REAGAN'S MARITIME STRATEGY

The Naval Intelligence Underpinnings of Reagan's Maritime Strategy

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ABSTRACT Washington's so-called Maritime Strategy, which sought to apply US naval might against Soviet vulnerabilities on its maritime flanks, came to full fruition during the 1980s. The strategy, which witnessed a major buildup of US naval forces and aggressive exercising in seas proximate to the USSR, also explicitly targeted Moscow''s strategic missile submarines with the aim of pressuring the Kremlin during crises or the early phases of global war. Relying on a variety of interviews and newly declassified documents, the authors assert that the Maritime Strategy represents one of the rare instances in history when intelligence helped lead a nation to completely revise its concept of military operations.

KEY WORDS: U.S. Navy, Maritime Strategy, Office of Naval Intelligence, Operational Intelligence, Ocean Surveillance Information System (OSIS)

Writing meaningfully about lessons from the role of intelligence in the Cold War is exceedingly difficult.¹ The Cold War decades are 'arguably the most interesting and certainly the most expensive' in the history of US naval intelligence, but they remain heavily 'shrouded in classification and ...may be at the most risk for [historical] preservation'.² The many triumphs of US technical intelligence during the Cold War produced some remarkably good information about the capabilities and status of the Soviet armed forces. US Naval Intelligence, particularly operational intelligence (Opintel) and the institutions and analytical mindset it created, played a critical role in Cold War naval

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operations and strategy, particularly in the design and implementation of the Maritime Strategy of the 1980s. The following pages provide an introduction to this little-known story.

OSIS Comes of Age

From the end of World War II until the late 1960s, Navy Opintel had largely been a national-level enterprise, performed principally by watch floors in the Pentagon and analysts in organizations such as the Navy Field Operational Intelligence Office (NFOIO), co-located with the National Security Agency (NSA) in Fort Meade, Maryland. By the end of the 1960s, however, automated data processing (ADP) systems made possible a meaningful Opintel capability aboard individual naval vessels themselves – or at least initially aboard aircraft carriers and fleet command ships. This process of devolution continued rapidly in the early 1970s with the formal establishment of a worldwide Ocean Surveillance Information System (OSIS) combining national-level analytical nodes with fleet-focused regional Opintel fusion centers and expanding 'afloat Opintel' capabilities.

In 1970, the Fleet Ocean Surveillance Information Facility (FOSIF) at Rota, Spain, began operations as an Opintel node devoted to providing tailored support to Sixth Fleet operations in response to a growing Soviet presence in the Mediterranean. The Rota facility focused on systematized collection, processing, and dissemination with an eye to indications and warning intelligence; exploitation of Soviet command, control and communications activity; more efficient surveillance and the appropriate sanitization of the resulting product for fleet operators. The locations and activity of Soviet units, Sixth Fleet and allied naval forces, and merchant marine activity were put together as all-source, 'fused' operational intelligence for use by the fleet in day-to-day activity. Following this model, OSIS quickly sprouted a network of fleet-support Opintel nodes. OSIS became operational on a 'worldwide system basis' in 1972 with the establishment of another FOSIF at Kamiseya, Japan, to support the commander of the Seventh Fleet conducting operations in the Western Pacific. Similar facilities designated Fleet Ocean Surveillance Information Centers (FOSICs) were set up in London, Pearl Harbor and Norfolk, Virginia, to support, respectively, US Naval Forces in Europe and the Commanders-in-Chief of the Pacific Fleet and the Atlantic Fleet. At the center of this network of intelligence nodes was the Naval Ocean Surveillance Information Center (NOSIC), ensconced in a 'Butler Hut' temporary building in the courtvard of the Naval Reconnaissance and Technical Support Center in Suitland, Maryland. NOSIC provided regular daily and weekly reports on global Soviet submarine operations as well as in-depth analytical assessments of the Soviet Navy, and was OSIS's principal repository of merchant shipping Opintel.³

Furthermore, the late 1960s saw a veritable revolution in the quality and variety of intelligence inputs – such as Sigint (signals intelligence), Acint (acoustic intelligence), Elint (electronic intelligence such as radar emissions) and increasingly specialized varieties of Imint (imagery intelligence) – that began to become available for incorporation in the all-source fusion analyses of navy Opintel. The various advances and innovations that came together during the 1970s helped produce a sophisticated, worldwide ocean surveillance system capable of providing navy commanders anywhere on the planet with an integrated, 'God's-eve view' of their operating environment. As a 'system of aerial, surface, and subsurface systems continuously provid[ing] locating data on maritime activity', OSIS was soon regarded as 'an extremely effective intelligence system that is one of the strongest aspects of naval intelligence and one of the most capable and efficient systems in the U.S. Intelligence Community'.⁴ By the turn of the 1980s, OSIS 'provided Navy operational commanders and strategic planners with an unprecedented picture of the capabilities and disposition of current Soviet maritime forces'.5

'Everybody Doesn't Look Like Me'

These improvements in US collection and analytic abilities provided 'a vital synergism that brought about a more holistic view of Soviet military advances',⁶ Crucially, however, these breakthroughs were confirmed by dramatic 'deep penetrations' of the Soviet adversary, penetrations that it is still impossible – officially, at least – to describe at anything but the most highly classified level. These successes allowed detailed studies of such things as Soviet 'command and control arrangements', plans for the use of stand-by reserves⁷ and the conduct (and after-action analysis) of naval exercises.⁸

The new intelligence sources were 'predominantly SIGINT [signals intelligence]', but included 'some very significant HUMINT penetration of senior echelons of the soviet leadership'.⁹ These insights also revealed much about how *Soviet* planners viewed US war planning. Perhaps not surprisingly, 'how they viewed US strategy in time of war ...was about as wrong as our view of the Soviet strategy, prior to that time, had been...'. As such sources developed, 'new classifications of 'sensitive compartmented information'' (SCI) were created' for the control of this sensitive information.¹⁰ Handling this new information was difficult, and access was initially restricted only to a handful of high ranking officials. In 1982, in procedures that mirrored the handling of ULTRA information during World War II, small cells of indoctrinated officers

were set up on each major fleet staff. With this slowly broadening access, information about the new insights into Soviet operational plans gradually spread throughout the navy leadership.¹¹

Nevertheless, while discussion of the specifics of these breakthroughs must await future declassification, it has recently become possible to discuss the basic *fact* that some such 'deep penetrations' occurred. It is thus possible to 'learn lessons' about the institutions and organizational cultures that produced them and how they were able to take advantage of the insights they provided.

Regardless of their specifics, it is clear that the results of these intelligence breakthroughs were dramatic. In the late 1970s and early 1980s:

Several sensitive sources became available which provided us, for the first time, with highly accurate insights gleaned from the highest levels of the Soviet regime. The information derived from these sources confirmed analyses of unclassified Soviet doctrinal writings that had been going on within ONI, at the Center for Naval Analysis, and at DNI [Director of Naval Intelligence]sponsored symposia for several years....

[W]hile it lasted, the insights gained from these [deep penetration] sources allowed the U.S. Navy, led by Naval Intelligence, to totally reassess how the Soviets would fight a war, where their strengths and vulnerabilities were, and how their perceptions and prejudices caused them to view us. This enabled Naval Intelligence to stimulate and participate not only in a complete rewrite of U.S. naval strategy and the war plans which governed how the U.S. would fight a war with the Soviet Union, but also to plan and conduct meaningful perception management.¹²

In the words of one participant, '[w]e began to understand Soviet perceptions, expectations, and intentions in a possibly unique way'.¹³

The combined insights of these highly sensitive 'deep penetrations' and of unclassified scholarly analyses of Soviet naval doctrine helped lead the navy to revise completely its strategic concept of operations vis-à-vis the Soviet Union, producing the so-called 'Maritime Strategy'. They helped vindicate and amplify upon the open-source insights of Center for Naval Analyses (CNA) analysis and authors such as Robert Herrick, and helped make possible the:

Slow development of an interpretation that tried to move away from an ethnocentric view of the Soviet in American terms, and began to develop an interpretation in Soviet terms on the basis of the Soviet Union's values and the view, aims, and objectives of its leaders. $^{\rm 14}$

As Admiral David Jeremiah recalls of the period:

Through a variety of sources, we learned enough about how the Russians perceived their force capability to be, so that we could be much more aggressive in the use of maritime forces ...We made assumptions in beginning without that information, that 'you are a naval officer, [so] you are going to operate just like I operate.' ...[We assumed that] 'everybody looks like me.' [But] everybody *doesn't* look like me. They don't think like [me]. Different culture.... When we understood that the Russians didn't operate the way we did, then we could take advantage of that.¹⁵

Despite the gradual emergence of improved operational intelligence through the 1960s, the US intelligence apparatus was hampered by a lack of 'regular access to high-level message-like sources and a sustained effort to interpret them',¹⁶ making it impossible to take the intelligence art to its highest level: discovering *how the enemy thinks* and anticipating his plans and reactions. US naval analysts and strategic planners, therefore, too often assumed that Soviet admirals would act and react just as American ones would – that is, that the Soviets would endeavor to bring about fleet-to-fleet actions on the high seas aimed at contesting control of crucial strategic Sea Lines of Communication (SLOCs). As one naval historian described it, for years:

The predominant view in America was on[e] which saw the Soviets building a naval force with many capabilities similar to that which the United States Navy had developed. Most importantly, the existence of a blue-water Soviet Navy seemed to emphasize, in American minds, the capability for peacetime power projection and the capability for wartime attack on U.S. and Western naval forces and sea lines of communication, as well as a capacity for strategic nuclear strikes from the sea ...In short, Americans tended to view the new Soviet naval capabilities in terms of mirror-imaging and refighting World War II.¹⁷

As a result of such assumptions, for most of the Cold War, US strategists imagined that the naval part of World War III would be a high technology, nuclear-armed re-enactment of the 1939–45 conflict.¹⁸

Despite such traditional mirror imaging, however, some specialists in Soviet affairs – basing their analysis heavily upon 'Soviet naval writings, naval exercises, and construction trends'¹⁹ – gradually 'began

to develop an interpretation that tried to move away from an American, ethnocentric view of the Soviets'.²⁰ In particular, Robert W. Herrick's 1968 study of Soviet naval strategy²¹ argued for an essentially *defensive* conception of Soviet naval doctrine. Analysts such as James McConnell and others at the Center for Naval Analysis (CNA) also did influential work on this subject in the 1970s.²²

CNA concluded, for example, that the Soviets planned to withhold their SLBM force during the conventional stages of a war with NATO and during initial nuclear strikes 'in order to provide either a second strike capability or to retain a bargaining chip during [war-termination] negotiations'. To this end, CNA believed that Moscow would operate its nuclear-powered ballistic missile submarines (SSBNs) within special 'bastions' protected by naval forces dedicated to sea control missions as a means of strategic defense - thus giving the Soviet Navy an important war-termination mission. This analysis led CNA analysts to suggest the need for the US Navy to attack or threaten Soviet strategy by developing antisubmarine warfare (ASW) capabilities in Soviet home waters that could threaten these bastions and thereby enhance the deterrent effect of US naval power. This strategy, they felt, would make it harder for the Soviets to rely upon the underwater strategic missile reserve they believed crucial to a war-fighting strategy.²³ Thus stated, this analysis encapsulates much of the thinking of the Maritime Strategy of the early 1980s.²⁴

Though some of these studies clearly proved remarkably prescient, their authors were for some time prophets without honor in their own country.²⁵ In the end, it took a series of dramatic intelligence breakthroughs in the late 1970s to tip the intellectual center of gravity within the US Navy against the traditional view.²⁶ Change did not come easily. As two Naval Intelligence veterans of this period later recounted:

[T]he intelligence that we were presenting to the leadership of the Navy was not what they expected or necessarily wanted to hear. First of all . . .we were telling them [things] about the strategy and planned operations of the Soviet Navy [which] were completely antithetical to the way U.S. and other Western admirals believed that any Navy would operate.²⁷

The confirming information provided by the new 'deep penetration' sources, however, helped to generate acceptance of the new understanding of Soviet naval strategy. US National Intelligence Estimates (NIEs) published on the Soviet Union in the early 1980s were 'enormously more insightful than earlier estimates'.²⁸ In November 1981 an inter-agency intelligence memorandum on 'Soviet Intentions and Capabilities for Interdicting Sea Lines of Communication in a War

with NATO' embodied the final agreement of the US Intelligence Community that CNA had been right all along: the Soviets regarded SLOC attack as a *secondary* mission. The Office of Naval Intelligence (ONI) prepared a similar assessment as the navy's input to a new NIE in 1982.²⁹

The Kremlin's Naval Bastion Strategy

By the early 1980s, the 'new intelligence consensus on the anticipated wartime role of the Soviet Navy had concluded that the Soviets... would assume a defensive posture in the event of war', and would focus their efforts upon establishing and defending so-called 'bastions' in which to protect their submarine-based ballistic missile forces.³⁰ The next global naval war – if it happened – would not be a 1939–45- style conflict in which the Soviet fleet would reach out to interdict the SLOCs across which crucial American troops and materiel would be moving to support the ground war in Europe.³¹ Rather, the Soviets would seek to dominate specific areas of ocean close to their own shores, seizing and controlling the maritime 'terrain' much as a ground commander might. The goal was to protect submarine-based strategic forces hidden therein and maintaining a buffer zone against airborne nuclear strikes from US aircraft carriers.

This has led some to describe the Soviet approach as the conceptual work product of 'a group of artillery field marshals with operations analysis degrees'.³² (The oft-cited 'field marshal' formulation appears to originate with Admiral Harry Train, who reportedly declared during an intelligence briefing on Soviet naval operations planning that 'My God, these [Soviet] flag officers are Army marshals in Navy uniforms!'.)³³ As Rear Admiral Thomas Brooks has put it, this assessment is 'not far wrong, because the [Soviet] General Staff [was] permeated with ground force thinking and the Navy has always been [no more than] a deep-water adjunct to ground forces'.³⁴

This fundamentally *defensive* and *territorial* focus of Soviet naval doctrine,³⁵ it came to be understood, revolved around Soviet concepts of 'the nuclear correlation of forces' which, it was believed, powerfully conditioned the outcome of even a *non-nuclear* conflict with the North Atlantic Treaty Organization (NATO). Where American admirals, steeped in the intellectual traditions of Captain Alfred Thayer Mahan's sea power theories, focused upon control of the sea lanes and bringing about decisive engagements, Soviet planners looked at naval power through the prism of 'the total military power of the state'. Even if a war with the US did not involve the actual *use* of nuclear weapons, therefore, such a conflict would still be:

In Soviet eyes, a 'nuclear' war in the sense that the nuclear balance is constantly examined and evaluated in anticipation of possible escalation. Because of this aspect of Soviet doctrine, the Soviets place[d] a high priority on changing the nuclear balance, or as they term it, the nuclear correlation of forces, during conventional operations.³⁶

In a sense, therefore, Soviet admirals did not view naval operations as having any particular independent logic of their own, but rather through the prism of how they affected the overall balance of strategic power.

This different conceptual starting point led Soviet naval doctrine in a different direction than had been expected by Mahan-schooled American naval strategists. To the Soviets, as it turned out, interdicting Western SLOCs was far less important a mission than 'providing combat stability for their SSBNs [ballistic missile submarines] and defeating the West's nuclear-capable strike forces'.³⁷ The 'primary naval mission' of the Soviet Navy was to favorably influence the overall East/West correlation of forces by providing Moscow with a sea-based strategic nuclear strike capability.³⁸ In wartime the navy's primary operational goal revolved around preserving that force and protecting the homeland against Western analogues.³⁹

Specifically, according to the US Intelligence Community's 1982 NIE on the Soviet Navy, Moscow's naval priorities were, in order of importance:

- Providing 'combat stability' (i.e., protection and support) for Soviet SSBNs, principally through the creation and maintenance of submarine safe havens, or 'bastions' in Soviet SSBN deployment areas.
- Defending the USSR and its allies from NATO sea-based strike forces (i.e., aircraft carriers and Western SSBNs).
- Supporting ground forces involved in land combat against NATO in Europe or elsewhere.
- Interdicting some Western SLOCs.⁴⁰

The *territorial* focus of Soviet doctrine derived from the fact that during this period Western SSBNs were essentially immune to Soviet attack.⁴¹ This relative Western immunity to strategic ASW effectively collapsed the Soviet Navy's first and second missions into one assignment of overwhelming priority: keeping *all* NATO forces out of seas close to the Soviet Union itself. The 1982 NIE assessed the Soviet Navy's objective in wartime was not to interdict Western SLOCs, but to seize and defend the Kara Sea, the Barents Sea, the northern portions of the

Norwegian and Greenland seas, the Sea of Japan, the Sea of Okhotsk and the Northwest Pacific Basin. The navy would then extend 'sea denial' operations out to a distance of perhaps 2,000 kilometers, in order to protect the homeland against Western carrier-based nuclear strikes.⁴²

The shift in the US Navy's understanding of Soviet naval doctrine may be seen from the following chart, which contrasts public statements made in the Department of the Navy's periodically revised pamphlet *Understanding Soviet Naval Developments* between 1978 and 1991 (see Table 1).

The Revolutionaries

As with much really valuable intelligence, the remarkable new intelligence sources that began providing information in the late 1970s about how Soviet admirals *really* planned to fight World War III, did not yield their bounty to casual intelligence analysis. Indeed, it was some time before the US Navy was able to evaluate it properly and begin to understand its profound implications. One of the navy's first steps in evaluating this information was to establish special teams to study it with the requisite depth and intensity.

In late 1980 Director of Naval Intelligence Rear Admiral Sumner 'Shap' Shapiro chose civilian analyst Richard Haver to lead the analytical work being done by OP-009J within the ONI, reporting directly to Shapiro himself. Dr Alf Andreassen – the chief civilian scientist at the Directorate of Naval Warfare (OP-95) - was subsequently also brought into this endeavor as the head of 'Team Charlie'. That group was populated mostly by line officers whose job it was to assess the implications of the new ideas being developed by Haver's OP-009I.⁴³ In 1981, under Chief of Naval Operations (CNO) Admiral Thomas B. Hayward, the Navy also established a Strategic Studies Group (SSG) at the Naval War College, which reported directly to the CNO and worked heavily upon many of these issues of Soviet naval doctrine.⁴⁴ Finally, the Strategic Concepts Branch (OP-603), staffed by 'line officers who were part of the navy's political-military planning brain trust', played an important role in developing new strategic approaches in conjunction with allied NATO naval commanders.43

The 'board of directors' for this overall assessment and evaluation effort was something called the Advanced Technology Panel (ATP), an institution established by the CNO in 1975, which, after 1981, consisted of several senior flag officers under Vice-CNO Admiral William Small and his successors.⁴⁶ The ATP's official mission – stated in understandably vague terms given the sensitive nature of the project

1978 Assessment	1985 Assessment	1991 Assessment
Office of the Chief of Naval Operations (CNO), US Department of the Navy, <i>Understanding Soviet Naval</i> <i>Developments</i> (3d edn, January 1978).	Office of the CNO, US Department of the Navy, Understanding Soviet Naval Developments (5th edn, 1985).	Office of the CNO, US Department of the Navy, <i>Understanding Soviet Naval</i> <i>Developments</i> (6th edn, July 1991).
'[T]he Soviets are firm believers in the old adage that "the best defense is a good offense".'	The Soviet Navy is 'for the first time in its history capable of conducting hostile and aggressive operations if it should desire'. It has become 'a modern, oceangoing, "blue water" Navy increasingly capable of accomplishing the full range of naval tasks The Soviets are employing their Navy in much the same way as the United States, Great Britain and other naval powers'	The principal Soviet Navy wartime role is strategic strike. The top priority for non-SSBN forces, therefore, is to provide SSBN forces with 'combat stability' by protecting them against attack.
The Soviet Navy is focusing increasingly upon fighting a long, conventional conflict with NATO, and is increasingly 'challenging the United States in all aspects of maritime activity'.	Nevertheless, the Navy's top two missions are strategic offense and strategic defense. In the defensive mission, great emphasis is placed upon countering NATO anti- submarine warfare in order to protect Soviet ballistic missile submarines (SSBNs). The aim is to 'exercise their own type of sea control and hence to provide maritime security for their submarines particularly in those waters considered critical by the Soviet leadership'.	To this end, SSBNs are increasingly deployed in 'bastions' surrounded by layered anti-submarine and anti-ship defenses.

Table 1. The US Navy's understanding of Soviet naval strategy

(continued)

1978 Assessment	1985 Assessment	1991 Assessment
'[T]he Soviets are employing their navy in much the same way as the United States and Great Britain, [and the Navy can now] perform most of the traditional functions of a naval power in waters distant from the Soviet Union.'	SLOC interdiction has long been a mission of the Soviet Navy, but it is only the fourth of the five main Soviet Navy missions.	The priority mission for the Soviet Atlantic and Pacific Fleets is to ensure SSBN survival and keep US carrier battle groups as far as possible from the Soviet homeland.
Interdicting NATO Sea Lines of Communication (SLOCs) is 'one of the most important of the Navy's missions'.		In time of war, much of the Atlantic and Pacific Fleets would be devoted to the protection of SSBN bastions. The main mission of most Soviet Navy forces, therefore, is primarily defensive.
		Interdicting SLOCs is low- priority mission. The only forces that would be available for this in wartime would be those not needed for higher-priority missions such as protecting SSBN 'bastions'.

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- was to advise the CNO on 'issues identified through insights provided by highly sensitive intelligence, future warfighting capabilities available through advanced technology, and innovative strategic thinking'.⁴⁷

Over time, as OP-009J's analysis matured, the ATP shifted focus from evaluating Soviet capabilities in light of the new intelligence to devising approaches for acting on this information.⁴⁸ Given across-theboard access to even the most sensitive new intelligence, the ATP was able to provide an unmatched, *truly* 'all'-source analytical perspective that helped it 'understand Soviet perceptions, expectations and intentions in a possibly unique way'.⁴⁹ Issues related to 'the Soviet defensive employment issue' represented only 'a very small part of the ATP agenda',⁵⁰ but the Panel was nonetheless to play an important role in the process that gave rise to the US Navy's new operational approach in the early 1980s.

Setting a New Course

The fruits of these labors were not fully publicly revealed until January 1986, in CNO Admiral James Watkins' famous article in a Special Supplement to the US Naval Institute's *Proceedings* magazine, which has been called 'the nearest thing to a British "White Paper "...that we are likely to encounter in the American political system'.⁵¹

As Watkins' effort suggests, the public dissemination of the Maritime Strategy was in part the culmination of a broader effort begun in mid-1981 to develop 'an intelligence and persuasive exposition of why we need a Navy... a public relations effort aimed at members of Congress, the media and the American public... [that] could be drawn upon for internal purposes as well'.⁵² This has led some to suggest that the Maritime Strategy itself was no more than a cynical public rationalization for larger navy budgets and Navy Secretary John Lehman's dream of a '600-ship Navy'.⁵³ The Maritime Strategy, however, made its first public appearance only in 1985, when President Ronald Reagan's defense buildup had already passed its peak.⁵⁴ Long before this – when these issues were wrapped in the tightest secrecy within the Navy Department and could therefore have no impact upon public opinion – the US intelligence breakthroughs that began in the 1970s had already left their mark upon US naval doctrine in the development of the 'Maritime Strategy'.

That new intelligence information could be acquired is itself a remarkable tale that owes much to the planning, foresight and willingness to take risks shown by the Navy's senior leadership during the 1960s and early 1970s – without which these vital 'deep penetrations' of the Soviet Union could not have occurred.⁵⁵ That the acquisition of such information could lead to wholesale doctrinal revisions, however, is in some ways an even more remarkable story. The institutional history of this Navy 'sea change' must be told elsewhere, but in some respects the Navy was simply lucky: the service's leaders were fortunate that these intelligence windfalls could be whispered into ears that were willing to listen.⁵⁶

Not everyone was equally willing to listen, of course. Though one might have expected the Navy's submarine community to grasp Soviet pro-SSBN 'nuclear correlation of forces' concepts more quickly than admirals with surface warfare or aviation backgrounds,⁵⁷ Admiral Small remembers that US submariners were 'not in favor of anti-SSBN concepts'.⁵⁸ The submarine community's resistance to new strategic thinking about submarine operations, however, apparently did not long

survive the retirement of Admiral Hyman Rickover, the founding father of the US nuclear navy, in 1982.⁵⁹ According to Small, it was the Navy Secretariat itself that became the locus of much resistance to the Maritime Strategy – allegedly because 'the new view of Soviet operations did not support the 600 ship Navy requirement' as well as Secretary John Lehman would have liked.⁶⁰

The Navy was willing to listen for several reasons. To begin with, navy intelligence professionals were themselves fortunate in that they were able to draw upon a considerable reservoir of operator trust and credibility. This illustrates the continued importance of the operator/ intelligencer relationship: if senior navy leaders had not learned to trust intelligence advice and respect those who offered it, the new insights into Soviet war planning would have been worthless. As one former Director of Naval Intelligence recalled, the Navy's leadership 'at the three- and four-star level are people who grew up side by side with intelligence. They understand its importance. It was operationally relevant to them when they were in operational billets...' As a result, they learned to trust it as a basis for operational planning thereafter.⁶¹ This was a crucial element in convincing operators to accept ONI's 'new thinking' in the late 1970s and early 1980s: 'the key was... the credibility of the ONI leadership that was presenting this case to the unrestricted line Navy'.⁶²

By bringing operators and intelligence professionals together to help assess Maritime Strategy-era 'new thinking', Team Charlie, with its line officer staff conducting assessments of the operational validity of the new intelligence, further improved the already close relationship between the two communities. So successful did this model prove, in fact, that the navy subsequently institutionalized it through the creation of analytic groups that brought together both intelligence professionals *and* operators into analytical groups to analyze an adversary's doctrine and tactics. Team Charlie thus provided the model for present-day ONI organizations such as SWORD (Submarine Warfare Operations Research Division that conducts submarine analysis), SPEAR (Strike Projection Evaluation and Anti-air Research division that assesses air operations) and SABER (Surface Analysis Branch for Evaluation and Reporting that analyzes surface warfare issues).⁶³

Another crucial factor in the acceptance of the new ideas was their validation in practice – or at least 'virtual' practice – through extensive war gaming. These efforts brought operators and intelligence professionals together to test their theories in something approximating 'real life', and proved invaluable in developing ways for the US Navy to *counter* the operational plans that it now understood the Soviets to have. From the beginning, the SSG chose war gaming as 'one of its key analytical tools', and – with the ATP's sponsorship – a series of war

games were conducted from 1982 onwards, supported by 'all-source' intelligence information at the 'codeword' level, to validate key concepts of the navy's new theoretical approach.⁶⁴

Through their seamless integration into navy war gaming, Opintel experts played an important role in testing and validating the new analytical conclusions that underlay the Maritime Strategy. ONI's heavily submarine-focused Opintel cell, the Navy Field Operational Intelligence Office, which by the 1970s was located at both the National Security Agency and Naval Intelligence Command facilities in Suitland, Maryland, established a specialized detachment at the Naval War College (NWC) at Newport, Rhode Island, in August 1977, dedicated specifically to providing Opintel support for war games conducted by the Center for Advanced Research (CAR) there. In its first year, this 'Newport Detachment' participated in nine major war games and several minor games and demonstrations.⁶⁵ This program was updated to the status of a full shore activity in 1979 by the Secretary of the Navy himself, for the purpose of providing 'operational intelligence support on Soviet Naval matters and U.S. Navy Operational Intelligence Systems' to the CAR and the NWC's Center for War Gaming.⁶⁶

Officially organized as NFOIO-05, the Newport Detachment not only provided Opintel support for NWC war games but 'worked closely with the Strategic Studies Group' over the next several years in helping produce and verify the assessments of Soviet strategy and doctrine that underlay the Maritime Strategy.⁶⁷ Taking advantage of their Opintel-derived expertise in seeing the battlespace through Soviet eyes, the detachment formed the nucleus of the 'Red Force' opposition in NWC war games⁶⁸ – thereby also allowing US operational commanders to develop and validate new approaches to gaining advantage over the Soviet fleet. The cadre of Opintel professionals at Newport was thus able to play an important role helping the SSG 'examin[e] the strengths and weaknesses of the Maritime Strategy'.⁶⁹

Though much of this war gaming focused upon submarine – or more specifically, potential *antisubmarine* – campaigns, it also played an important role in developing new approaches to surface operations, especially for aircraft carrier battle groups.⁷⁰ As John Hattendorf has written, ATP-sponsored war gaming validated the use of US carriers as a kind of "tactical nuclear reserve" …a nuclear bargaining chip'. The carriers tied down Soviet air assets in northern areas while remaining just outside their reach 'until that point in a war when it became necessary to negotiate with the Soviet Union whether the war could be terminated or would escalate into a nuclear war'.⁷¹ As one participant recalls, such 'highly classified all-source war games' helped sell surface and air operators on ONI's new ideas, and provided 'probably the largest contribution that ONI made to war fighting since World War Two'.⁷²

The Essence of the Maritime Strategy

Based on intelligence and analysis, the navy was ready to adopt an 'avowedly offensive maritime strategy toward the USSR in the early 1980s, discarding plans for the kind of [SLOC-focused] defensive barrier strategy that had been put forward in the 1960s and 1970s'.⁷³ This new 'doctrinal foundation [for] U.S. naval power' took its cue from the ancient Chinese military theorist Sun Tzu's maxim that 'the highest realization of warfare is to attack the enemy's plans'⁷⁴ and his advice to attack 'what they love first'.⁷⁵ In what has been described as the fourth and final phase of postwar US planning for conflict with the USSR, the period from the late 1970s through most of the 1980s was marked by:

New approaches based on the concept of attacking Soviet military strategies and operational practices, as perceived and understood by military planners in the West, rather than just [attacking] Soviet forces.⁷⁶

To be sure, the Maritime Strategy always remained something of a work in progress, and never acquired a definitive final form. Rather, it developed over time, being periodically modified according to approaches suggested by the fine-tuning of intelligence analyses and extensive war gaming.⁷⁷ Nevertheless, throughout this period, the Maritime Strategy revolved around a basic conceptual core firmly rooted in the 'new thinking' about Soviet war plans that can be traced to CNA's analyses of the late 1960s and the dramatic intelligence insights of the late 1970s.

Soviet naval doctrine stressed the protection of ballistic missile submarines in order to preserve a favorable 'correlation of forces', so the Maritime Strategy sought to hold SSBNs at risk through an aggressive approach to ASW – even beneath the polar ice caps and in Moscow's vital SSBN 'bastions'.⁷⁸ Soviet naval doctrine also stressed keeping US carrier battle groups well beyond the launch points from which carrier-based aircraft could launch nuclear strikes against the Soviet homeland. US commanders therefore staged aggressive exercises in which their carriers surged forward in operations clearly designed to contest the control of the very northern seas they knew Moscow to deem essential to Soviet planning.⁷⁹ US submarine force commanders even sent wellpublicized surges of attack submarines toward Soviet waters and reportedly staged practice 'sinkings' of Soviet SSBNs beneath the polar ice caps in order to demonstrate an ability to threaten these prized assets at will.⁸⁰ By such means, the Maritime Strategy sought to 'attack the preferred strategy of the Soviet Navy for a general war at sea'. $^{\rm 81}$

A vital part of the new understanding of Soviet doctrine by US intelligence analysts was the assessment – as embodied in the 1982 NIE – that the Soviet Navy's territorially-focused *defensive* operational concept would almost wholly preoccupy it in event of war. Protection of vital northern waters, it was believed, would occupy 'virtually all' of the Soviet Navy's two most powerful operational flotillas, the Northern Fleet and the Pacific Fleet – as well as perhaps two-thirds of the attack submarines so feared by Western admirals.⁸² In short, 'the Russians would assign their most capable air, surface, and subsurface forces to this mission'.⁸³

The Maritime Strategy thus sought to help make *victory* possible in a war against the USSR in three principal ways. First, through destroying as many Soviet SSBNs as possible, thus reducing the strategic nuclear threat to the US. Second, by launching strikes upon Soviet targets from US carriers, and third, by tying down the Soviet fleet in static, defensive operations in the far north and thereby preventing it from causing mischief elsewhere. As President Ronald Reagan himself put it in a January 1987 strategy document, the Maritime Strategy 'permits the United States to tie down Soviet naval forces in a defensive posture protecting Soviet ballistic missile submarines and the seaward approaches to the Soviet homeland, and thereby to minimize the wartime threat to the reinforcement and resupply of Europe by sea'.⁸⁴ An aggressive forward-focused naval strategy, it was hoped, would also 'divert Soviet forces ...[from] using [naval aviation] air power directly on the "Central Front" in Europe'.⁸⁵ In this fashion, American admirals hoped to help seize the initiative in any general war, allowing NATO to fight and win the kind of war *it wanted* in Europe.

Conversely, if Western forces in wartime did *not* move north to threaten Soviet submarine bastions and the USSR itself, more Soviet Naval Aviation assets would be free to join the battle in Europe and more Soviet attack submarines would be free to move against the vital NATO SLOCs. The Maritime Strategy must therefore also be viewed in context with its alternative – the traditional Cold War 'defensive barrier' approach to protecting the NATO sea lanes. Ironically, if indeed ONI now correctly understood Soviet naval doctrine, threats to the transatlantic SLOCs would increase the more NATO focused upon trying to protect them.

This new US naval doctrine was designed to win a war against the Soviets if need be, but its conceptual touchstone was deterrence⁸⁶ – that is, trying to prevent World War III by demonstrating to Soviet naval commanders that their strategy in such a conflict would be a resounding failure. By 'denying the Soviets their kind of war' and holding their

most cherished assets at risk,⁸⁷ US naval strategists hoped to move beyond mirror-imaging and direct their deterrent strategy:

Not [at] a collection of American theoreticians and scholars, but a Soviet naval leadership that constantly calculates the nuclear correlation of forces and uses those calculations in the decisionmaking process. By making it clear at the outset that Soviet SSBNs will be at risk in a conventional war, the strategy alters Soviet correlation of forces calculations and thus enhances deterrence.⁸⁸

Some observers criticized the new strategy as being dangerously prone to escalation in crisis, fearing that it might tempt Soviet leaders to use their submarine-based missiles earlier in a crisis than they might otherwise contemplated, lest by waiting they lose them to US hunter-killer submarines.⁸⁹ Nevertheless, US naval leaders embraced it as the best way for NATO to persuade Moscow – whether or not this was, in fact, the case – that a naval war could only be a net loss to the USSR.

The importance of such deterrent dynamics may suggest why the ATP's initial Soviet strategy study group in 1982, and the subsequent larger working group of junior admirals and senior captains formed in 1984 to support the ATP in deterring Soviet strategic options for war, focused so much of their attention upon 'perception management'. This included likely Soviet reactions to American anti-SSBN operations and the effects of command, control and communications countermeasures $(C^{3}CM)$ – that is, the disruption of Soviet battle-management capabilities.⁹⁰ The aim of much of the Maritime Strategy, as one ATP Soviet strategy working group member put it, was to:

Continuously reinforce in the Soviet mind the perception that it could not win a war with the United States, both *before* a war, to enhance deterrence, and at all phases of the war should it occur ... The key point is that the desired prospect must be *as perceived* and measured in Soviet terms.⁹¹

The ATP hoped that if faced with aggressive moves that threatened their control of the Norwegian Sea and other northern areas 'the Soviets would seek war termination prior to increasingly intensive assaults by Marines and CVBGs [carrier battle groups] on the Soviet flanks and without risking nuclear war'.⁹²

Some commentators have suggested that during a real international crisis with the USSR, the US civilian leadership would not actually *permit* the navy to embark upon the contemplated initial moves of the Maritime Strategy for fear of provoking unwanted escalation.⁹³ Nevertheless, even if they were at root no more than an extraordinary

strategic bluff – perhaps not unrelated to contemporaneous efforts to create the appearance of dramatic progress toward the Strategic Defense Initiative's avowed aim of constructing a workable defense against Soviet ballistic missiles⁹⁴ – the aggressive US naval exercises and publicly-announced forward-focused war planning of the Maritime Strategy era might still hope to do much good by 'proving' what Soviet admirals' own doctrinal presuppositions about the correlation of forces already led them to dread. If the 'overriding purpose' of the Maritime Strategy was to 'influence the Soviet strategic mindset' during peace-time,⁹⁵ there was reason for US admirals to encourage the diversion of resources to the far north by playing upon Soviet fears even if US commanders never expected actually to *execute* their plans.

In any event, Admiral Small recalls that 'the uniformed Navy never really took a position' with regard to precisely where the line lay between aggressive Maritime Strategy deterrent actions and destabilizing provocation. 'No one knew or should have tried to really know, whether such a strategy would be destabilizing or a good/bad idea. It was simply an option that needed to be considered at an appropriate time.'⁹⁶ (Small also cautions that most of 'the ATP perception management effort' had 'nothing to do with SSBN[s] of either side' – but that it is not possible to elaborate further in an unclassified setting.)⁹⁷

Operational Intelligence Support for the Maritime Strategy

From the early 1970s through the late 1980s, the most important mission of navy Opintel was tracking the Soviet Navy itself. Potential Soviet naval activity remained an important target in a regional context. During the tense period surrounding the declaration of martial law in Poland in a crackdown on the trade union Solidarity in 1980–81, for example, the Navy Ocean Surveillance Information Center began delivering a daily situation report on the USSR's Baltic Fleet – the naval force that might be called upon to support a Soviet invasion should the Polish Communist Party prove unable to crush the popular movement on its own.⁹⁸ With the development of the Maritime Strategy, however, Opintel's mission became more crucial than ever in a strategic context.

Within this context there was no higher priority during the 1980s than the tracking of Soviet ballistic missile submarines – targets that the Maritime Strategy sought to threaten even in their well-defended 'bastions' in Soviet home waters. As one intelligence veteran has noted, detecting a submarine at sea is difficult, and holding it at risk for long periods of time without making it aware of such a threat is *very* difficult indeed.⁹⁹ Yet this was precisely what the Maritime Strategy demanded of US Navy Opintel. This focus upon continuous real-time monitoring

of Soviet submarine forces required a huge investment in and emphasis upon Opintel of the most challenging sort. As Vice Admiral Mike McConnell has recounted, the navy responded well to these challenges, ultimately succeeding consistently even against targets as uncooperative as Soviet nuclear-powered submarines.¹⁰⁰

Because operations to hold Soviet SSBNs at risk pursuant to the Maritime Strategy would require going after them in their defended 'bastions', the depths of Moscow's home waters became a major focus of Opintel attention. From 1976, as an adjunct to its operational intelligence activities, therefore, NFOIO's 'Special Projects' Detachment (NFOIO-06) had been providing 'unique support' through indepth analysis of:

various topics relating to U.S. security, Soviet ASW technology and Soviet underwater reconnaissance programs, as well as threat assessments in support of sensitive National intelligence collection programs.¹⁰¹

Also in keeping with the Maritime Strategy's emphasis upon the threat posed by Soviet Naval Aviation, NFOIO established a 24-hour Soviet air watch and increased its emphasis upon the Soviet Naval Aviation Readiness Evaluation [SNARE] program.¹⁰²

By July 1980, NFOIO replaced its prior daily reports on submarine activity by geographic area with a more focused daily message on Soviet 'in-area/local area submarine operations and ...Soviet submarine readiness'.¹⁰³ Whereas previous Submarine Activity Report (SAR) messages had emphasized Soviet out-of-area submarine deployments, this new 'Summary Evaluation of Nuclear Submarine Operational Readiness' (SENSOR) report was designed to exploit 'improvement[s] in both the quality and quantity of incoming data' in order 'more fully [to] address the status of the Soviet SSBN force' in its local home-water operational areas.¹⁰⁴ This was anti-SSBN Maritime Strategy Opintel at its most focused.

The information demands of Maritime Strategy-era Opintel placed enormous burdens even upon the rapidly developing information technologies of the 1980s. Sophisticated analytical work being done by the Submarine Analysis Group (SAG) and the Soviet Combatant Readiness Evaluation (SCORE) programs at NOSIC, for example, required massive computerized databases of past Soviet activities against which to compare current operations. As the navy moved into the 1980s, however, such data storage and manipulation technologies were still comparatively primitive. Command histories from the period warned that '[t]he volume and complexity of information is growing and automation supporting the analytical process is urgently needed',¹⁰⁵ and that the Naval Intelligence Command (NAVINTCOM) had experienced 'increasing demands for more sophisticated tools to process data from currently existing sensors as well as an increasing volume of data from new sensor systems'.¹⁰⁶ Naval Intelligence programmers and systems engineers struggled to meet the challenge.

The high-level Opintel fusion that allowed the Maritime Strategy's aggressive focus upon ASW in Soviet home waters was thus made possible in part by the US Navy's high-technology integration of command, control, computers and intelligence $(C^{3}I)$ systems to create a satellite-linked, highly-informed hunter-killer network.¹⁰⁷ Also important, however, was the continuing development of additional intelligence sources and their integration into this interconnected scheme. Inputs of acoustic intelligence (Acint) locator and hull identification data from seabed hydrophone arrays (the Sound Surveillance (SOSUS) system),¹⁰⁸ for example, were supplemented during the 1980s by information from Surveillance Towed Array Sensor System (SURTASS) ships – vessels trailing long hydrophone sets through northern waters, and which uplinked semi-processed Acint to Ocean Surveillance Information System (OSIS) nodes via satellite link.¹⁰⁹ In addition, information came from Rapidly Deployable Surveillance System (RDSS) units that could be dropped to the ocean floor on very short notice to produce semi-permanent mini-SOSUS beds.¹¹⁰ Such multiple-source Acint, in fact, provided:

...the vast majority of information on [submarine] units in deployed status, filling the space between the bookends of national sensors [e.g., satellites] which could accurately report the departure and return of the Soviet SSBNs from their home-ports.¹¹¹

Improvements in the analysis of oceanographic phenomena also helped Acint analysts improve their techniques for finding Soviet submarines attempting to hide in the ocean depths.¹¹²

A Decisive Advantage

By the mid-1980s, at which point the Maritime Strategy was firmly ensconced as US naval doctrine, Opintel had emerged as a tool of extraordinary effectiveness at the *strategic* level of US-Soviet competition. The methodology of all-source fusion – first adopted by the navy during World War II and now updated and developed into the age of computers and satellites – allowed Opintel analysts to wield a variety of collection systems almost as one. Grist for OSIS' fusion mill came from dozens of underwater listening arrays around the world, an extensive network of ocean-surveillance Sigint stations and a system of oceanwide Elint collection. Other radar detection, merchant ship locator data, visual reports and electronic collection from platforms at sea provided a vast number of inputs. Combined with a variety of inputs and analytical support from other parts of the sprawling, multibilliondollar US intelligence community, these torrents of information were knit together via a number of data processing facilities and intelligence analysis centers connected by satellite communications links. All together, this information provided a coherent, real-time operational picture for US naval commanders.¹¹³

The Maritime Strategy was made possible because this vast and sophisticated Opintel system gave US naval commanders an unprecedented picture of their adversary:

For the first time, navy planners and commanders could follow the movements of an enemy navy both theater-wide and globally on a day- to- day basis, providing a great sense of confidence in analyzing Soviet naval operations.¹¹⁴

This was particularly true with regard to antisubmarine warfare. One cannot strike a target one cannot see, and during this period submarines at sea were effectively invisible *unless* one possessed the ability to cross-correlate such far-reaching and diverse information sources with 'near-real-time' rapidity. As former Commander of the Pacific Fleet (CINCPACFLT) Admiral David Jeremiah later recalled, antisubmarine Opintel became extremely effective:

[W]hen Mike McConnell was my N-2 [senior intelligence officer] at CINCPACFLT... [h]e had unique stuff that he could use to identify by hull number the identity of Soviet subs, and therefore we could do a body count and know exactly where they were. In port or at sea. If they were at sea, N3 [the fleet's operations staff] had an SSN [nuclear-powered attack submarine] through SUB-PAC [the Pacific Fleet's submarine command] [on them], so I felt very comfortable that we had the ability to do something quite serious to the Soviet SSBN force on very short notice in almost any set of circumstances.¹¹⁵

With the Opintel concept having been brought to technological maturity, American antisubmarine warfare could pose a very real threat to the naval assets most prized by Soviet strategists, ballistic missile submarines, thus making intelligence-driven ASW a *strategic* military asset.¹¹⁶

Because the Soviets lacked an equivalent Opintel capability, however, their ASW could present NATO with no countervailing threat. As suggested by Moscow's view of ultimate outcomes hinging upon the strategic nuclear 'correlation of forces', the Soviet Navy's 'most critical defensive task' was the destruction of enemy SSBNs before they could launch their missiles at the Soviet homeland.¹¹⁷ The Soviets certainly tried to emulate US Opintel capabilities in some respects, deploying limited ocean surveillance hydrophone arrays, landbased Sigint stations, satellite-based Elint and radar satellites, and ocean-going intelligence-gathering ships (AGIs) and reconnaissance aircraft.¹¹⁸

To maintain this comparative advantage in Opintel capabilities, US intelligence analysts spent much time and effort assessing and monitoring the 'at-sea ASW threat' posed by Soviet naval forces and by Soviet research and development efforts in both acoustic and nonacoustic detection systems.¹¹⁹¹US Navy Opintel professionals engaged in a continual operational duel of wits with Soviet naval commanders, who during the early 1980s continually probed and tested the limits of US battlespace awareness and operational responsiveness. The early 1980s were thus heady days for Opintel. As Captain J.R. Reddig remembered, for example, the summer of 1983 was in some ways the 'ultimate experience' for OSIS professionals.¹²⁰ At that time, in an effort to threaten the US mainland in 'analogous response' to NATO's deployment of ground-launched cruise missiles (GLCMs) and Pershing II intermediate-range ballistic missiles (IRBMs) in Europe, Soviet SSBNs lurked in unprecedented numbers off each American coast. At the same time, Soviet nuclear-powered attack submarines conducted operations near the US SSBN bases at Kings Bay, Georgia, and Puget Sound, Washington. It was an enormous challenge for OSIS to monitor these deployments and provide useful Opintel to US ASW commanders.

Thanks to the efforts of the OSIS watchfloors, it was clear to the American authors of the 1982 National Intelligence Estimate on the Soviet Navy that while US Opintel provided *NATO navies* some chance to conduct effective ASW work, the Soviets:

Probably recognize ...that there is a wide gap between the importance of this task and the capability of their current forces to carry it out ... They probably also recognize ...that they do not now have the capability to detect U.S. SSBNs operating in open ocean areas or to maintain contact or trail if a chance detection occurs.¹²¹

The advent of longer-range US Trident submarine-launched ballistic missiles (SLBMs) carried aboard Obio-class SSBNs in the 1980s made

the Soviets' ASW task even more difficult by greatly expanding the area of ocean in which US submarines could operate while still holding Soviet land targets at risk.¹²² All in all, Moscow's attempt at real-time, all-source intelligence fusion lagged far behind US Navy Opintel and lacked 'any significant capability to detect deployed submarines, especially in open-ocean areas such as the central Atlantic or Pacific'.¹²³ Any strategic naval war between East and West – it was therefore hoped – could have only one outcome.

Opintel and the Maritime Strategy

It would be difficult to overstate the importance of Opintel in both the creation of the Maritime Strategy and its implementation. The intelligence analysis that produced the Maritime Strategy was not *itself* Opintel analysis, but the navy's Opintel legacy was vital to the analytical understanding of the Soviet Navy upon which the Strategy was based. The deep strategy-and-doctrine insights into Soviet naval operations of the late 1970s and early 1980s that gave rise to the Maritime Strategy were possible in large part only because so many of the experts who reached such new conclusions were products of the navy Opintel system.

The 'OSIS culture' that had begun to develop in the mid-1960s, and which had come to full fruition by the mid-1970s, produced a generation of Naval Intelligence professionals possessing an unprecedented wealth of personal and institutional experience of watching the Soviet Navy from close range. They also possessed an enormously close and productive relationship of mutual trust and understanding with US operating commanders whose vessels (and fates) they had shared when maneuvering on a daily basis against the Soviet Fleet. By the time the new 'deep penetration' sources of the late 1970s began to produce information about the Soviets, this generation of intelligence professionals had already acquired an unequaled peacetime education in Soviet operations.

The new analytical insights that produced the Maritime Strategy were, in effect, a triumph of learning to 'get outside's [one's] own preconceptions, in short as well as long-term analysis', and see the world 'through the target's viewpoint'.¹²⁴ The Opintel-trained professionals tasked with analyzing the new information that became available in the late 1970s and early 1980s *already* understood their enemy quite well – thanks to a highly empirical education on the high seas. They thus needed far less of a 'push' from the new sources than other analysts might have required in order to solve the final riddles of Soviet operational behavior.

Once the Maritime Strategy was in place, Opintel became more central than ever. It provided the informational predicate for the Maritime Strategy – the real-time battlespace awareness that was necessary for US carrier and submarine admirals to 'take the fight to the enemy'.

Opintel during the era of the Maritime Strategy, therefore, demonstrated how good intelligence can be used, in effect, as a weapon of war – one that helped the US Navy develop the capability to 'bring the Soviet Navy to their knees'.¹²⁵ The imbalance of Opintel capabilities between the US and the USSR provided NATO with a potentially *decisive* advantage over the Warsaw Pact in the event of war. It allowed the US Navy to threaten the only strategic nuclear assets Moscow might expect to survive attacks upon land-based strategic systems (missile silos and bomber bases) while US SSBNs remained essentially invulnerable. As Vice Admiral Thomas Wilson recalls:

The knowledge that the Soviets had [was] that we were very good at our OPINTEL mission and therefore good at our operational mission of war at sea – ASW, protecting our carriers, projecting power ...[Eventually,] they realized we were good at finding them, [and] attack[ing] them if necessary. You saw OPINTEL and operational ability contributing to the strategic environment that was developed.¹²⁶

If indeed it was '[t]he main objective of the [Maritime] [S]trategy ...to enhance deterrence by attacking the Soviet strategic mindset before war began',¹²⁷ navy Opintel was perhaps one of the West's most powerful weapons, and may have contributed in important ways to NATO's victory in the Cold War.¹²⁸

Disclaimer

The views expressed here are the author's personal opinions, and should not be taken to reflect the official position of the Department of Defense or any U.S. government agency.

Notes

1 This article is an abridged version of Chapter 5 of the book *The Admiral's Advantage: U.S. Navy Operational Intelligence in World War II and the Cold War*, scheduled to be published in March 2005 by the Naval Institute Press. It is the result of an official study of Cold War US Navy Operational Intelligence conducted by Naval Reserve Intelligence Command analysts under the authorization and direction of the successive Directors of Naval Intelligence from 1994–2004. Lieut. Cdr. Christopher A. Ford was the principal author and Capt. David A. Rosenberg was the project director and overall editor. Rosenberg presented the paper at the Naval War College 'Cold War at Sea' Conference in May 2004. The endnotes in this work document fully the sources used, and while most of the videotapes and interview records remain only in official, classified hands, that material is being preserved in the hope of its eventual declassification for research.

- 2 Cdr. J.R. Reddig, 'The OSIS Culture: Intelligence Support to Naval Operations from Cold War to New World Order', unpublished monograph based on National War College Maritime Strategy Elective seminar paper, 2 Feb. 1998, p.1
- 3 See Ford and Rosenberg, *Operational Intelligence in the Age of Global Conflict* (note 1) Chap. 4.
- 4 Bruce Watson, Susan Watson and Gerald Hopple (eds), *United States Intelligence: An Encyclopedia* (New York: Garland Press 1990) p.411. See also Rear Adm. Edward D. Sheafer, Director of Naval Intelligence Posture Statement, 3 May 1993, Office of Naval Intelligence (ONI) Historians Files, 4, describing OSIS as a crucial ONI contribution '[I]n modern times' to the US Navy.
- 5 David A. Rosenberg, 'American Naval Strategy in the Era of the Third World War: An Inquiry into the Structure and Process of General War at Sea, 1945–90', *in Naval Power in the Twentieth Century* (Annapolis, MD: US Naval Institute Press 1996) p.249.
- 6 Loch Johnson, *Secret Agencies: US Intelligence in a Hostile World* (New Haven, CT: Yale University Press 1996) p.178.
- 7 John B. Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986 (Newport, RI: Center for Naval Warfare Studies, Naval War College 1989) declassified text, p.45. This and the following notes are to the 1989 document, now published as John B. Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986, Newport Paper No. 19 (Newport, RI: Naval War College Press 2004).
- 8 Rear Adm. Thomas A. Brooks, USN (retd.), videotape interview by Cdr. Steve W. Scalenghe, Suitland, MD, 8 Jan. 2000.
- 9 See Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) pp.44, 50 and 56–7.
- 10 Ibid.
- 11 Ibid.
- 12 Rear Adm. Tom Brooks, USN (retd.) and Capt. Bill Manthorpe, USN (retd.), 'Setting the Record Straight', *Naval Intelligence Professional Quarterly* XII/ 2 (April 1996) p.1. Perception management, in this context, relates to the importance to strategic planning of incorporating anticipated enemy reactions and assumptions into one's own planning. If the adversary, for example, *believes* that one will take certain actions and that these actions will have a certain effect, actual or apparent *preparations* for these actions can themselves powerfully affect enemy planning and behavior long before the initiation of actual combat operations. Such approaches can have dramatic effects in controlling or shaping the outcome of crisis situations well short of actual warfare.
- 13 Adm. William Small, USN (retd.), 'Some Thoughts on OPINTEL', unpublished paper, 9 Sept. 1998, p.2. Accessed in 'ONI Historian's Files'.
- 14 Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy (note 7) p.36.
- 15 Adm. David Jeremiah, USN (retd.), videotape interview by Cdr. Steve W. Scalenghe, Suitland MD, 4 Feb. 2000.
- 16 Michael Herman, Intelligence Power in Peace and War (Cambridge: Cambridge University Press 1996) p.85.

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- 17 Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) p.35; see also Rear Adm. Brooks, videotape interview (note 8) describing US views of Soviet strategy prior to the Maritime Strategy period as being 'a lot of mirror-imaging, a lot of reliving the last war'.
- 18 See Hattendorf, (note 7).
- 19 Director of Central Intelligence, Soviet Naval Strategy and Programs Through the 1990s, NIE 11-15-82/D (March 1983) (declassified version) [hereinafter NIE 11-15-82D], p.14. The unclassified version of the 1982 NIE has now been published as Appendix I to Hattendorf, *The Evolution of the US Navy's Maritime Strategy*, 1977–1986 (note 7) pp.101–83.
- 20 Hattendorf, (note 7), p. 36; see also Rosenberg, 'American Naval Strategy in the Era of the Third World War' (note 5) pp.242, 250.
- 21 Robert W. Herrick, Soviet Naval Strategy: Fifty Years of Theory and Practice (Annapolis, MD: US Naval Institute 1968).
- 22 Adm. William Small, USN (retd.), letter to Lieutenant Christopher Ford, USNR, 7 March 2000, p.1 accessed through 'ONI Historian's Files' (note 7); Hattendorf, *The Evolution of the* U.S. Navy's Maritime Strategy (note 7) p.37.
- 23 Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy (note 7) pp.41-3.
- 24 See Hattendorf, (note 7), pp. 36–49. Two other major works on the defensive focus of the Soviet Navy suggested Moscow's naval power might be devoted to the establishment and protection of ballistic-missile submarine 'bastions'. See James L. George (ed.), Problems of Sea Power as We Approach the Twenty-First Century (Washington, DC: American Enterprise Institute for Public Policy Research 1977), especially James L. George's introduction, pp.1–9, and the chapter by James M. McConnell, 'Strategy and Missions of the Soviet Navy in the Year 2000', pp.39–67; James M. McConnell, 'Military-Political Tasks of the Soviet Navy in Peace and War', in US Congress, House of Representatives, Soviet Oceans Development, Prepared for the Use of the Committee on Commerce and National Ocean Policy (Washington, DC: Government Printing Office 1976) pp.183–209; and Bradford Dismukes and James M. McConnell (eds), Soviet Naval Diplomacy (New York: Pergamon Press in cooperation with the Center for Naval Analyses 1977) pp.1–36.
- 25 See, e.g., Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) p.36, 'It took a rather long time for a different attitude and interpretation to prevail within the U.S. Navy' and p.37, 'This conclusion was a controversial one which has not always sat easily with the Intelligence Community...'.
- 26 See Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) pp.47–9, describing debates over CNA's analyses of Soviet strategy, which were resolved to ONI's satisfaction only in early 1981.
- 27 Brooks and Manthorpe, 'Setting the Record Straight' (note 12) p.1.
- 28 Johnson, Secret Agencies (note 6) p.178.
- 29 Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy (note 7) p.53. The unclassified version of the 1982 has now been published as Appendix I to Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy, 1977–1986 (note 7) pp.101–183.
- 30 David A. Rosenberg, 'Process: The Realities of Formulating Modern Naval Strategy' in James Goldrick and John Hattendorf (eds), *Mahan is Not Enough* (Newport, RI: Naval War College Press 1993) pp.141, 158; see also David A. Rosenberg, 'The History of World War III, 1945–1990: A Conceptual Framework' in Robert David Johnson (ed.), *On Cultural Ground: Essays in International History* (Chicago, IL: Imprint 1994) p.213.
- 31 See Brooks and Manthorpe, 'Setting the Record Straight' (note 12) p.2.

- 32 Rosenberg, 'The History of World War III' (note 30) p.216 (quoting Capt. Linton Brooks, USN (retd.).
- 33 Rear Adm. Brooks videotape interview (note 8).
- 34 Ibid.
- 35 One Soviet author saw this approach as having clear historical roots in 'Lenin's thesis of reliable defense of the socialist homeland' itself. See Capt. 2nd Rank V. Dotsenko, 'Soviet Art of Naval Warfare in the Postwar Period', *Morskoy Sbornik* 7 (1989) pp. 22–30.
- 36 Adm. James D. Watkins, USN, 'The Maritime Strategy', U.S. Naval Institute Proceedings, Special Supplement (Jan. 1986) pp.4, 7.
- 37 NIE 11-15-82D (note 19) p.22.
- 38 Ibid. p.15.
- 39 See Watkins, 'The Maritime Strategy' (note 36) p.7, arguing that the Soviet Navy's role in a conflict would be to protect the Soviet homeland and Soviet SSBNs, 'which provide the Soviets with their ultimate strategic reserve' while '[o]ther roles, such as interdicting sea lines of communication or supporting the Soviet Army, while important, will probably be secondary'.
- 40 NIE 11-15-82D (note 19) p.14; see also ibid. p.5.
- 41 Watkins, 'The Maritime Strategy' (note 36) p.7: 'The Soviets would particularly like to be able to destroy our ballistic missile submarines, but lack the antisubmarine warfare capability to implement such a mission'.
- 42 Ibid. p.5; see also ibid. p.20, discussing importance of defense against US aircraft carriers as 'a critical element of several important naval tasks'.
- 43 Brooks and Manthorpe, 'Setting the Record Straight' (note 12) p.2.
- 44 Hattendorf, (note 7) pp. 7, 16, 73–8; see also Small, 'Some Thoughts on OPINTEL' (note 13) p.3; Rosenberg, 'Process' (note 30) p.161.
- 45 Rosenberg, 'Process' (note 30) p.160; see also Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) *supra*, pp.71–2, describing OP-603 and its role in preparing the briefing for the Directorate of Naval Warfare [OP-095] that 'later became known as the Maritime Strategy'.
- 46 Ibid. The ATP was originally a special panel of the CNO's Executive Board, but it later became a separate component; the ATP's OPNAV sponsor was the Vice Chief of Naval Operations. See Cdr. J.C. Williams, 'OPNAV Decision Process Review', memorandum of 27 May 1987 accessed through 'ONI Historian's Files'. David A. Rosenberg, lecture slides from Naval War College presentation (undated). Support for the ATP came from the ATP Working Group run by Rear Admirals Bill Studeman and Roger Bacon. Brooks and Manthorpe, 'Setting the Record Straight' (note 12) p.2 accessed through 'ONI Historian's Files'.
- 47 OPNAV Instruction 5420.2M, 7 May 1983, unclassified copy provided to David A. Rosenberg by former ATP staff members.
- 48 Rosenberg, 'Process' (note 30).
- 49 Small, 'Some Thoughts on OPINTEL' (note 13) pp.1–2. Such a perspective was invaluable, for until the 'deep penetrations' of the 1970s, US military intelligence relied principally upon technical means (e.g., Sigint and satellite imagery) for its understanding of the Soviet Union. Such methods were 'relatively unilluminating about underlying Soviet motivations. These needed regular access to higher-level message-like sources and a sustained effort to interpret them'. Herman, *Intelligence Power* (note 16) p.85.
- 50 Small, letter to Lieut. Christopher Ford, 7 March 2000 (note 22) p.1.

- 51 Linton F. Brooks, 'Naval Power and National Security', *International Security* 11/2 (Fall 1986) pp.16, 17 (quoting James A. Barber, Jr., 'From the Executive Director', *Proceedings* (Jan. 1986) p.1).
- 52 Small, 'Some Thoughts on OPINTEL' (note 13) p.2.
- 53 See, e.g., John Mearsheimer, 'A Strategic Misstep', *International Security* 11/2 (Fall 1986) p.47.
- 54 See Rosenberg, 'Process' (note 30) p.162.
- 55 See Richard Haver, presentation at Office of Naval Intelligence Symposium, 'U.S. Navy OPINTEL: Lessons Learned from the Cold War', Navy and Marine Corps Intelligence Training Center, Dam Neck, VA, 13 Sept. 1998.
- 56 For a general discussion of the organizational, professional and personal factors that helped make the navy more receptive to the 'new thinking' behind the Maritime Strategy, see Rosenberg, 'Process' (note 30) pp.150–67.
- 57 Ibid. pp.150-51.
- 58 Small, letter to Lieut. Christopher Ford, 7 March 2000 (note 22) p.1.
- 59 See Rosenberg, 'Process' (note 30) p.168, suggesting that Rickover's retirement helped 'release the brakes' upon strategic thinking; c.f. Watkins, 'The Maritime Strategy' (note 36) p.15, noting in 1986 that '[t]he most striking and far-reaching trend within the naval profession in recent years has been [its] emphasis on strategy as the focus of naval thought, planning, resource allocation, and operational employment'.
- 60 Small, letter to Lieut. Christopher Ford, 7 March 2000 (note 22) p.1.
- 61 Rear Adm. Lowell E. Jacoby, USN, videotape interview by Cdr. Steve W. Scalenghe, Suitland, MD, 5 Feb. 2000.
- 62 Brooks videotape interview (note 8).
- 63 Ibid.
- 64 Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy (note 7) pp.54-5 and 83.
- 65 Navy Field Operational Intelligence Office (NFOIO), *History*, 1977 (1 March 1978), ONI Historian's Files, 9. See also Lieut David A. Rosenberg, USNR, 'Being "Red": The Challenge of Taking the Soviet Side at War Games at the Naval War College', *Naval War College Review* XLI (Winter 1988) pp.81–93.
- 66 NAVINTCOM Notice 5450 (June 11, 1979), ONI Historian's Files, 1.
- 67 Commanding Officer, NFOIO, Memorandum to Director of Naval History (OP-09BH), 'Command History for CY 1981 (OPNAV Report 5750-1)' (15 April 1982), ONI Historian's Files, 13. In 1982, in fact, SSG support was apparently the Detachment's *principal* mission. See NFOIO, *Command History 1982* (undated), ONI Historian's Files, 8, listing SSG support first under description of Detachment mission, and introducing war gaming role with phrase 'in addition'.
- 68 See NFOIO, Command History 1982 (undated), 8; NAVOPINTCEN, Command History 1984 (28 Feb. 1985), 20; NAVOPINTCEN, Command History 1985 (13 March 1986), 19; NAVOPINTCEN, Command History 1987 (20 May 1987); NAVOPINTCEN, Command History 1986 (16 March 1987) 21–2, all in ONI Historian's Files.
- 69 NAVOPINTCEN, Command History 1986 (16 March 1987), ONI Historian's Files, 21. Not surprisingly, however – given the remarkable changes then underway in the Soviet Union during Mikhail Gorbachev's years of perestroika and glasnost' – the Detachment's focus upon Maritime Strategy-related support waned in the late 1980s. By 1989, for example, Newport Detachment mission statements focused upon war gaming and no longer emphasized support for cutting-edge Soviet naval analysis. See NAVOPINTCEN, Command History 1989 (26 June 1990), ONI Historian's Files, 2.

- 70 Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy (note 7) p.55.
- 71 Ibid.
- 72 Brooks videotape interview (note 8).
- 73 Rosenberg, 'Process' (note 30) pp.150, 159.
- 74 Sun Tzu, 'Art of War', in Ralph D. Sawyer (ed.), *The Seven Military Classics of Ancient China* (Boulder, CO: Westview Press 1993) p.157.
- 75 Ibid. p.183.
- 76 Rosenberg, 'American Naval Strategy in the Era of the Third World War' (note 5) p.243.
- 77 See, e.g., Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) *supra*, 145–8, describing some changes in emphasis under follow-on convocations of the Strategic Studies Group.
- 78 See Vice Adm. John M. McConnell, USN (retd.), interview by Lieut. Cdr M.D. Mizrahi, USNR, 13 Aug. 1996; Linton F. Brooks, 'Naval Power and National Security' (note 51) p.23.
- 79 See Rosenberg, 'Process' (note 30) pp.161–2; see also Linton F. Brooks, 'Naval Power and National Security' (note 51) p.23; Gregory L. Vistica, *Fall From Glory* (New York: Touchstone 1997) pp.214 and 217–18.
- 80 Vistica, Fall From Glory (note 79) p.214.
- 81 Rosenberg, 'The History of World War III' (note 30) p.213.
- 82 NIE 11-15-82D (note 19) pp.5, 15–16; see also Linton F. Brooks, 'Naval Power and National Security' (note 51) p.21, 'To implement this strategy, the bulk of the Soviet navy must be used to protect defensive bastions near the Soviet Union, with only limited forces deployed into the broad ocean areas'; Watkins, 'The Maritime Strategy' (note 36) p.7.
- 83 Joel S. Wit, 'Advances in Antisubmarine Warfare', *Scientific American* 244/2 (Feb. 1981) pp.31, 40.
- 84 Ronald Wilson Reagan, National Security Strategy of the United States (Jan. 1987) pp.29–30 quoted in Hattendorf, The Evolution of the U.S. Navy's Maritime Strategy (note 7) p.25.
- 85 Linton F. Brooks, 'Naval Power and National Security' (note 51) p.26.
- 86 Hattendorf, (note 7), pp. 6-7, 24.
- 87 Linton F. Brooks, 'Naval Power and National Security' (note 51) pp.24 and 28.
- 88 Ibid. pp.28-9.
- 89 See generally, e.g., Desmond Ball, 'Nuclear War at Sea', in Steven Miller and Stephen van Evera (eds), Naval Strategy and National Security (Princeton, NJ: Princeton University Press 1988) pp.323, 328–9; Mearsheimer, 'A Strategic Misstep' (note 53) pp.51, 79–80, 90–92.
- 90 Cf. Rosenberg, lecture slides; Rosenberg, 'Process' (note 30) p.159 accessed through 'ONI Historian's Files'.
- 91 Hattendorf, *The Evolution of the U.S. Navy's Maritime Strategy* (note 7) p.88, quoting Cdr. Kenneth McGruther [emphasis in original].
- 92 Ibid. p.91.
- 93 See Mearsheimer, 'A Strategic Misstep' (note 53) pp.92-8.
- 94 See, e.g., Alvin A. Snyder, Warriors of Disinformation: American Propaganda, Soviet Lies, and the Winning of the Cold War – An Insider's Account (New York: Arcade 1995) pp.120– 25.
- 95 Rosenberg, 'The History of World War III' (note 30) p.214.
- 96 Small, letter to Lieut. Christopher Ford, USNR, 7 March 2000 (note 22) p.2; see also Adm. William Small, USN (retd.), letter to Lieut. Christopher Ford, USNR, 10 March 2000, p.1 accessed through 'ONI Historian's Files'.
- 97 Small, letter to Lieut. Christopher Ford, USNR, 7 March 2000 (note 22), p.2.
- 98 Ibid. p.4.

99 Vice Adm. John M. McConnell, USN (retd.), interview by Lieut. Cdr. M.D. Mizrahi, USNR, 13 Aug. 1996.

- 101 Commanding Officer, NFOIO, memorandum to Director of Naval History (OP-09BH), 'Command History for CY 1981 (OPNAV Report 5750-1)', 15 April 1982, ONI Historian's Files, 13–14; see also Commanding Officer, NFOIO, memorandum to Director of Naval History (OP-09BH), 'Command History for CY 1980', 11 March 1981, ONI Historian's Files, 9.
- 102 Commanding Officer, NFOIO, memorandum to Director of Naval History (OP-09BH), 'Command History for CY 1981 (OPNAV Report 5750-1)', 15 April 1982, 20.
- 103 Commanding Officer, NFOIO, memorandum to Director of Naval History (OP-09BH), 'Command History for CY 1980" (11 March 1981), ONI Historian's Files, 3–4. Later that year, a 24-hour watch was also established specifically to follow 'Soviet operations bearing on readiness estimates'. Ibid.
- 104 Commanding Officer, NFOIO, memorandum to Director of Naval History (OP-09BH), 'Command History for CY 1981 (OPNAV Report 5750-1)', 15 April 1982, ONI Historian's Files, 21.
- 105 Ibid. 19.
- 106 NIPPSA, Calendar Year 1984 History Naval Intelligence Processing System Support Activity (NIPSSA) (undated), ONI Historian's Files, 2.
- 107 Wit, 'Advances in Antisubmarine Warfare' (note 83) p.35.
- 108 Throughout this period, the Undersea Warfare Technology Department at the Naval Intelligence Support Center (NISC) continued to build and analyze databases of Acint information on Soviet submarine radiated noise levels, as well as acoustic signature information on foreign ships and submarines. See Commanding Officer, NISC, memorandum to Director of Naval History (OP-09B9), 'Command History 1980', 18 June 1982, ONI Historian's Files, v–i.
- 109 Karl Lautenschläger, 'Technology and the Evolution of Naval Warfare', *International Security* 8/2 (Fall 1983) pp.173, 217.
- 110 Wit, 'Advances in Antisubmarine Warfare' (note 83) p.32.
- 111 Reddig, 'The OSIS Culture' (note 2) p.4.
- 112 In 1986, for example in response to a surge of Soviet attack submarines into the Atlantic the navy turned to Harvard oceanographer Allan Robinson, for help in analyzing peculiar acoustic 'holes in the sea' in which Soviet submarines had learned to hide. These 'holes' were created by loops of warm water that eddied off of the Gulf Stream into cooler areas of the ocean, thereby creating isolated areas out of which sound propagated less easily. See William J. Cromie, 'Ocean Weather Prediction System Developed', *Harvard College Gazette* (May 2000) p.7.
- 113 See generally Ball, 'Nuclear War at Sea' (note 89) pp.321–2; Rosenberg, 'American Naval Strategy in the Era of the Third World War' (note 5) p.250.
- 114 Rosenberg, 'Process' (note 30) p.158.
- 115 Jeremiah, interview (note 15). One measure of the extent to which the Soviets recognized the apparently ever present danger of attack by US submarines was their effort to develop radical approaches to ASW countermeasures. The *Shkval* rocket-powered underwater weapon, for example, represented one such approach. Essentially an unguided torpedo, this 200-knot weapon was a last-chance weapon that was designed on the assumption that the first warning a Soviet submarine would have of its impending doom at the hands of an attacking NATO submarine would be the sound of a NATO torpedo being fired. The *Shkval* was designed to

¹⁰⁰ Ibid.

be fired immediately back down the bearing of the attacking torpedo's transient noise with the aim of destroying both the attacking submarine and the incoming weapon with a nuclear explosion. See John Downing, 'How Shkval Ensured Soviet SSBN Survivability', *Jane's Intelligence Review* (1 Nov. 1999). In effect, *Shkval* was the physical embodiment of the Soviet high command's realization that US Navy Opintel could place SSNs in position to threaten to sink Soviet ballistic missile submarines at will, even within 'bastions' in the northern Atlantic and Pacific seas.

- 116 See Wit, 'Advances in Antisubmarine Warfare' (note 83) pp.31, 35-6, 39.
- 117 NIE 11-15-82D (note 19) p.16. [check]
- 118 Ibid. p.35.
- 119 See, e.g., Commanding Officer, Naval Intelligence Support Center, Memorandum to Director of Naval History, 'Command History 1982' (4 March 1983), ONI Historian's Files, iv-ii; Commanding Officer, Naval Intelligence Support Center, Memorandum to Director of Naval History (OP-09B9), 'Command History 1980' (18 June 1982), ONI Historian's Files, iv-2.
- 120 See Reddig, 'The OSIS Culture' (note 2) pp.12-13.
- 121 NIE 11-15-82D (note 19) p.16. [check]
- 122 See NIE 11-15-82D (note 19) pp.52-3.
- 123 Ibid. p.35. Because improvements in Soviet ASW during the mid-1980s were expected to be offset by the need to cover the far larger patrol areas anticipated for US Ohio-class submarines carrying longer-range Trident missiles, US planners estimated that Soviet anti-SSBN capabilities would remain 'modest' for some years to come. See ibid. pp.5–6, 53.
- 124 Herman, Intelligence Power (note 16) pp.109, 252.
- 125 Rear Adm. Sumner Shapiro, USN (retd.), videotape interview by Cdr. Steve W. Scalenghe, Suitland. MD, 8 Jan. 2000.
- 126 Vice Adm. Thomas R. Wilson, videotape interview by Cdr. Steve W. Scalenghe, Suitland, MD, 4 Feb. 2000.
- 127 Rosenberg, 'Process' (note 30) p.248.
- 128 See, e.g., Rear Adm. Shapiro videotape interview ('I think that this probably had a lot to do with our winning the Cold War'); and Vice Adm. Wilson videotape interview (note 126) (arguing that the Maritime Strategy 'certainly had a lot to do with helping end the Cold War').

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