW policy will be useful in both deterrence and warfighting. By influencing the Soviet perception of the "correlation of forces" it will serve to deter them from aggressive adventurism that could lead to war and force them into a more defensive military posture at the expense of considerable offensive capability. If in spite of this, war does occur, a positive U.S. strategic ASW policy will be a guide to limiting damage to the United States and its allies and gaining a position of relative military strength that will underwrite war termination on terms favorable to the United States.

To be effective this strategic ASW policy must be credibly backed not only by national resolve but by appropriate force structure, technology and tactics for the wartime destruction of Soviet SSBNs wherever they may be. Strategic ASW will entail opposed operations against Soviet SSBNs defended by general-purpose naval forces in Soviet home waters. It must be an integral part

BIOGRAPHIC SUMMARY



Hamlin Caldwell was graduated from the U.S. Naval Academy and holds the M.A. degree in National Security Affairs from Georgetown University. He is a graduate (with high honors) of the Naval War College

and was a Research Fellow of the College's Center for Advanced Research in 1977. Mr. Caldwell is now a Senior Naval Analyst with the BDM Corporation, McLean, Virginia.

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of the U.S. Navy's overall strategy to destroy the Soviet naval threat and exploit all of the opportunities available to a dominant maritime power.

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