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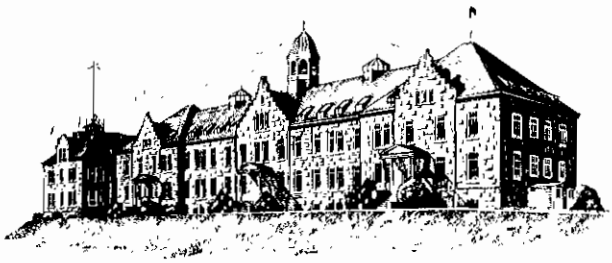

Our cover depicts an imaginary scene involving the U.S.S. *George Washington* converted into an AGSSN (U.S. Naval Institute *Proceedings*, June 1985, p. 103). Her tunnel boom is extended 120 feet to the U.S.S. *Whale* (SSN 638), resupplying *Whale* with weapons such as the Mark 48 torpedo and missiles to refill her empty tubes and racks. This will save *Whale* a trip to the U.S. mainland. The two subs are in a "polynya" in the Arctic ice and fancy themselves alone and safe in the hands of passive detection modes of radar and sonar. Meanwhile, below the surface lies a Russian Alpha submarine, now listening, inert, but capable of 40 knots maximum speed. A new theater? A new scenario? Yes. A new world? Probably.

Soviet Military Objectives in the Arctic Theater

Charles C. Petersen

Several postwar developments have ensured that the Arctic theater will occupy center stage in any future world conflict. The nuclear submarine, for one thing, has eliminated the Arctic ice cap as a barrier to the strategic mobility of the superpower navies, permitting the side that controls the theater to exploit its central position between the North Atlantic and North Pacific Oceans. The intercontinental bomber and intercontinental ballistic missile, for another, have made the Arctic the shortest line of approach from one superpower to the other. Next, the submarine-launched ICBM[1] has enabled the Soviet Union to deploy its strategic submarines close to home where they can be more readily protected. Finally, the general-purpose forces and the infrastructure that support this strategic reserve are also located in the Arctic theater. It should not surprise us, then, that the Soviets speak of the region's "exceptionally important military-strategic position."[2]

From these considerations it is apparent that the Soviet Armed Forces must carry out at least four tasks in the Arctic theater. First, they must seize control of the lines of communication linking the Arctic basin with the North Atlantic on the one hand and the North Pacific on the other. Such control will enable Soviet Northern Fleet and Pacific Fleet nuclear submarines to reinforce each other without interference along interior lines of operation.[3] Second, they must intercept and destroy whatever aerial threats to the homeland appear over the Arctic horizon. In a conventional war, this means primarily air-launched (and perhaps also submarine-launched) cruise missiles; in a nuclear war, it means ballistic missiles as well. Third, they must provide for the security of the sea-based component of their strategic nuclear arsenal, which would remain fair game for enemy antisubmarine forces even in a conventional war (unlike its land-based counterpart which is accessible only

Mr. Petersen did his graduate work in international affairs at George Washington University and is now serving on the professional staff of the Center for Naval Analyses as a specialist in Soviet naval strategy and doctrine. A version of this article was presented at the Conference on Sovereignty, Security and the Arctic at York University, Toronto, Ontario, on 8 May 1986.

to "silo-busting" nuclear missiles). And last, they must ensure the safety of the forces and infrastructure that support this strategic reserve.

As a theoretical foundation for its plans to carry out these missions, the Soviet Navy has revived the concept of command of the sea, which the authoritative *Military Encyclopedic Dictionary* defines as "decisive superiority . . . in a sea or ocean theater of military action (or part thereof) that assures the Navy of favorable conditions for its execution of basic combat tasks."[4] This concept had been one of the casualties of the early nuclear age: according to the General Staff Academy's 1965 *Dictionary of Basic Military Terms*, the term "command of the sea" had passed out of use in the Soviet Armed Forces.[5] Among the arguments used to reject the concept, Admiral Gorshkov tells us, was "the assertion that . . . hostilities had become short and decisive. After all, what should the Soviet Navy be doing in a nuclear war—destroying the enemy, or trying to gain command of the sea and exposing itself to the risk of being destroyed before it can achieve its goals?"[6]

But by the dawn of the 1970s, the Soviets had lost their certainty that a nuclear war would be short and decisive; on the contrary, it might last well beyond the initial nuclear exchange. By the end of the decade, they had begun to prepare for the possibility that escalation to nuclear war might be avoided altogether, even in a conflict directly involving NATO and the Warsaw Pact. Today, most analysts agree, the Soviets hope to fight a war between the coalitions conventionally, from start to finish, neither moving themselves to escalate the conflict, nor giving the other side cause to do likewise.

The remainder of this discussion will lay out a plausible Soviet approach to the problem of securing command of the sea in the Arctic Ocean TVD during a general war fought entirely with conventional weapons. In so doing, it will focus primarily on the strategic aspects of the problem, highlighting those features of the Soviet solution that by some conventional reckonings may seem unorthodox, but which effectively compensate for some of the Soviet Navy's main weaknesses. There is no hard evidence for the scenario that follows; nevertheless, it is consistent with sound military logic and with what Soviet military writings tell us about Soviet military thinking.

The purpose of this analysis is to suggest alternatives to some of the conventional "wisdoms" about Soviet strategy in the Arctic region, notions that may prove dangerous. The danger of such notions often lies in their very popularity, whatever their worth by any other yardstick, for it is precisely their ubiquity that will best inform the quest of an alert and crafty opponent for the unexpected in wartime. For this reason, Frederick the Great's advice to his generals remains as pertinent today as it was nearly two and a half centuries ago: "Skepticism is the mother of security. . . . One falls into a feeling of security . . . through . . . lack of calculation concerning the intentions of the enemy. To proceed properly it is necessary to put oneself in his place and say: What would I do if I were the enemy? What project would I

form? Make as many as possible of these projects, and above all reflect on the means to avert them."[7]

Should this article stimulate thought and discussion of such alternative projects, it will serve its purpose handsomely.

The Arctic Theater of Military Action (TVD)

The boundaries of the Arctic TVD coincide with those of the Arctic Ocean as defined by the Soviet Ministry of Defense, but extend well beyond those conventionally accepted in the West. As figure 1 shows, the Soviet-defined boundaries circumscribe not only the central Arctic basin but also the Norwegian Sea, Greenland Sea, Baffin Bay, and even the Hudson Bay—which in most Western accounts are treated either as marginal seas of the Atlantic Ocean or, in the case of the Hudson Bay, as internal Canadian waters.[8] More importantly, these boundaries show that the Soviets think of the Arctic TVD as an enclosed theater, access to which is controlled by a handful of relatively narrow passages whose combined width accounts for only a fraction (about 6 percent) of the theater's perimeter. As will become evident, this outlook has conditioned Soviet thinking about the problems of gaining command of the sea in a number of significant ways.

BOUNDARY OF THE SOVIET ARCTIC TVD

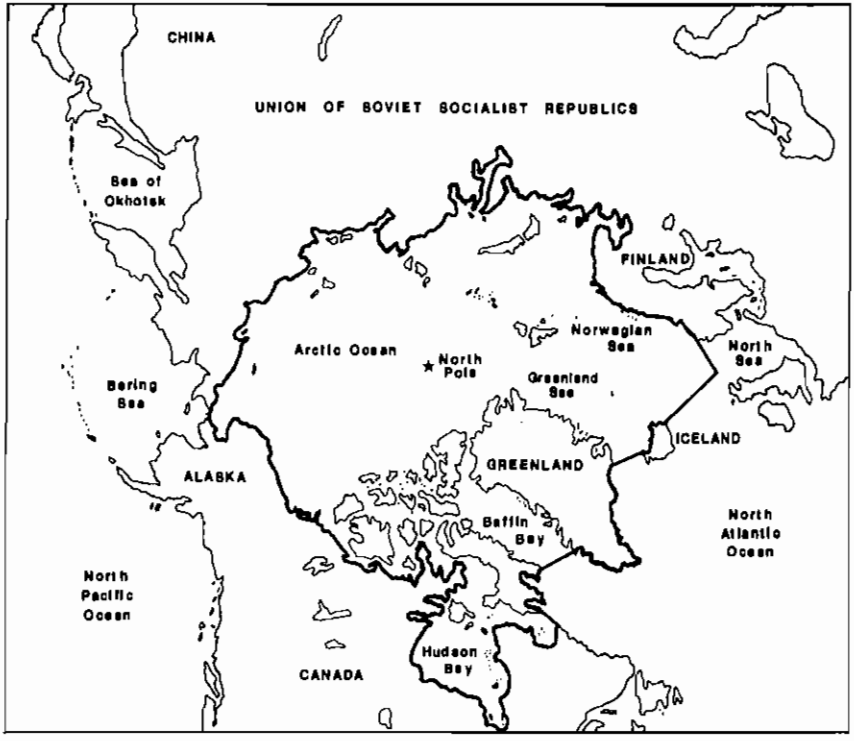

Figure 1

Basic Principles Underlying the Effort. When the West thinks of command of the sea, it tends to conceive of it almost exclusively in terms of what naval forces do on the water. Although the West readily grasps how events at sea can affect the situation ashore, it does not often fully appreciate the reverse. To the Soviets, however, the outcome of events ashore is of crucial importance in winning command of the sea and dictates the coordinated involvement of the other armed services in the effort. Gorshkov writes that "The experience of the Great War for the Fatherland showed that successful action by ground [forces] . . . and their capture of new coastal areas also contribute to winning command of the sea. An example of this was [our] attainment and consolidation of command of the sea . . . in the Black, Baltic, and Barents Seas as a result of operations carried out by ground forces jointly with the fleets. [Similarly], the German [high] command sought mastery of the Black and Baltic Seas by capturing the Soviet Navy's bases from land. . . . From this we may conclude that gaining command of the sea depends both on the Navy's execution of the basic tasks assigned it as well as on the overall course of the armed conflict as a whole."[9]

This statement has been echoed by representatives of the other armed services and, therefore, should not be dismissed as a case of special pleading by the Soviet Navy. "In the years of the Great War for the Fatherland the spheres of action of the Armed Services tended to overlap," according to one of the Deputy Chiefs of the Frunze Academy, which trains ground forces officers. "Thus, the task of attaining command of the sea was then accomplished not just through the efforts of the fleets, but also through the implementation of a system of measures by the Ground Forces and the Air Forces."[10]

Success in attaining command of the sea will also depend on the outcome of the contest for superiority in the air, or command of the air. For reasons that are as yet unclear, the two concepts—command of the sea and command of the air—became firmly associated only in the late 1970s when Soviet naval theorists began to assert that the former was unthinkable without the latter.[11] While the entry for "command of the sea" in volume 2 of the *Soviet Military Encyclopedia* (signed to press on 20 July 1976) contains no reference to command of the air, the new *Military Encyclopedic Dictionary* (signed to press in January 1983) states flatly that "command of the sea simultaneously calls for command of the air."[12]

Finally, the effort to win command of the sea must begin at the outset of hostilities, relying on preemptive action that exploits groundwork already laid in peacetime. "The experience of centuries of warfare shows that in some regions of ocean and sea theaters of military action [command of the sea] may devolve historically on one coalition of sea powers or even on one country, and be recognized by the opposing side and taken into account by the latter in planning and conducting its own combat actions. In the main [this applies to] internal or marginal seas.

"In other regions the groundwork for gaining command [of the sea] can be laid in advance. . . . At the outset of hostilities the side that has established those conditions gains command [of the sea] at the necessary moment and exploits this circumstance to perform subsequent tasks successfully."[13]

Specifically, this groundwork may involve "creating task forces and distributing them in the theater so as to assure them superiority of position" when the war begins;[14] "positioning bases, airfields, command posts, and the elements of a surveillance, communications, and early warning system in the theater in an operationally advantageous way . . . [or] preparing straits and narrows zones in order at the outset of hostilities to prevent enemy surface ships and submarines from passing through."[15]

Gaining Mastery of the Theater. As this mention of straits and narrows suggests (and as the *Military Encyclopedic Dictionary*'s entry for "Gaining Command of the Sea" confirms)[16] the chokepoints controlling access to, and egress from, the Arctic TVD will play a central part in any Soviet effort to gain control of the theater.

One of the most popular, yet most ill-considered, conventional wisdoms about the Soviet Navy is that the handful of straits and narrows lying athwart its path to the open ocean have somehow condemned it to an inferior geostrategic position.[17] That may have been true in the day of Peter the Great, when the challenge of wresting these chokepoints from foreign control was beyond the capabilities of the sailing navies and foot-marching armies of the time. On several occasions, indeed, the Russian Navy was the victim of blockades aimed at bottling it up in its home-water areas.

Today, however, when the operational and strategic mobility of armed forces is measured in bounds spanning countries, not counties, the gateways to the Arctic TVD have become the maritime equivalent of defiles in land warfare—natural defensive positions, the key not only to the Soviet Navy's mastery of the seas behind them but also to the ability of its nuclear submarine force to exploit the theater's central position in the Northern Hemisphere. This might be one of the factors accounting for the keen interest Soviet military writers have shown in the role of straits and narrows in the history of maritime warfare. "The control of straits and straits zones," according to G. Morozov and B. Krivinskiy, "enables naval forces to maneuver rapidly between theaters, and to interdict the movement of [enemy] . . . ships to other areas of a sea or ocean TVD."[18] For example, after seizing Greece and Crete in 1941 "the Germans established control over the straits joining the Aegean and Mediterranean Seas. . . . As a result the Aegean became inaccessible to the Allied fleet. Using the airfields and naval bases on Crete and on other islands of the Southern Aegean Sea, the Axis armed forces succeeded in paralyzing the communications of their opponent in the Eastern

Mediterranean to a considerable degree."[19] Similarly, "Germany's occupation in April 1940 of Denmark and Norway assured her of nearly complete control of the Baltic Straits zone. This enabled the *Wehrmacht* to cut the British Navy off from the Baltic (into which, for the first time in the history of war, not even its submarines could penetrate)" as well as to "improve conditions for the deployment of German naval forces into the Atlantic."[20] And in the future, say Soviet military theorists, the role of chokepoints in maritime war—including the passages into, and out of, the Arctic TVD—will be even more important: "Since warfare of the future . . . may take on a global scope, various types of naval forces will need to maneuver between ocean theaters of military action. The role of straits such as the *Bering Strait*, the Drake Passage, *the straits of the Canadian Archipelago and others*—which have almost never before been utilized in maritime warfare—will then be considerably enhanced.

"Antiship missiles, modern mine weapons, long-range aviation, and advanced means of surface, subsurface and aerial surveillance have substantially increased the ability of navies to fight for straits, lay antisubmarine barriers, and impose blockades over enormous areas of sea and ocean theaters. Many regions never before regarded as narrows in the literal sense of the word may now become a zone of offensive blockade actions by combined armed forces cooperating closely at the operational and tactical levels."[21]

Almost certainly, then, the Soviets will attempt to impose a blockade of the Arctic Ocean's gateways—probably at the outset of hostilities—aimed at barring additional enemy forces from access to the theater. As the above passage also suggests, antisubmarine barriers will be instrumental in this blockade; and to judge from other Soviet sources, naval mines will play a key role in these antisubmarine barriers. "Much attention is being given today to the development of mine weapons," began a recent article on mine warfare in the Soviet Navy's professional journal, *Morskoy sbornik*. "Their role has especially increased in barrier and blockade actions."[22] And according to another Soviet article on mine warfare, "the conduct of warfare to gain command of the sea presupposes offensive minelaying to combat enemy naval forces, and above all else submarines."[23]

The Soviets find mine warfare attractive for a number of reasons. On the one hand, mines "are simple, comparatively cheap to produce and use, yet highly reliable;"[24] on the other, "countermeasures against them entail the mobilization of considerable forces and resources."[25] They can be laid "covertly, regardless of sea state, ice situation, and hydrological and meteorological conditions, both before and during the war."[26] They are "continuously ready for action over a long period," and "require no maintenance after laying."[27] Even if the enemy no more than suspects the

presence of a mine danger, it will have "a powerful psychological effect" on him.[28] Mines "can be covertly developed, tested, serially produced, and stockpiled," and "are relatively immune to obsolescence."[29] In short, there is superior economy of force in the use of these weapons, for mines "will permit a considerable reduction in fleet striking forces [assigned to blockade duties], and in some areas their complete release and reassignment to other missions."[30]

Although estimates of the size of the U.S.S.R.'s stockpile of naval mines vary considerably,[31] it is believed to be the world's largest.[32] It may well also be the world's most diversified, with deep-water acoustic rising mines,[33] and underwater electric potential mines for use against submarines under ice.[34] What is more, most of the Soviet Navy's warships, bombers, and submarines are fitted for minelaying missions,[35] enabling the Soviets to employ their mines "massively at the war's outset," as their military doctrine prescribes,[36] in all the chokepoints controlling access to the Arctic TVD, including the straits of the Canadian Archipelago. Four narrow passages control all inter-theater movements through the Canadian Archipelago: The Robeson Channel (18 nm wide), the Lancaster Sound (38 nm wide), the Fury and Hecla Strait (7 nm wide), and the Cardigan Strait (6 nm wide). The first 2 are between 200 and 500 meters deep; the last 2 are less than 200.

A blockade of the theater's gateways will not only hinder enemy forces outside it from entering, but will also have a decisive effect on the forces already there. The "true aim" of the strategist, as Liddell Hart once wrote, "*is not so much to seek battle as to seek a strategic situation so advantageous that if it does not of itself produce the decision, its continuation by a battle is sure to achieve this.* In other words, dislocation is the aim of strategy; its sequel may be either the enemy's dissolution or his easier disruption in battle."[37] By menacing or cutting off the enemy's line of retreat—and endangering his lines of supply—a blockade will produce this very dislocation. It will be, in essence, the maritime equivalent of Napoleon's *manoeuvre sur les derrieres*, or "maneuver against the enemy's rear," whose object was to form "a strategic back-stop, or barrage, . . . a position offering natural obstacles, . . . a secure pivot from which to prepare a stranglehold for the enemy, whose instinctive tendency, when cut off from [his] line of retreat and supply, was to turn and flow back, usually in driblets, towards him."[38]

In order to exploit the Arctic TVD's interior lines, however, the Soviets must do more than just keep enemy forces out: they must also ensure that their own forces—their submarines in particular—are able to leave. Specifically, they must:

- prevent enemy submarines from mining or patrolling the exits from the theater;
- prevent enemy ASW surface ships and ASW aircraft from patrolling these exits; and

- stave off enemy aerial minelaying efforts.

A Soviet mine blockade could accomplish only the first of these three tasks; the remainder will require air superiority as a necessary condition of their fulfillment. And just as command of the sea is unthinkable, in Soviet eyes, without command of the air, so too is command of the air inconceivable in a maritime theater—as long as the Soviet Navy has no fleet of aircraft carriers—without control of adjacent shores. "Thus, in the first period of the Great War for the Fatherland," writes Yu. Bystrov, "when the overall situation on the southern strategic axis was developing unfavorably for us, the Black Sea Fleet bore heavy losses, until the correlation of forces in the air on the land front changed radically in our favor. An analogous situation [was] obtained in the Baltic and Northern Fleets."[39] A recent Soviet assessment suggests where the "correlation of forces in the air" will have to be changed in the Arctic TVD today: "Much attention is being given [by NATO] to . . . Greenland and Iceland, which are 'blocking' the way out from the Arctic to the Atlantic Ocean. Taking this circumstance into account, the U.S. and NATO commands have established a number of military bases on these islands.

"Greenland is the world's largest island. . . . Most of it is covered by a glacier and is uninhabitable. Only a narrow strip of its rocky coast . . . is ice-free. On Greenland's western shore the U.S. command has built two air bases, including Thule, the largest [such base] in the Arctic. . . .

"Iceland, a small island nation, also plays the role of . . . an '*unsinkable aircraft carrier*'. . . . The U.S. has a major air base at Keflavik, 50 km west of Reykjavik. . . . [T]he *main task of American forces in this country is to operate the Greenland-Iceland-Norway antisubmarine barrier*. . . .

"Norway is the USSR's northern neighbour. . . . Norway is in a favorable strategic position. From its territory the sea lanes connecting the Atlantic and Arctic Oceans can be controlled. . . .

"Strategists from the Pentagon have always considered . . . Alaska, which lies in the Soviet Union's immediate vicinity, to be an important staging area for launching aggression in this region. The French military journal *Revue de Défense Nationale* has called it 'the Gibraltar, eyes and ears of the Arctic.' "[40]

Thus, all of Norway, not just its northern end—southern Norway forms not only the eastern hinge of the Greenland-Iceland-Norway "gap," but also the northern hinge of the Baltic Straits and is therefore vital to the control of both—and Iceland and parts of the eastern and western coastline of Greenland are probably marked for seizure in the war's opening *coup de main*. Very likely, also, is seizure of the Arctic TVD's Pacific gateway, the Bering Strait—including its eastern pillar, Alaska's Seward Peninsula, and nearby islands like Little Diomede and St. Lawrence. Of all these objectives, Norway has the strongest defenses, and consequently offers the greatest potential

challenge to Soviet military planners. The possible shape of a Soviet attack on Norway, therefore, deserves more discussion.

The Conquest of Norway. Current plans for the defense of Norway rest on the assumption that the Soviets will in the first instance attack only the northern end of the country,[41] and Norwegian defenses are organized accordingly. Nearly 85 percent of the Norwegian Army's small standing force is stationed in Norway's two northern-most counties (Finnmark and Troms): a 500-man battalion in the Kirkenes area opposite the Soviet border; a 1,000-man battalion group in the Lakselv-Porsangmoen area; another battalion group at Harstad; a mechanized brigade in the Bardufoss area; and a company-sized unit in the Skibotn valley. From the Lyngenfjord to the Ofotfjord (Narvik), torpedo batteries, mining stations and coastal artillery forts protect the seaward flank of these forces. As figure 2 will confirm, these dispositions are designed to repel an enemy main attack through the Finnish "wedge," while delaying secondary thrusts into Finnmark and warding off landings along the coast between Tromsö and Narvik.[42] When mobilization is ordered, these troops will be reinforced by two reserve brigades assembled locally and by two brigades flown in from southern Norway.[43] Most of Norway's external reinforcements are likewise committed to,[44] and conduct annual exercises in,[45] northern Norway.

NORTH NORWAY

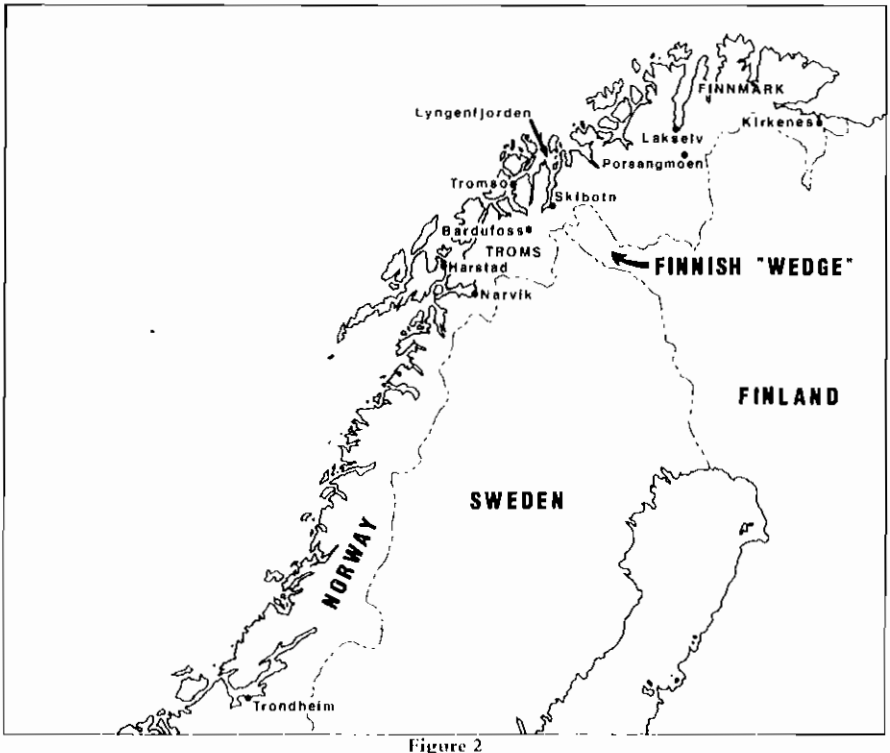

Figure 2

A design that features a main effort in northern Norway along these lines, however, is scarcely likely to appeal to Soviet general staff planners for the simple but compelling reason that it has already been anticipated by the Norwegians. A thrust into northern Norway would be met by an enemy firmly in position, his modest capabilities enhanced by the broken terrain, his will to resist stiffened by the predictability of Soviet behavior. And surely the Soviets are mindful, from their own experience in the Winter War with Finland, of "how rarely the possession of superior force offsets the disadvantage of attacking in the obvious way."[46]

A main effort at the other end of Norway, in contrast, may offer much better prospects for success, and should be considered as a possible alternative. Here the climate and terrain, although far from ideal, are less forbidding, and the operational capacity is greater by any measure. (The Soviets define the "operational capacity" of a given region as its "dimensions, width and depth, its geographic position, . . . its . . . trafficability, . . . and the availability and condition of its . . . roads, airfields, and ports.")[47] What is more, Norway's political and military nerve centers are here: the national capital and, near it, the Norwegian Defense Command and Headquarters, Allied Forces Northern Europe (AFNORTH).

Above all, however, southern Norway is the line of least expectation. For example, General Sir Anthony Farrar-Hockley, a former CINCNORTH, has written of its "relative inaccessibility to attack from Russia or other Warsaw Pact territory."[48] This is an assessment manifest, indeed palpable, in the tiny standing force deployed in this region: an understrength infantry battalion (the King's Guard), a rifle company, a tank company, a field artillery battery, and a platoon of tanks at each major airfield.[49] To the extent that any threat to southern Norway is perceived at all, it is envisaged as developing only after the Soviets have occupied Denmark by combined overland and amphibious invasion, giving this region, where 10 of Norway's 13 reserve brigades mobilize, ample time to prepare for a Soviet attack across the Skagerrak.[50]

Thus, the south of Norway may be vulnerable to the very kind of *coup de main* staged by the Germans 46 years ago against a Norwegian force also composed mainly of reservists. Then, as now, the combination of a small standing force and a large reserve force[51] served as an open invitation to an attacker to forestall Norway's mobilization. On 9 April 1940, 6 landing detachments (fewer than 9,000 men all told) captured Norway's capital and chief ports, while elements of an air-landed battalion seized Oslo's Fornebu Airport and a parachute company took Sola airfield at Stavanger. From these airfields, redeployed *Luftwaffe* units were able eventually to play a key role in frustrating Allied attempts to thwart the *Wehrmacht's* occupation of the rest of the country. A similar airborne and seaborne *coup de main* forced the capitulation of Denmark on 9 April after token resistance, giving the

Germans air and sea control of the Skagerrak, and securing their lines of communication with Norway.[52]

The Soviets have made a detailed study of *Weserübung* (as this operation was code-named), and the lessons they have drawn from it are of considerable interest. According to the introduction to a 1977 Soviet book on World War II in Scandinavia, "The *Wehrmacht*'s operation against Denmark and Norway . . . evokes the most contradictory interpretations in the Western military and historical literature. Some specialists qualify it as a reckless adventure, an operation completely at odds with the canons of warfare, founded only on naked risk. Others categorize it as a 'brilliant' and highly instructive campaign, believing that it 'will always have a special place in the history of war and arouse great interest.' "[53]

As the conclusion to the book's analysis of the operation makes plain, the Soviets agree with the second group of specialists: "Operation *Weserübung* was an example and distinctive demonstration of a carefully planned, resolutely executed combined operation by three armed services. Here, for the first time in the war, attempts were made to create a unified command. . . .

"In addition, the maritime character of this beachhead and the area's difficult climatic and natural conditions required cooperation of a particularly precise and diverse form. Each armed service was compelled to perform several tasks simultaneously. . . .

"In the Norwegian operation the air force emerged as an independent armed service, capable of carrying out major tasks. It was here that the German air force for the first time entered a head-to-head contest with superior forces of the British navy, and the experience showed that command of the air can under certain conditions compensate for a lack of surface ships. Here also efforts were made for the first time to substitute air lines of communication for sea lines of communication. This practice set a new direction in the art of war and revealed the great promise of transport aviation in landing operations."[54]

A Soviet invasion of Denmark and Norway, then, may well bear a strong resemblance in most of its essentials to Operation *Weserübung*. Like the Germans, the Soviets would rely heavily on speed, deception, precise timing and shock action to forestall the Danish and Norwegian mobilizations and the arrival of assistance from the NATO allies. Denmark, like Norway, is relying on an extensive mobilization system for its defense. Denmark's reserves, however, are said to "lack appropriate training, equipment and supplies to engage enemy armored, amphibious or airborne units."[55] Moreover, the standing forces available to the Commander, Allied Forces Baltic Approaches (COMBALTAP), who is responsible for the defense of Denmark and Schleswig-Holstein, are deployed primarily to meet a Warsaw Pact drive

POSSIBLE SOVIET OBJECTIVES IN SOUTH NORWAY AND DENMARK

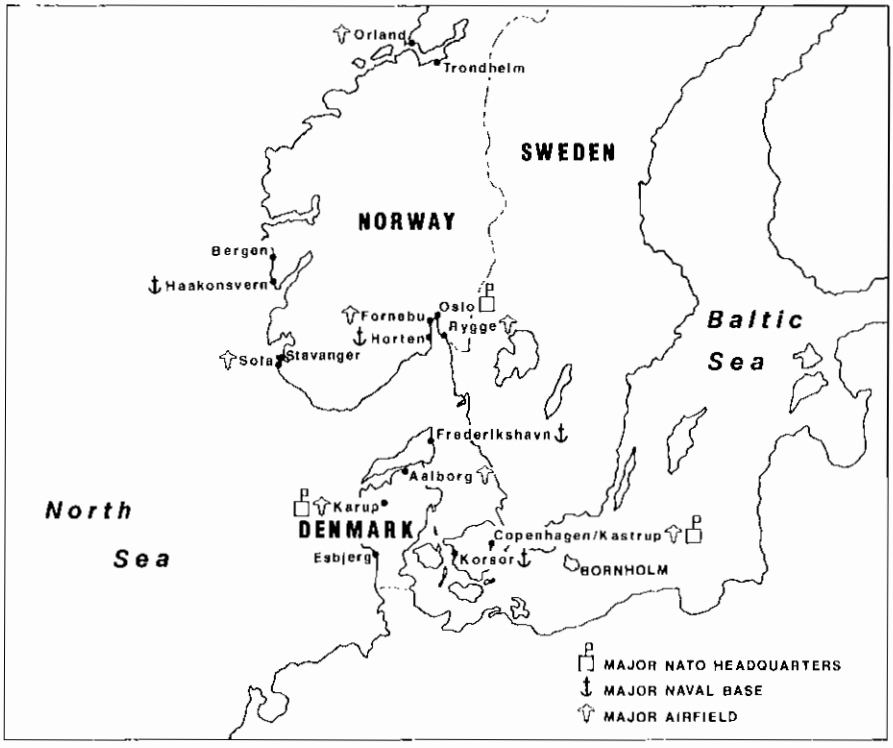

Figure 3

across the inter-German border,[56] leaving the vital northern Jutland area and the Danish islands virtually exposed to airborne and amphibious attack. The main ports, air defense airfields, and naval bases in Denmark and southern Norway, the international airports serving Copenhagen, Oslo and Stavanger, and the principal NATO headquarters located in both countries would probably all be targets for capture in the opening stroke. (As figure 3 shows, many of these objectives are collocated.)

Tactically, a number of approaches might be used to secure these objectives. One alternative that deserves further study is suggested by the above assessment of *Weserübung* and past Soviet practice. In this scheme the invasion would be spearheaded by airborne and seaborne assault teams conveyed to the landing areas by Soviet civilian means of transportation to disguise their approach. In the opening moves of the invasions of Czechoslovakia and Afghanistan, for example, the airports at Prague and Kabul were seized by *spetsnaz* teams flown in by Aeroflot,[57] which also has scheduled air service into Copenhagen, Oslo, and Stavanger.[58] An analogous ruse, with *spetsnaz* teams concealed aboard roll-on/roll-off (RO/RO) cargo ships, could be used to capture some or all of the ports and naval bases. From these airheads and beachheads, helicopter-borne

assault groups could deploy to seize major mobilization centers. With the way thus cleared for a massive airlift and sealift, covered by fighters flying from the captured airfields, the buildup of occupation forces could begin.[59] These opening moves would be timed to coincide with overland advances into Finnmark, Troms, and Jutland, whose chief purpose would be to draw NATO's attention away from the focus of main effort.

Another possible line of approach to Norway runs through southern Sweden, an alternative envisaged by some Soviet contingency plans in World War II,[60] and proposed by some writers to account for the U.S.S.R.'s apparent interest in reconnoitering Swedish waters today.[61] On the whole, however, this idea seems unattractive from the Soviet point of view. Although this approach may be the shortest route to southern Norway, it is also one the Swedes are expecting the Soviets to take and are preparing their armed forces to meet.[62] Thus, an attempt to use southern Sweden as an invasion route would quickly run into strong resistance, giving the Norwegians time to redeploy their forces to the threat axis.

From the Soviet perspective, indeed, it makes more sense to aim at persuading Sweden to stay out of the war altogether, an objective which is better served by her strategic encirclement (i.e., by the occupation of Denmark and Norway) than by moving on her directly.[63] Even if the Soviets were convinced that occupation of Sweden would sooner or later be necessary, the surest way to dislocate Swedish resistance is to take this same indirect approach through Denmark and Norway.

Achieving Surprise. Clearly, no venture such as the one we have outlined will succeed without tactical, operational, and even strategic surprise. "But while the wish to achieve surprise is common and, indeed, indispensable," according to Clausewitz, "surprise can rarely be *outstandingly* successful. It would be a mistake, therefore, to regard surprise as a key element of success in war."[64] In a sense, the historical record would seem to bear Clausewitz out. As a number of studies have shown, the veil of secrecy with which aggressor nations have tried to cloak their preparations for war has rarely proved to be completely impenetrable.[65] And yet, as Richard Betts points out, "numerous and disparate cases reveal that attempts to achieve military surprise in the initial phase of war usually succeed."[66] Surprise *can* be outstandingly successful, even when the victim has had some warning, a fact of which the Soviets are well aware. There are at least two reasons for this, both of them rooted in the psychology of the victim, and both of which can be, and have been, exploited by aggressor nations in wartime.

Misperception. The first is that the victim's leaders either fail to recognize, or refuse to believe information pointing to the enemy's intentions, not because of incompetence or treachery, but because the data does not comport with the "strategic assumptions" these leaders bring to bear

in assessing the validity of the warnings. The solution is not to be found, unfortunately, in "just sticking to the facts," for the problem lies at the core of the cognitive process itself. "Facts can be interpreted, and indeed identified, only with the aid of hypotheses and theories," Robert Jervis has written.[67] Decision makers tend more readily to recognize and accept as valid information that which their preconceptions have conditioned them to expect, and more easily to misinterpret (or reject as irrelevant) all other data. This is why "the most effective deception measures are those designed to reinforce rather than change the victim's preconceptions."[68]

The Soviets have a keen appreciation of how these cognitive verities can be turned to profit to mislead the enemy. According to a 1974 analysis of surprise attacks in World War II, "Both the Hitlerite and Japanese leaders held the view that they would probably be unable to completely conceal their preparations for aggression, and that it was therefore necessary at the very least to disorient the enemy as to the place, time and method [of their respective attacks], and to cause them to hesitate in making or adjusting their operational-strategic decisions. When planning the disinformation [of the enemy] the attacker exploited the enemy's biases and errors quite successfully in order to compel the latter to act along lines that benefitted the attacker . . . [For example, after the original operational plan for an attack against France and the Low Countries fell accidentally into Allied hands in January 1940] the German fascist leadership developed and carried out a whole series of deception measures . . . [whose] main aim was to reinforce the Anglo-French high command's conviction that the old . . . plan . . . remained unchanged—that is, . . . that the main attack would be delivered by the enveloping right wing [Army Group B] through central Belgium [instead of by Army Group A through Luxembourg as in fact happened]."[69] An effective deception thus "requires the execution of diverse . . . measures of disinformation . . . and the development of subtle logical constructs that take into account the 'consumer's character and his wish to obtain particular important facts concerning the situation and actions of the opponent."[70] The consumer, as Soviet materials make clear, "is the person who must make a decision on the basis of intelligence information available to him. . . . The *disinformer therefore makes a thorough study* not only of the [enemy's] means of reconnaissance and of his system of collecting, evaluating and presenting intelligence information to the military policy leadership, *but also of the leaders and higher commanders themselves, on whom the final decision depends.*"[71]

Of the strategic assumptions the West makes about Moscow's aims in the Arctic TVD, several would seem to be vulnerable to manipulation: preconceptions about the nature and scope of Soviet objectives, and about how, where and when the Soviets would strike to attain them. The importance of the theater as a defensive bastion for Soviet strategic

submarines is by now universally recognized,[72] but the implications of Soviet control of this classic Mahanian central position for the *offensive* employment of the Soviet Navy's *general-purpose* submarines in adjacent theaters have gone largely unnoticed. As a consequence, what is poorly understood is the importance and economy of force inherent in (and resulting from) the seizure and blockade of the chokepoints controlling access to, and egress from, the Arctic TVD. Another assumption, again, is that the principal threat to Norway issues from the Kola Peninsula, making northern Norway an excellent choice not for the main attack but for a *diversion* to cover a move into the country through the southern back door, which at this writing may well be vulnerable to the type of forcible entry hypothesized in the foregoing pages. The list of such manipulatable assumptions, unfortunately, can be extended.

Indecision. The second reason why attempts to achieve surprise usually succeed is the victim's fear that military response to warning "may worsen the crisis and decrease the chances of avoiding war."[73] This concern often produces a tendency to see evidence of enemy preparations to attack "as a bluff designed for diplomatic coercion,"[74] a tendency that the enemy can reinforce by conducting a series of alerts and stand-downs (or exercises) to dull the victim's vigilance. When the blow finally falls, the victim is off guard, and his army maldeployed and unready for war. Indeed, history teaches that it is more often the aggressor, not the victim, who profits from a prolonged period of tension to prepare himself for war, another lesson of which the Soviets seem keenly aware.

Since the late 1940s, the U.S.S.R. has waged a relentless diplomatic campaign against efforts by the Scandinavian countries, and Norway in particular, to improve their defense posture. Moscow strongly protested Norway's decision to join NATO in 1949; her consent to the location of AFNORTH headquarters in Norway in 1951; her acceptance of West German liaison officers at this facility in 1959; her participation in biennial NATO exercises in northern Norway since the early 1960s; and her pre-positioning agreements with various Allied governments since the late 1970s.[75]

Norway has responded to this relentless diplomatic pressure with its own *Nordpolitik*, which the Norwegians liken to Willy Brandt's *Ostpolitik*, and which incorporates an element of "reassurance" to go with the measures of "insurance" Moscow finds so objectionable. In 1949, a Norwegian diplomatic note pledged that Norway would not "open bases for the military forces of foreign powers on Norwegian territory as long as Norway is not attacked or exposed to threats of attack."[76] In 1957, another Norwegian note extended this pledge to cover nuclear weapons as well.[77] In 1978, Oslo curtailed planned West German participation in exercises in northern Norway.[78] In 1980, the Norwegian Government decided that the U.S. Marine Amphibious Brigade's heavy equipment should be prestocked not in Troms, as the Army had recommended, but considerably farther to the south around Trondheim.[79]

Allied military aircraft may not fly in Norwegian airspace east of the 24th meridian, and analogous restrictions apply to Allied warships operating in Norwegian territorial waters. Finally, Oslo allows no Allied maneuvers in Finnmark, which borders on the U.S.S.R., gives notice of NATO maneuvers anywhere else in Norway, and regularly invites Warsaw Pact observers to witness them.[80]

Throughout this difficult balancing effort, Norway has sought to show that her will to defend her territory remains undimmed. (To compensate for its decision to prestock the Marine Amphibious Brigade's equipment in the Trondheim area, for example, the Norwegian Government has decided to prestock heavy equipment for an additional mobilization brigade in Troms County.)[81] Nevertheless, during a period of severe East-West tension, the Soviets may hope to exploit the *Nordpolitik's* element of "reassurance," and try, through threatening words and gestures, to effect the paralysis of Norway's political leadership, delay her decision to mobilize, and achieve the necessary conditions for a *coup de main* in the south.

Summary and Conclusions

"We are accustomed," Sir Julian Corbett once wrote, "to speak of naval strategy and military strategy as though they were distinct branches of knowledge which had no common ground. . . . [But] embracing them both is a larger strategy [that] regards the fleet and army as one weapon, which coordinates their action, and indicates the lines on which each must move to realize the full power of both."[82] Like Corbett, the Soviets understand that a campaign in the Arctic TVD will not be the Navy's alone to fight. It will involve not just that service, but its sisters as well, in a series of coordinated moves on land and at sea in order to win "strategic command of the sea," or mastery of the entire theater.

The strategic aims of this enterprise will be both defensive *and* offensive. On the one hand, the Soviets will seek to protect their sea-based strategic reserve and its supporting infrastructure against enemy attack; on the other hand, they will seek to exploit the theater's central position in the Northern Hemisphere for offensive action in the North Atlantic and North Pacific Oceans.

The campaign will include operations not just to destroy enemy naval forces in the theater, but to seize and blockade its gateways, and to capture areas ashore that are crucial to gaining mastery of the theater's airspace.

For most of these measures to succeed, the Soviets will probably have to carry them out largely unopposed at the outset of the war, even if seizing the initiative entails initiating the hostilities. Seizing the initiative, in turn, will hinge critically on achieving surprise. It would be a cardinal error, however, to suppose that modern means of surveillance and detection have made the

surprise attack somehow obsolete, or great deceptions no longer feasible. For surprise "is primarily a behavioral problem,"[83] not a technical one: The reasons for surprise are rooted more in the psychology of the victim than in his means of providing warning of attack. "It is often said," wrote Liddell Hart in 1935, "that the development of air observation and, more recently, of wireless interception, have made surprise impossible. I believe this view to be a fallacy. Air observation may be a check on the cruder forms of surprise, but it is an incentive to the more subtle—to deceiving the enemy's eyes so that the more trust he reposes on what they tell him, the more readily they can be made to mislead him. So also with wireless interception the one practical answer lies in *wireless deception.*"[84] Every one of these words was borne out in the Second World War, and they remain valid today.

Notes

1. The first submarine-launched missile of intercontinental range—the 4,200-nm Soviet-built SS-N-8—became operational on Delta I-class SSBNs in 1973. See *Jane's Fighting Ships 1985-1986* (London: Jane's Publishing Co., 1985), p. 514. The first equivalent U.S. missile (the 4,400-nm Trident I) became operational in the late 1970s.

2. A. Tsvetkov, "Arktika v planakh SShA i NATO" [The Arctic in U.S. and NATO Plans], *Zarubezhnoe voennoe obozrenie* [Foreign Military Review] (hereafter cited as *ZVO*), October 1985, p. 7. Unless otherwise noted, this and subsequent translations are the author's.

3. "Interior lines of operations," wrote Antoine Henri de Jomini, who coined the term, "are those adopted by one or two armies to oppose several hostile bodies, and having such a direction that the general can concentrate the masses and maneuver with his whole force in a shorter period of time than it would require for the enemy to oppose to them a greater force." See Baron de Jomini, *The Art of War*, trans. G.H. Mendell and W.P. Craighill (Philadelphia, Pa.: J.B. Lippincott and Co., 1982; reprint Westport, Conn.: Greenwood Press, 1971), p. 102. According to Alfred Thayer Mahan, who believed (and sought to demonstrate) that much of Jomini's thinking about strategy also applied to maritime warfare, "the expression 'interior lines' conveys the meaning that from a central position one can assemble more rapidly on either of two opposite fronts than the enemy can, and therefore utilize force more effectively. . . . Briefly, interior lines are lines shorter in time than those the enemy can use." A.T. Mahan, *Naval Strategy: Compared and Contrasted with the Principles and Practice of Military Operations on Land* (Boston: Little, Brown, 1911), pp. 31-32.

4. *Voennyy entsiklopedicheskiy slovar* [Military Encyclopedic Dictionary] (hereafter cited as *VES*) (Moscow: Voenizdat, 1983), p. 205.

5. *Slovar' osnovnykh voennykh terminov* [Dictionary of Basic Military Terms] (Moscow: Voenizdat, 1965), p. 65.

6. S.G. Gorshkov, *Morskaya moshch' gosudarstva* [Sea Power of the State], 1st ed. (Moscow: Voenizdat, 1976), p. 377; 2nd rev. ed. (Moscow: Voenizdat, 1979), p. 344.

7. Frederick the Great, *Instructions for His Generals*, trans. Thomas R. Phillips (Harrisburg, Pa.: The Military Service Publishing Co., 1944), p. 56.

8. See U.S.S.R. Ministry of Defense, *Atlas okeanov: [Vol. 3], Severnyy ledovityy okean* [Atlas of the Oceans: Vol. 3, Arctic Ocean] (Moscow: Glavnoe upravlenie navigatsii i okeanografii Ministerstva oborony S.S.S.R. [Main Navigation and Oceanography Directorate of the U.S.S.R. Ministry of Defense], 1980), plate 22; *Sovetskaya voennaya entsiklopediya* [Soviet Military Encyclopedia] (Moscow: Voenizdat, 1979), v. 7, p. 291; for a typical Western delimitation of the Arctic Ocean's boundaries, see Willy Ostreng, "The Strategic Balance and the Arctic Ocean," *Cooperation and Conflict*, December 1977, p. 59, fn 1.

9. Gorshkov, 1st ed., pp. 379-380; 2nd ed., pp. 345-346.

10. V. Rezuichenko and I. Suddenok, "Sistema obshchevoyskovykh i sovmestnykh operatsiy" [The System of Combined-arms and Joint-service Operations], *Voenno-istoricheskiy zhurnal* [Journal of Military History] (hereafter cited as *VIZ*), April 1981, p. 19.

11. Yu. Bystrov, "Zavoevanie gospodstva na more" [Gaining Command of the Sea], *Morskoy sbornik* [Naval Digest] (hereafter cited as *MS*), March 1977, p. 20; G. Kostev, "Ob osnovakh teorii voenno-morskogo flota" [Foundations of the Theory of the Navy], *MS*, November 1981, p. 21.

12. *VES*, p. 205.

13. Bystrov, p. 18. "If neither side succeeds at the outset in attaining such a commanding position, favorable conditions for the activity of forces are won in the course of a fierce armed struggle." *Ibid.*

14. Gorshkov, 1st ed., p. 379; 2nd ed., p. 345.
15. Bystrov, p. 18.
16. *VES*, p. 260.
17. See for example, Clyde A. Smith, "Constraints of Naval Geography on Soviet Naval Power," *Naval War College Review*, September-October 1974, pp. 46-57; Jay C. Mumford, "Geographic Constraints on the Soviet Navy," *Military Review*, August 1981, pp. 39-48.
18. G. Morozov and B. Krivinskiy, "Rol' prolivov v vooruzhennoy bor'be na more" [The Role of Straits in Maritime Warfare], *MS*, August 1982, p. 19.
19. *Ibid.*, p. 20.
20. A. Basov, "Prolivy v strategii kapitalisticheskikh gosudarstv [Straits in the Strategy of the Capitalist States], *MS*, February 1982, p. 82.
21. Morozov and Krivinskiy, p. 22. Author's emphasis.
22. M. Adam, "Nekotorye aspekty primeneniya minnogo oruzhiya v sovremennoy morskoy voyne [Some Aspects of the Employment of Mine Weapons in Modern Maritime Warfare], *MS*, August 1984, p. 22.
23. V. Yankovskiy, "Minnaya voyna na more" [Mine Warfare at Sea], *ZVO*, February 1980, p. 70.
24. A. Kondratovich and Yu. Skorokhod, "Miny—oruzhie universal'noe" [Mines—All-purpose Weapons], *MS*, November 1975, p. 110.
25. V. Yankovskiy, "Minnaya blokada v planakh komandovaniya VMS NATO" [The Mine Blockade in the NATO Naval Command's Plans], *MS*, May 1984, p. 27.
26. *Ibid.*; see also Yankovskiy, "Minnaya voyna na more," p. 70.
27. Kondratovich and Skorokhod, p. 110. It should be noted, however, that some types of minefields require periodic reseeding.
28. Adam, p. 23; see also Yankovskiy, "Minnaya blokada v planakh komandovaniya VMS NATO," p. 27 and "Minnaya voyna na more," p. 69; Kondratovich and Skorokhod, p. 110.
29. Kondratovich and Skorokhod, p. 110; see Yankovskiy, "Minnaya blokada v planakh komandovaniya VMS NATO," p. 27.
30. Yankovskiy, "Minnaya blokada v planakh komandovaniya VMS NATO," p. 29.
31. One source puts it at 225,000, and total Warsaw Pact stocks at 300,000 ("Mine System Survey," *NAVY International*, February 1986, p. 114).
32. C.C.M. de Nooijer, "Countering the Mine Threat," *Naval Forces*, August 1985, p. 67.
33. According to Norman Polmar, *Guide to the Soviet Navy* (Annapolis, Md.: U.S. Naval Institute Press, 1983), p. 356, the Soviets possess "deep-water mines, probably with a capability to be planted in depths to 3,000 feet (910 m)." According to Ronald Pretty, ed., *Jane's Weapon Systems 1985-1986* (New York: Jane's Publishing, Inc., 1985), p. 222, these are thought to be "tethered torpedo-shaped devices fitted with a rocket propulsion unit and an active/passive acoustic sensor device."
34. "Mine System Survey," p. 114; Pretty, p. 222.
35. Wesley McDonald, "Mine Warfare: Pillar of Maritime Strategy," U.S. Naval Institute *Proceedings*, October 1985, p. 49; de Nooijer, p. 67.
36. Yankovskiy, "Minnaya blokada v planakh komandovaniya VMS NATO," p. 30.
37. B.H. Liddell Hart, *Strategy: The Indirect Approach* (New York: Frederick A. Praeger, 1954), p. 339. Liddell Hart's emphasis.
38. *Ibid.*, p. 123.
39. Bystrov, p. 17.
40. Tsvetkov, pp. 8, 11. Author's emphasis.
41. This assumption pervades public discussion of Northern Flank issues, and is expressed or implicit in the writings of NATO officials, journalists and scholars alike. See, inter alia, John Berg, "Soviet Front-Level Threat to Northern Norway," *Jane's Defence Weekly*, 2 February 1985, p. 178; Erling Bjol, *Nordic Security*, Adelphi Paper No. 181 (London: International Institute for Strategic Studies, 1983), pp. 24-25; Richard C. Bowman, "Soviet Options on NATO's Northern Flank," *Armed Forces Journal International*, April 1984, pp. 88ff.
42. The information presented here and depicted in figure 2 was compiled from the following sources: "Close-up: Norway," special supplement to *Military Technology*, November 1984, pp. 19-20 and map on p. 7; R.D.M. Furlong, "The Strategic Situation in Northern Europe: Improvements Vital for NATO," *International Defense Review*, v. 12, no. 6, 1979, pp. 899-900, 902; Tomas Ries, "Defending the Far North," *International Defense Review*, v. 17, no. 7, 1984, p. 879; Peter Howard, "Manning the Border at Grense Jakobselv," *Jane's Defence Weekly*, 12 April 1986, p. 664; Ted Hooton, "Update on Norway's Defense," *Military Technology*, January 1986, p. 65; Ellmann Ellingsen, ed., *Militaerbalansen 1983-1984* (Oslo: Norwegian Atlantic Committee, 1984), which is a Norwegian translation of the IISS' Military Balance 1983-1984 with a special addendum on the Northern Flank.
43. "Close-up: Norway," pp. 19-20; Furlong, p. 902; Ries, p. 879; see Ellingsen; Roy Breivik, "Assuring the Security of Reinforcements to Norway," *NATO's Fifteen Nations*, v. 27. Special Issue no. 2, 1982, p. 66.

44. The reinforcements include a multinational Allied Command Europe (ACE) Mobile Force, the United Kingdom/Netherlands Amphibious Force (U.K./NLAF, which consists of three Commando Brigade Royal Marines and one Amphibious Combat Group Royal Netherlands Marine Corps), a U.S. Marine Amphibious Brigade (MAB), and the Canadian Air-Sea Transportable (CAST) Brigade Group. The ACE Mobile Force and the U.S. MAB will arrive by air (the latter in the Trondheim area), and the U.K./NLAF and CAST Brigade Group by sea. See Ries, pp. 879-880; Furlong, pp. 906-907; "Close-up: Norway," p. 25; Harald Ronneberg, "Norway: Key to the North Atlantic," John Moore, ed., *Jane's Naval Review* (London: Jane's Publishing Co., 1985), p. 77; Richard Castle, "Northern Norway: A Defense Challenge," *Joint Perspectives*, Fall 1981, pp. 61-63; A.F. Whitehead, "Reinforcing NATO's Northern Flank," U.S. Naval Institute *Proceedings*, July 1985, pp. 133-135.

45. Furlong, p. 900; see Whitehead; Castle, p. 57.

46. Liddell Hart, p. 205.

47. *VES*, p. 253.

48. Anthony Farrar-Hockley, "The Influence of the Northern Flank upon the Mastery of the Seas," *Naval War College Review*, May-June 1982, p. 13. "At least, this is true so long as the USSR does not decide to attack across Sweden to reach south Norway," he adds. But on the other hand, "Warsaw Pact attacks across Sweden are likely to be self-defeating."

49. "Close-up: Norway," pp. 19, 21, 30; see Ellingsen.

50. Reportedly, these forces can mobilize within 3 days (Furlong, p. 902; "Close-up: Norway," pp. 19-20); see also Ellingsen.

51. In 1940, 82 percent of the Norwegian Army's wartime strength consisted of reservists. Today that figure is 87 percent; see Earl F. Ziemke, "The German Decision to Invade Norway and Denmark (1940)," in Kent Roberts Greenfield, ed., *Command Decisions* (Washington: U.S. Govt. Print. Off., 1958), p. 51n; "Close-up: Norway," p. 16.

52. The German conquest of Denmark was effected by two infantry divisions, one motorized rifle brigade, an airborne battalion, a parachute company and a parachute platoon. The key actions were the seizure of the airfields at Aalborg by the airborne battalion and parachute platoon, and the landing in Copenhagen of an infantry battalion that had entered the harbor concealed in a merchant ship. The most detailed and comprehensive account of *Weserübung* in English is in Earl F. Ziemke, *The German Northern Theater of Operations, 1940-1945*, Department of the Army Pamphlet No. 20-271 (Washington: U.S. Govt. Print. Off., 1959), pp. 26-112.

53. A.M. Noskov, *Skandinavskiy platsdarm vo vtoroy mirovoy voyne* [The Scandinavian Beachhead in the Second World War] (Moscow: Nauka, 1977), pp. 8-9.

54. *Ibid.*, pp. 125-126. It should be emphasized that this assessment is not peculiar to this particular Soviet author. Eleven years before, Colonel D. Proektor came to substantially the same conclusions in an article written for the Soviet *Journal of Military History*: "O nekotorykh voprosakh strategii pervogo perioda vtoroy mirovoy voyny" [Some Questions of the Strategy of the First Period of World War II], *VIZ*, August 1966, p. 31.

55. Diego A. Ruiz Palmer, "The Forces: National Contributions," *Armed Forces Journal International*, May 1984, pp. 58, 61.

56. COMBALTAP, who is headquartered in Karup, Denmark (67 km northwest of Aarhus), includes two subordinate ground forces commands: Commander, Allied Land Forces Jutland (COMLANDJUT, headquartered in Rendsburg, West Germany, 30 km west of Kiel), and Commander, Allied Land Forces Zealand (COMLANDZEALAND, headquartered in Copenhagen). The forces assigned to COMLANDJUT—who is responsible for the area between the Elbe River and a line running west across the Jutland Peninsula from Horsens, Denmark—include the FRG's 6th *Panzergrenadier* Division and 13th Home Defense Group, both stationed south of the Kiel Canal, and the Danish Jutland Division, which is stationed in the Fredericia area. All three of these formations have orders to move up to the inter-German border in the event of a Warsaw Pact attack. COMLANDZEALAND, however, must defend the Jutland Peninsula north of Horsens, the Zealand Archipelago and Bornholm Island with two brigades (headquartered in Copenhagen) and a reinforced battalion (stationed on Bornholm Island). Furlong, pp. 903-905; Wolfgang Gerhardt, "What About Multinational Corps in NATO? One Example: NATO Corps Landjut," *Military Review*, March 1979, pp. 11-16; O.K. Lind, "Denmark and the Baltic: Forward Defeuse for the U.K.?" *RUSI*, Juue 1985, p. 10.

57. Donald E. Fink, "Prague Invasion Vanguard Used Aeroflot," *Aviation Week and Space Technology*, 30 September 1968, pp. 16-18 and "Afghan Invasion Likened to 1968 Action," *Aviation Week and Space Technology*, 14 July 1980, pp. 20-23.

58. Aeroflot has daily service from Moscow to Oslo and Copenhagen and thrice-weekly service to Stavanger. See *Official Airline Guide: Worldwide Edition*, 1 April 1985, pp. 641-657, 1752-1765, 2182-2186.

59. The buildup of forces at Kabul International Airport in 1979 was swift. Between 24 and 26 December, 5,000 troops and their equipment (the bulk of the 105th Guards Airborne Division) were flown into the airport in 250 sorties, with transport aircraft landing every 10 minutes (see *Aviation Week and Space Technology*, 7 January 1980, p. 15).

60. These contingency plans are outlined in Robert P. McQuail, "Khrushchev's Right Flank," *Military Review*, January 1964, pp. 7-16.

61. See Kirsten Amundsen, "Soviet Submarines in Scandinavian Waters," *The Washington Quarterly*, Summer 1985, pp. 116-118. See also Stig Lofgren, "Soviet Submarines against Sweden," *Strategic Review*, Winter 1984, pp. 36-42.

62. Tomas Ries, "Combined Operations: The Swedish Approach to Defense," *International Defense Review*, v. 16, no. 4, 1983, pp. 413-420.

63. Perhaps not accidentally, the effect of the German conquest of Norway on Sweden's behavior in World War II has not escaped Soviet notice. "The appearance of Hitler's troops at the Swedish border led to a sharp change in neutral Sweden's domestic and foreign policy," states the official Soviet history of the war. "This country's ruling circles began to tilt toward the fascist Reich in their foreign policy, and allowed [German] freight and troops to pass through Swedish territory to the Narvik area and to Northern Finland." Source: *Istoriya vtoroy mirovoy voyny 1939-1945: [Vol. 3], Nachalo voyny. Podgotovka agressii protiv SSSR.* [History of the Second World War 1935-1945: Vol. 3, The War's Beginning. Preparations for Aggression Against the U.S.S.R.] (Moscow: Voenizdat, 1974), p. 79.

64. Carl von Clausewitz, *On War*, bk. III, ch. IX, trans. Michael Howard and Peter Paret (Princeton, N.J.: Princeton University Press, 1984), p. 198.

65. See Roberta Wohlstetter, *Pearl Harbor: Warning and Decision* (Stanford, Calif.: Stanford University Press, 1962); Johan Jorgen Holst, "Surprise, Signals and Reaction: The Attack on Norway April 9th 1940—Some Observations," *Cooperation and Conflict*, no. 1, 1966, pp. 31-45; Abraham Ben-Zvi, "Hindsight and Foresight: A Conceptual Framework for the Analysis of Surprise Attack," *World Politics*, April 1976, pp. 381-395; see Richard K. Betts, *Surprise Attack: Lessons for Defense Planning* (Washington, D.C.: The Brookings Institution, 1982).

66. Betts, p. 4.

67. Robert Jervis, "Hypotheses on Misperception," *World Politics*, April 1958, p. 457.

68. Betts, p. 109.

69. N.I. Gutchenko, "Maskirovka agressii v Evrope i na Tikhom okeane [Camouflaging Aggression in Europe and the Pacific Ocean] in S.P. Ivanov, ed., *Nachal'nyy period voyny (Po opytu pervykh kampaniy i operatsiy vtoroy mirovoy voyny* [The Initial Period of War (From the Experience of the Early Campaigns and Operations of the Second World War)] (Moscow: Voenizdat, 1974), pp. 167-168.

70. K. Penzin, "Vnezapnost' v morskikh desantnykh operatsiyakh i mery po ee dostizheniyu [Surprise in Amphibious Landing Operations and Ways to Achieve It], *MS*, April 1980, p. 16.

71. V. Mesheheryakov, "Strategicheskaya dezinformatsiya v dostizhenii vnezapnosti po opytu vtoroy mirovoy voyny [Strategic Disinformation in the Achievement of Surprise, from the Experience of the Second World War], *VIZ*, February 1985, p. 74. Author's emphasis.

72. See the official Department of Defense publication *Soviet Military Power 1986* (Washington: U.S. Govt. Print. Off., 1986), pp. 87-88; and Jan S. Breemer, "The Soviet Navy's SSBN Bastions: Evidence, Inference, and Alternative Scenarios," *RUSI*, March 1985, p. 18.

73. Betts, p. 4.

74. *Ibid.*, p. 105.

75. Robert K. German, "Norway and the Bear: Soviet Coercive Diplomacy and Norwegian Security Policy," *International Security*, Fall 1982, pp. 58-60, 62, 63-64, 70-72, 73-75.

76. *Ibid.*, pp. 59-60. According to German, this policy would probably have been followed anyway, but the formal pledge was a response to Soviet protests.

77. *Ibid.*, pp. 62-63.

78. *Ibid.*, p. 71.

79. *Ibid.*, p. 73.

80. *Ibid.*, p. 70; Castle, p. 57; Betts, p. 257.

81. Bjol, p. 26; John Berg, "Tight Defence Budget for Norway," *Jane's Defence Weekly*, 2 November 1985, p. 962.

82. Julian S. Corbett, *Some Principles of Maritime Strategy* (London: Longmans, Green and Co., 1911), p. 8.

83. A. L. Elliott, "The Calculus of Surprise Attack," *Air University Review*, March-April 1979, p. 61.

84. B.H. Liddell Hart, *When Britain Goes to War: Adaptability and Mobility* (London: Faber and Faber, 1935), p. 243. Liddell Hart's emphasis.

The United States Should Reorder its Priorities in East Asia

Donald E. Nuechterlein

Forty years ago President Harry Truman enunciated his famous Truman Doctrine—with its implied promise of aid to any country that was threatened by Soviet-supported revolution. Today a number of thonghtful Americans of various political persuasions believe that the United States is overcommitted to the world in terms of our willingness to uphold all the mutual security obligations undertaken since 1947 in the name of "containing communism." The current controversy over implementation of the Reagan Doctrine is but the latest example of congressional resistance to the proposition that the United States must oppose Soviet influence everywhere if Americans are to live in a favorable world order. Congress' unwillingness to increase defense and foreign aid budgets to pay for these worldwide obligations and the President's refusal to approve significant tax increases to overcome congressional resistance to higher defense spending suggests that a reassessment of U.S. international priorities is now at hand.[1]

As the President and Congress grapple with foreign aid and defense spending priorities in the final years of the Reagan administration, one geographic area—East Asia—is visible beyond all others in terms of irs previous claims to U.S. resources, and particularly the American military casualties suffered while undertaking its defense. Even though the Truman administration originally believed that no country on the Asian mainland constituted a vital U.S. interest, the United States went to war twice within 15 years ro prevent Sovier and Chinese-supported communism from expanding in Korea and Southeast Asia. Since 1950 the United States has committed itself by treaty and security agreements to defend a number of Asian states which are no longer threatened by the People's Republic of China; these include Japan and South Korea in Northeast Asia; and Malaysia, Singapore, Thailand, and Indonesia in Southeast Asia. Taiwan, although

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officially recognized by Washington as part of China, retains a residual defense relationship with the United States. Moreover, China itself now tacitly relies on U.S. strategic power to deter its greatest antagonist, the Soviet Union. In short, while the political and military situation in East Asia has changed profoundly since President Richard Nixon made his historic visit to China in 1972, the U.S. defense posture in East Asia has changed little except for the U.S. withdrawal from Indochina in 1975.

This article argues the case for reordering U.S. national interests in East Asia in light of the significant changes that have occurred in China's leadership and foreign policy over the last decade, Japan's rise to economic superpower status and growing defense capabilities in Northeast Asia, and the Soviet Union's recent willingness to emphasize political détente with the East Asian states. The thesis here is that it is now time for the United States to return to an offshore defense strategy in the Western Pacific, a policy that prevailed from 1945 to 1950, and to encourage Japan, China, the Philippines, and Australia to take greater responsibility for improving political and security relationships and for countering pressures from hostile regional powers such as Vietnam and North Korea. The objective of U.S. policy in the coming decade should be to promote political stability and build a lasting balance of power among the major states in East Asia. To achieve this, U.S. policymakers need to have a clear vision of fundamental—vital—American interests in the region as differentiated from those that are important but not crucial.[2]

Offshore Defense Strategy: 1945-1950

U.S. national interests in East Asia since the Second World War may be divided into four clearly identifiable periods. The first runs from August 1945 until February 1950 and may be called the offshore defense posture. Following Japan's defeat and the collapse of its Asian empire, the Truman administration concluded that the United States had no enduring crucial interests at stake on the mainland of East Asia. This assessment was made even though strong political forces, particularly in the Republican Party, argued that China was of overriding importance for balance of power reasons and that Washington had a vital stake in preventing Communist forces from winning a military victory there and establishing a Marxist regime. Truman sent General George C. Marshall to China in 1946 to assess the political and military situation and then decided that U.S. forces should not be used in an attempt to save the Nationalist regime from defeat. Without an American military guarantee to support his cause, Chiang Kai-shek's position on the mainland was nearly hopeless. In making this judgment, Truman implicitly decided that China was not a vital U.S. interest and that Washington could live with the consequences of a Nationalist defeat. He also decided, in 1949, to withdraw

U.S. occupation forces from South Korea after Moscow removed Soviet troops from North Korea. The Truman administration believed that Britain, France, and The Netherlands—the prewar colonial powers in Southeast Asia—should have responsibility for maintaining security in that region and did not object to the return of their forces to Malaya, Indochina, and the East Indies, respectively. After granting independence to the Philippines in July 1946, the United States continued its prewar role as protector of the islands. Washington also accepted responsibility for the security of Japan, Okinawa, and the former Japanese islands in the Pacific, which became strategic Trust Territories under a United Nations mandate. A fundamental factor influencing U.S. policy in East Asia during this period was the strongly held view in official Washington that U.S. interests in Europe far outweighed those in Asia. It simply was not prudent for the United States to undermine the efforts of Britain, France, and The Netherlands in Asia while soliciting their cooperation to rebuild postwar Europe and bring West Germany into a new political and economic arrangement.

Australia and New Zealand were also considered to be part of the U.S. postwar defense posture in the Pacific. These wartime allies had served as staging areas for the liberation of the Philippines and other Pacific islands and assisted in the defeat of the Japanese empire. Although the strategic importance of Australia has always outweighed that of New Zealand, the United States nevertheless concluded a formal defense alliance (ANZUS) with both countries following the outbreak of war in Korea.

U.S. vital security interests in East Asia between 1945 and 1950 clearly lay in the offshore chain of islands running from Japan and Okinawa in the north, to the Philippines, Australia, and New Zealand in the south. American security interests in this early period did not include China, the Korean peninsula or Southeast Asia, except for the Philippines. Even though Indochina was embroiled in a colonial war against France during 1947-1950, and the Indonesians fought a similar war to oust the Dutch (and won independence in 1949), the United States provided no military aid to either colonial power. Thailand was the only independent state in Southeast Asia prior to 1941 and had allied itself with Japan during World War II. Treated as an enemy state by Britain, France, and China after the Japanese surrender, the Thai kingdom regained its sovereignty in 1946 with U.S. help. Yet this political support did not imply more than a modest U.S. interest in Thailand's security prior to 1950.

China represented a special problem for President Truman. After deciding in 1946 that the United States had no vital security interests at stake in mainland China, he was obliged to accept the Red Army's victory over the Nationalists and the establishment of the People's Republic of China in 1949. Washington declined to grant diplomatic recognition to the new regime, but it also refused to provide aid to Chiang Kai-shek's Nationalist forces after

they fled to Taiwan and established a rival government there. Washington adopted a wait-and-see attitude toward the policies of the new Peking regime; and although apprehension existed in Washington in late 1949 over events in China, the new Peking regime was not yet perceived as being implacably hostile to the United States. Britain and other Commonwealth countries recognized the new Peking government.

The Truman administration's overall assessment of U.S. interests in East Asia at the start of 1950 was spelled out by Secretary of State Dean Acheson in a now-famous address to the National Press Club in Washington on 12 January. Acheson defended Truman's decision not to intervene in China's civil war to save the Chiang regime, a decision that infuriated the Republican opposition in Congress and provided it with an opportunity to charge the Truman administration with being "soft on communism." Acheson later cited his reasons for making this fateful speech, which he had cleared with President Truman: "Its purpose was to bring home what the United States Government had done to defend vital interests in the Pacific, not to speculate on what it might do in the event of various exigencies in Asia. Our defense stations beyond the western hemisphere and our island possessions were the Philippines and defeated, disarmed, and occupied Japan. These were our inescapable responsibilities. We had moved our line of defense, a line fortified and manned by our own ground, sea, and air forces, to the very edges of the Western Pacific."[3]

Acheson recalled that General Douglas MacArthur had asserted a year earlier that the U.S. defense line in Asia started in the Philippines and continued through the Ryukyus to Japan and the Aleutians. At the beginning of 1950, that view seemed to him and the President to be a prudent definition of U.S. security interests in the Western Pacific.

Expansion of U.S. Security Commitments, 1950-1965

The second period in U.S. policy began abruptly in February 1950 when Peking signed a mutual defense pact with Moscow. This precipitated a major reevaluation of U.S. interests and policies in Asia, a process made urgent by the outbreak of war in Korea in June 1950 and China's massive intervention in November after General MacArthur moved United Nations forces to the Chinese border at the Yalu. These events shaped President Truman's view of Peking's intentions and caused U.S. policymakers to conclude that all non-Communist Asian states were highly important to the United States in the worldwide struggle with the new "Sino-Soviet bloc." Washington then concluded mutual defense pacts with South Korea, Taiwan, the Philippines, Australia, and New Zealand. It urgently negotiated a peace treaty and defense pact with Japan, and began for the first time to send military and economic assistance to French forces fighting Vietminh Communists in

Indochina. It also inaugurated aid to Thailand, which faced growing insurgency along its border with Laos. Washington even provided clandestine military support to Chinese Nationalist forces based in the jungles of Burma. By the time Truman left office in January 1953, the State Department was seeking to enlist the support of all Asian countries in a broad anti-Communist security pact.

President Dwight D. Eisenhower substantially expanded U.S. commitments in East Asia by concluding a new Southeast Asian alliance, which soon was known as SEATO. The Manila Pact, signed in September 1954, included Thailand, the Philippines, Australia, New Zealand, Pakistan, France, Britain, and the United States. It also covered the British colonial possessions of Malaya, Singapore, and North Borneo, and it authorized the supply of economic and military assistance to the new governments of South Vietnam, Laos, and Cambodia (now Kampuchea) to help them resist pressures from Communist-dominated North Vietnam. The Southeast Asia Treaty Organization was an outgrowth of the Manila Pact and provided its military arm for the next two decades.[4] Significantly, three new and influential Asian countries—India, Indonesia, and Burma—declined to join the Manila Pact and decided instead to form a nonaligned Afro-Asian bloc at the Bandung Conference in Indonesia in 1955.

The Manila Treaty was one result of President Eisenhower's refusal in April 1954, despite strong pressures from Paris, to send U.S. forces to Indochina to save the French garrison at Dien Bien Phu. When this strategic position fell to Vietminh forces, it precipitated a crisis in the French Government and resulted in France's withdrawal from the war. This Vietnamese victory led to the Geneva Accords in July 1954 which provided for the independence of Laos and Cambodia and the division of Vietnam into two provisional administrations, North and South. Eisenhower's refusal to use U.S. forces to save the French position, despite the urging of his advisers, meant that he did not consider Vietnam at that time to be a crucial security interest of the United States. He decided instead to pursue a diplomatic course and sent Secretary of State John Foster Dulles to Geneva to negotiate the best political arrangement possible. The partition of Vietnam soon followed.[5] The Manila Treaty, signed 2 months later, afforded the United States a face-saving fallback position in Southeast Asia, and provided the legal framework for subsequent armed intervention in Indochina should the security situation there deteriorate further.

President John Kennedy faced such a deteriorating situation in Vietnam when he entered the White House in January 1961. He had to decide whether a non-Communist South Vietnam was of truly vital interest to the United States and, if so, what his Administration was prepared to do about defending it. After about 6 months of deliberations amid a decaying security situation in Laos as well as South Vietnam, his National Security Council concluded that

South Vietnam must not succumb to North Vietnam, which was then being heavily supported by Moscow and Peking.[6] Kennedy's secret decision that the United States should not tolerate the subjugation of South Vietnam by Hanoi led to the introduction of 15,000 U.S. advisers and Special Forces into Vietnam by the summer of 1963. His Administration made a serious effort to draw Indonesia into a security relationship with the United States, but President Sukarno decided instead to pursue an armed "confrontation" against British possessions in North Borneo and Malaya and to align Indonesia with Hanoi and Peking. Following the failure of a Communist coup in Jakarta on 1 October 1965, in which Sukarno was implicated, the Indonesian Army assumed control of the country. Thereafter, a military regime headed by General Suharto reoriented Indonesian foreign policy toward friendly relations with Washington and London and hostility to Peking and Hanoi. Nevertheless, Suharto's new government decided to continue a nonaligned foreign policy.

Massive Intervention in Southeast Asia, 1965-1972

The third period in U.S. policy began after President Lyndon Johnson's landslide election victory in November 1964. In August he had obtained the Tonkin Gulf Resolution from Congress which permitted him to use American military forces to repel Communist aggression in Southeast Asia. The resolution specifically said that Southeast Asia constituted a "vital" U.S. interest. After sustained aerial bombing of Vietcong and North Vietnamese installations failed to produce negotiations to end the Communist insurgency, President Johnson decided in July 1965 to commit large U.S. ground forces as well as air power to the struggle to save Vietnam and all of Southeast Asia from a Communist takeover.[7] Soviet and Chinese support for North Vietnam's war effort put this crisis in a category similar to the one Harry Truman had encountered 15 years earlier in Korea when he sent large U.S. forces to thwart a Communist victory there. In both cases, the President perceived that the threat was not a localized one, but rather a broad challenge by Moscow and Peking to diminish American influence throughout Asia.

By 1968 most Washington policymakers had concluded that North Vietnam could not be bombed into negotiating an end to its war in the South, and that it was too risky to invade or blockade the North. Yet President Johnson continued to hold the view, shared by Richard Nixon who succeeded him in January 1969, that helping South Vietnam to defend its independence remained a vital U.S. security interest. Most American policymakers accepted the proposition that if Vietnam succumbed to communism, the other states in Southeast Asia—Cambodia, Laos, Thailand, Malaysia, Singapore, Indonesia, and the Philippines—would be in jeopardy. The domino theory

was accepted by leaders of both the Republican and Democratic Parties, but it was not shared by large segments of the press and the public.

After becoming President in 1969, Richard Nixon enunciated the Guam Doctrine which stated that the United States would not use its ground forces in local Asian wars, but would provide a strategic shield to allied countries against threats by nuclear powers.[8] Nixon thus intimated that local wars on the Asian mainland would no longer be seen as threats to vital U.S. interests, but he reaffirmed the general nature of U.S. treaty commitments in Asia, including South Vietnam. Nixon then sought to open diplomatic relations with China, which he believed to be the key to achieve his objective of withdrawing "with honor" U.S. combat troops from Vietnam. The first 3 years of his presidency were thus devoted to achieving a détente relationship with China (following 20 years of mutual hostility) and to the disengagement of American forces from Southeast Asia. In effect, Nixon concluded that friendly relations with China outweighed a continued U.S. military presence in Southeast Asia.

Redefining U.S. Security Interests in Asia, 1972-1986

Richard Nixon's historic visit to China in 1972 and his agreement to recognize the People's Republic as the sole government of all China inaugurated the fourth period of U.S. security involvement in East Asia and the Pacific. The Shanghai Declaration implied that Taiwan was no longer a vital U.S. concern, and Southeast Asia was downgraded in importance when all American combat forces were withdrawn from Vietnam in 1973. Washington's unwillingness to retaliate when Hanoi launched its final offensive against the South in 1975 confirmed that Vietnam was no longer a vital U.S. interest. The withdrawal of U.S. Air Force units from Thailand in 1975 and the subsequent dissolution of SEATO signalled a reduction in the U.S. commitment to Thailand, although Washington did reaffirm its treaty obligations under the Manila Pact. Britain's decision to withdraw militarily from Malaysia and Singapore in 1970 removed that area from American protection. In sum, every Southeast Asian country that had become part of the U.S.-sponsored East Asian containment effort, except the Philippines, was downgraded in priority by Washington. South Korea's status also came under scrutiny in 1977 when President Jimmy Carter tried to withdraw all U.S. ground forces. However, under heavy pressure from Japan and the Pentagon, Carter agreed to retain a combat force of about 40,000 troops in Korea.

The impetus for this shift in the U.S. perception of its security interests in Asia was the sudden turnabout in Washington's relations with the People's Republic of China. As China's relations with the Soviet Union deteriorated in the late 1960s and Peking sought to open ties with the United States,

Washington was permitted to downgrade the importance of countries along China's periphery. If China was no longer hostile to Washington and Tokyo, it did not appear to be essential for the United States to maintain armed forces in Southeast Asia and perhaps not in Korea. It clearly became a U.S. interest to reduce sales of arms to Taiwan in order to encourage Peking along a new path of détente with Washington. To restrain the growing Soviet power position in Asia after 1975, particularly the Soviet air and naval presence in Vietnam, it was important for the United States to foster good relations between China and its non-Communist neighbors such as Thailand and South Korea. It was also in the interest of the United States to provide China with sufficient economic and military assistance to enable it to be an Asian counterweight to Soviet influence as well as a check on Vietnam's designs in Southeast Asia. Washington also had an interest in encouraging China to modify its totalitarian system and move toward a free-market society and greater personal freedom for its people. Although China began experimenting with free enterprise in the mid-1980s, it has nevertheless shown little inclination to relax the tight security controls that dominate Chinese life.

Throughout the 1970s, Presidents Nixon, Ford, and Carter pursued détente policies with the People's Republic and gradually disengaged from the defense commitment to Taiwan, a problem that inhibited good relations between Washington and Peking. Ford and Carter also adopted a detached view of events in Laos and Cambodia when Hanoi moved to dominate their governments after its victory in Vietnam. Washington continued to provide limited military assistance to Thailand in the 1970s, but showed little inclination to become militarily involved there. Instead, U.S. policymakers sought to encourage regional solidarity through the Association of Southeast Asian Nations (ASEAN), an economic and political organization established in 1967 to foster cooperation among the countries in that region.[9]

Ronald Reagan came to the White House in 1981 determined to reduce U.S. involvement with the People's Republic of China and to strengthen U.S. security ties with Taiwan. However, this policy proved to be irreconcilable with his more important objective to counter growing Soviet influence in Asia, particularly in Vietnam. The President enunciated a modified view of U.S. interests in China while visiting Peking in 1984. He agreed to make economic and military equipment available to China to help modernize its economy and improve its defenses, and he pledged to reduce and eventually phase out arms sales to Taiwan. His Administration also reiterated the U.S. defense commitment to South Korea and has given no indication that the 40,000 U.S. troops currently stationed there will be reduced. Although Reagan has deepened U.S. relations with Japan, building on his good personal relationship with Japanese Prime Minister Yasuhiro Nakasone, he has had to contend with serious trade imbalances with that country and, consequently, strong protectionist pressures from Congress to curb imports. The U.S.

defense relationship with Japan remains good, however, and the Nakasone government has taken steps to gradually expand the size and missions of Japan's self-defense forces.

In sum, the cordial relationship between the United States and China, enlarged over the past decade, has significantly changed Washington's perception of U.S. interests in East Asia. Expanded ties between Washington and Peking, and between Peking and Tokyo, have reduced the danger of war on the Korean peninsula and opened the potentiality that China will quietly help to initiate talks between North and South Korea to lessen tensions there. In Southeast Asia, China's role in resisting Hanoi's occupation of Kampuchea and its efforts to build good relations with Thailand and Malaysia have improved the security situation in the area.

Proposed Strategy for the 1990s

In view of the changing political, economic, and security conditions that have occurred in East Asia and the Pacific over the past 20 years, U.S. security interests there should be more limited than they are at present. The United States does not have the unlimited economic and military resources to restore the preeminent world role that it enjoyed during the Eisenhower, Kennedy, and Johnson administrations. If one calculates that U.S. defense and foreign aid budgets will not increase in the foreseeable future, and may decline, it follows that the United States will be obliged to adopt a less ambitious international security stance in the 1990s and that East Asia, as well as Europe and the Middle East, will see a diminution of American military power deployed there. The reductions in American military assets located outside the Western Hemisphere will be hastened if President Reagan and Soviet General Secretary Gorbachev achieve a significant arms reduction agreement, particularly if they negotiate an understanding on reducing political tensions in Third World countries. In East Asia, therefore, the United States should adopt the posture of encouraging the principal states—Japan, China, and the ASEAN group in Southeast Asia—to take greater responsibility for reducing political tensions and encouraging North Korea and Vietnam to join in this effort. The United States should adopt a lower political profile in order to encourage this process.

The key factor influencing U.S. perception of its future security interests in East Asia is the Soviet Union, particularly the growing Soviet naval presence in the Western Pacific, South China Sea, and the Indian Ocean. Moscow's acquisition of a modern naval base at Cam Ranh Bay in Vietnam was a major strategic gain for the Soviet Navy, which is now capable of deploying task forces in an area once the preserve of U.S. naval forces. Additionally, the Soviet Air Force has facilities in Vietnam and North Korea. During 1986 Moscow showed a special interest in the island states of the South Pacific,

notably Kiribati and Vanuatu, located east of Australia. Gorbachev reiterated in a visit to Vladivostok in the summer of 1986 that the Soviet Union is an Asian and Pacific power and that it intends to play a larger political role there. The Soviet foreign minister and other ranking diplomats have visited East Asian capitals and said that Gorbachev wants to hold an East Asian conference to reduce threats to peace, including those posed by nuclear-armed ships. Gorbachev has made overtures to China's leadership to settle border disputes and other issues standing in the way of better relations.

Does the Soviet announcement of its intention to play a larger role in East Asia pose a greater threat to U.S. security interests? Some argue that an expanded Soviet role means the United States should enlarge its own military, especially naval, presence. Yet, an enlarged Soviet interest in the Western Pacific does not necessarily require a larger U.S. military presence there. The new Soviet challenge is primarily political in nature and will be supported by an expanded Soviet Navy capable of deployment over a larger expanse of the Pacific. But an enlarged Soviet naval presence does not in itself pose a greater security threat to countries of the region, and the United States should avoid responding primarily in a military fashion. Moscow is not likely, in the current political climate, to encourage land wars in Asia such as a Vietnamese attack on Thailand or a North Korean invasion of South Korea. In each case, Moscow would have to calculate that China's vital interests might be at stake and that Peking would not tolerate Vietnam or North Korea starting a war on its doorstep. Similarly, Moscow is not likely to use its navy to undermine governments in the Pacific or Southeast Asia. However, Moscow will certainly exploit local political conflicts for its own advantage, for example, in the Philippines, and it will take advantage of strong antinuclear sentiments prevailing in many Asian countries, including Japan, Australia, and New Zealand. But these are political challenges, and the United States should adopt sophisticated political responses in return.

If one calculates that China will remain friendly with the United States and Japan into the 1990s and that Japan will gradually expand its military capabilities and take on a larger security role in the Western Pacific, the United States should be able to return to an offshore defense strategy in East Asia without increasing the risk of a military challenge there from the Soviet Union. Washington should rely primarily on naval power to maintain its political influence in the Pacific area and should also retain air bases in Japan and the Philippines to caution Moscow against the use of its navy and air force to intimidate East Asian countries. It should not be necessary, however, to station American ground forces in Korea or any other mainland area. Washington should continue to sell military equipment and technical assistance to friendly states such as Thailand, Indonesia, South Korea, and

China. A significant product of an offshore defense strategy would be a sizeable reduction in U.S. ground forces stationed in the Western Pacific, including Marines based in Okinawa.

U.S. policymakers need to accept the reality that Congress and the American people are not willing to have the United States act as guardian of every East Asian country if this requires intervention with U.S. forces when regional states are subjected to pressure from hostile neighbors and local insurgencies. Specifically, North Korea and Vietnam are Asian regional threats and need to be dealt with by Asian regional powers. For example, South Korea clearly has the capability to provide a much greater defense of its own territory against North Korea. Its population is more than double that of the North, and its GNP is nearly four times larger. South Korea has well-trained armed forces numbering 600,000, many with Vietnam combat experience. It has the resources to increase this number to 1 million, if necessary, to deter another North Korean attack southward. Although the United States must be willing to respond to a direct Soviet challenge in Northeast Asia, it is unlikely Congress will again support U.S. military intervention in any Asian country that is not directly attacked by the U.S.S.R.

If one accepts the view that the United States no longer has vital interests at stake on the Asian mainland in the 1980s and 1990s, what can be done now about the 40,000 American combat troops that remain in South Korea 33 years after the Korean peace agreement was signed? The reality is that U.S. interest in Korea today is a derivative one based on the truly vital economic and security interests the United States has in Japan's security. Unlike the situation in 1950 whereby U.S. troops were first sent to Korea, or in 1954 when a Korean peace treaty was signed, China and Japan, and China and the United States today have good working relations that are designed to contain Soviet power in Asia. China and Japan are in the process of overcoming a half-century of animosity and have developed good economic and political relations. Peking maintains diplomatic ties with the North Korean Government, and recently it has shown a willingness to conduct limited negotiations with South Korea. Given the present relationship between Japan and China, the United States should ask these two Northeast Asian powers to take on a major responsibility for keeping the peace on the Korean Peninsula while the United States confines its military presence to Japan, the Philippines, and Australia. For historical reasons it may be difficult for Japan to assume a direct security role in Korea. This should not, however, dissuade the Tokyo government from strengthening its political relationship with South Korea and working toward an accommodation between the Pyongyang and Seoul regimes. China should be encouraged to exercise its influence with North Korea to avoid armed incursions into South Korea.

The United States should announce its intention to withdraw its ground forces from South Korea by 1990, leaving only a small U.S. contingent there,

primarily Air Force units. Washington should make clear to North and South Korea that it will honor its commitment to help South Korea if it is attacked; but it should emphasize that its obligation in the 1990s should not entail the continued presence of U.S. ground forces on the Korean peninsula. South Korea has a large, well-disciplined and well-equipped army, and it has the manpower and economic resources to increase its defenses as the United States withdraws. Japan will continue to provide air and naval surveillance in the Sea of Japan and around the Korean peninsula, and the U.S. Air Force in Japan and remaining units in Korea will be nearby in the event of an emergency.

What risks might Washington chance by withdrawing ground troops from Korea? Such action might embolden North Korea to think it could again overrun the South by force and unite the peninsula under Pyongyang's control. It is conceivable that China would refuse to be involved in efforts to restrain North Korea if it decided to attack the South. Arresting a North Korean attack would be left to Japan and the United States and would be difficult without U.S. combat presence in Korea. Withdrawal of U.S. forces from Korea may also embolden Moscow to increase political pressure on Japan and China. These are possibilities, but none of them is likely to occur so long as China continues a détente relationship with the United States and Japan and Washington maintains strong naval and air forces in the Western Pacific and Sea of Japan. Moreover, it is highly unlikely that North Korea would risk a full-scale attack on South Korea unless it had strong backing from Moscow. Such support is not likely to be given unless the Soviet leadership is prepared to risk a far wider war with the United States.

The Philippines poses another problem for the offshore defense strategy. Here the United States faces a crucial test of its ability to assist a former colony and long-time ally to recover its political and economic health after more than a decade of dictatorship and plunder by ex-President Ferdinand Marcos. A growing Communist insurgency threatens that country, and it will require monumental efforts by the government of Corazon Aquino to prevent its descent into political chaos. In the process, the United States could lose two key military bases in the Western Pacific—Subic Naval Base and Clark Air Force Base. These two installations are regarded by the Defense Department as crucial to the projection of U.S. power in the Western Pacific and Indian Ocean. They may be irreplaceable; yet, the uncertain political future of the Philippines makes it desirable that the United States not wait until the expiration of its bases agreement with the Philippines in 1991 to begin building alternative military facilities in the Pacific.

Although retention of Clark Field and Subic Bay clearly is important to long-range U.S. security interests in East Asia, particularly because of their size and location, it is possible that the current Philippine Government will

ask for termination of the bases agreement. Corazon Aquino campaigned on a platform of phasing out these American bases, but she may change her mind and conclude that the bases are important to her country's security as well as to the security of other Asian countries. However, it would be too risky for the United States to base strategic policy on this expectation. Washington is now considering the establishment of new bases in Guam, Tinian, and Palau to the east of the Philippines, even though the cost of construction will be great. Also, alternative bases in the Pacific will not enjoy the supply of skilled manpower available in the Philippines. An alternative bases plan should be pursued so that when negotiations with the Philippine Government commence in the next year or two, the United States will not be without a realistic fallback position.

The United States also has an important historical reason for helping the Philippine people rebuild that country's democracy. This was once a showcase for how American colonial rule could foster democratic institutions in an Asian country and prepare it for independence. The martial law period imposed by President Ferdinand Marcos was an embarrassment to the U.S. Government, and the Reagan administration belatedly acknowledged this moral dimension of American policy when it decided in 1985 that new democratic leadership was needed to prevent the Philippines' decline into chaos. The dilemma for U.S. leaders is whether they can achieve both democracy and military bases. By 1991 a tough choice may have to be made.

In Southeast Asia the United States has an enduring interest in fostering economic growth and political stability, but it does not have a vital security interest in this region and should not, therefore, contemplate reintroducing U.S. combat forces except in the case of general war. Thailand, which has a residual defense relationship with Washington stemming from the Manila Pact of 1954, poses a policy problem because of sporadic border clashes between its troops and Vietnamese forces occupying Kampuchea. Presidents Carter and Reagan reiterated the U.S. commitment to defend Thailand should it be attacked, but the means of doing so remain discretionary under the Manila Treaty. The United States should continue to give Thailand strong diplomatic support and military assistance to strengthen its defense capabilities; but Thailand should not be led to believe that U.S. combat forces will again be sent to its defense against a local threat in Southeast Asia.

Indonesia is another country that is important to the United States for political and economic reasons. It is the largest and most richly endowed land in Southeast Asia and, with Singapore and Malaysia, guards the strategic Malacca Strait between the Indian Ocean and South China Sea. However, Indonesia and Malaysia do not have treaty arrangements with the United States and there is no reason why they should be considered vital to U.S.

security interests. Non-Communist Southeast Asian states associated in ASEAN are important to the United States because of their economic and political influence in Asia. Yet, these states (except for the Philippines) should not be considered vital security interests of the United States, and U.S. policymakers should resist the temptation to be drawn into military conflicts there.

In the Southwest Pacific, the principal security problem for U.S. policy is the growing antinuclear sentiment in Australia and New Zealand. In mid-1986, Washington broke its ANZUS relationship with New Zealand because it refused to allow U.S. Navy ships to make port calls unless Washington declared that they carried no nuclear weapons. The Reagan administration sought unsuccessfully to persuade the Lange government to change its position and then broke off security relationships with Wellington. This sharp U.S. response to New Zealand's policy was conditioned by Washington's concern over potential reactions in other allied countries—notably Japan and the Philippines—should the United States bow to antinuclear sentiments in one state, such as New Zealand. The ANZUS relationship, therefore, became expendable in light of the larger U.S. strategic interest in Asia. With New Zealand now out of the alliance, there is danger that antinuclear sentiment in Australia will grow and eventually affect that government's policy toward the U.S. defense relationship. Consequently, it is imperative that Washington deepen the relationship with Australia and take greater notice of Canberra's political and economic needs. This might include coproduction in certain defense procurement arrangements and other economic measures.

During the remainder of this decade and into the 1990s, the United States will continue to be a major Pacific power and will also exercise great political influence in East Asia and the Indian Ocean area. However, the United States is no longer willing—for historical and financial reasons—to carry the East Asian security burden alone, as it did from 1950 to 1972, and as some think it should continue to do. Washington, therefore, needs to persuade other Asian countries to share the defense responsibility as Soviet naval power expands in the 1990s and the Soviet leadership plays a larger political role in East Asia. Similarly, U.S. policymakers should encourage all states in East and South Asia to work out political arrangements to protect the flow of oil from the Persian Gulf through the Indian Ocean to markets in Europe as well as East Asia. This is not a role that the U.S. Government can be reasonably expected to play alone, no matter how large a naval force it deploys to that area. Reducing the level of U.S. military commitments in, and the economic resources devoted to the security of, East Asia will not occur until political leaders in Washington make a fundamental decision to return the United States to an offshore defense strategy, a shift which is now overdue.

Notes

1. The new emphasis on seeking to define national security priorities is illustrated by a 40-page White House publication issued in January 1987, entitled: *National Security Strategy of the United States.* This assessment of national interests and national security policies was required by Congress as part of the Defense Reorganization Act of 1986.

2. As defined here, *a vital national interest* is one that is so important to a country's well-being that it will risk armed conflict in order to persuade another state to alter a threatening action or policy. See Donald E. Nuechterlein, "The Concept of National Interest: A Time for New Approaches," *ORBIS*, Spring 1979, pp. 84-85.

3. Dean Acheson, *Present at the Creation: My Years in the State Department* (New York: Norton, 1969), pp. 356-357.

4. SEATO went out of existence after the conclusion of the Vietnam war in 1975. Pakistan had previously withdrawn, following its war with India in 1971.

5. Dwight D. Eisenhower, *Mandate for Change 1953-1956: The White House Years* (New York: Doubleday, 1963), pp. 352-354.

6. Arthur M. Schlesinger, Jr., *A Thousand Days: John F. Kennedy in the White House* (Boston: Houghton Mifflin, 1965), pp. 546-548.

7. Lyndon B. Johnson, *The Vantage Point: Perspectives of the Presidency, 1963-1969* (New York: Rhinehart and Winston, 1971), pp. 151-153.

8. Richard M. Nixon, *RN: The Memoirs of Richard Nixon* (New York: Grosset and Dunlap, 1978), pp. 394-395.

9. ASEAN originally consisted of five countries: Malaysia, Singapore, Indonesia, Thailand, and the Philippines. In 1984 the new state of Brunei in North Borneo became the sixth member.

The Maritime Strategy in the Western Pacific

Edward A. Olsen

The Maritime Strategy, a well-known approach to U.S. strategy, has generated considerable controversy. Part of that debate will be evaluated here, but the primary focus of this analysis will be the impact of The Maritime Strategy on the Western Pacific. Before addressing the realities and prospects of that strategic perspective's place in Asian-Pacific affairs, it would be useful to briefly review the evolution of maritime strategic affairs in the Western Pacific.

As a maritime zone, the Western Pacific encompasses the coastal waters of two Asian subregions that are being recognized increasingly for their dynamism. In Northeast Asia, Japan's economic power and China's gargantuan proportions loom large in world affairs, though experts differ as to whether both truly deserve the prominence they receive. The Korean Peninsula is a nexus of international tensions. Led by the ASEAN States, Southeast Asia is being transformed into a new center of economic importance. Both subregions have earned strategic value in the eyes of major regional powers and the superpowers by virtue of the capabilities, potentialities, and geographic configurations of its states. Additionally, far offshore the Asian continent lay the large oceanic states of Australia and New Zealand, and numerous slowly developing island ministates. Until the early 1980s, much of Oceania had been widely considered utterly remote from world centers of power, but the changing nature of the larger Pacific rim economic and strategic balances has sharply boosted perceptions of this still distant and dispersed subregion of the Western Pacific.

From both an internal and external perspective, the concept of a maritime strategy is not new in the Western Pacific. Except for continental China, with its broad cross-regional access, all the littoral states of Asia have had to place considerable reliance on seaborne communication. Though few of these states developed a major maritime tradition, most have been cognizant of its importance throughout their histories and have an appreciation for such

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traditions. While several ancient Asian kingdoms and dynasties cultivated the strategic aspects of maritime affairs for trade, colonial expansion, and the export of culture and religion, in only one—Japan—did that perspective remain viable into the modern era. As Western culture produced Mahan and other maritime-oriented geopolitical thinkers, the Japanese produced their own counterparts—Satō Nobuhiro (1769-1850) being the most notable. However, with these exceptions, Asian strategic affairs remained primarily continental over the ages. Asia's martial and diplomatic traditions clearly are stronger than its naval traditions. Whether in the Sinified or Indic cultural realms, the respective intellectual descendants of Sun Tzu and Kautilya had little to learn from Clausewitz, a decided latecomer from their perspective.

Seafaring Western imperialists took it upon themselves to remind the land-oriented Asians of their seaborne vulnerabilities. Nearly all expansionist Europeans and Americans came to Asia by sea. Only the czarist Russians traversed the broad Eurasian landmass to challenge Asia from the rear, using seaborne avenues as a flanking approach to compete with the other imperialists. The maritime assaults on Asia's largely unprepared nations produced an era of Western dominance. Except for the Japanese, who speedily learned to play the imperialists' game by imperialists' rules, Asia succumbed to colonial subjugation or semicolonial intimidation.

Imperial Japan's rise to become prewar Asia's leading indigenous power and its disastrous fall in World War II, is the story of two successful but rivalrous services: the army and the navy. That story is important because it is symbolic of much of modern Asia's strategic dichoromy. Japan's army succeeded beyond the wildest hopes of most Japanese. Its navy was, if anything, even more successful. However, they could not cooperate very well strategically or politically. In effect, Japan had two strategies: one for land, one for sea. Had Japan's seaborne strategy been able to dominate its continental strategy, especially in Tokyo's policymaking councils, a plausible argument can be made that Japan's prewar and wartime aggressive exploits would have had better prospects. Japan suffered from a lack of coordination, compounded by the army's tendency to rashness. While the details of Japan's successes and failures are not particularly pertinent to the experiences of other powers, the principles entailed are very relevant. Without knowing it, Japan was exemplifying, in Asia, the geopolitical principles and tensions embodied in Mackinder's heartland doctrine, Spykman's rimland doctrine, and Mahan's ideas of seapower as a controlling factor. The key question inherent in this mix of ideas is whether one approach can dominate another.

In the course of WWII the United States tacitly faced up to this question in the form of a two-pronged assault in the Central and Southwest Pacific. Partly as a result of earlier experiences of the U.S. Army and Marine Corps with land combat in Asia (China, the Philippines, and Siberia) and partly as a result of Japan's bitter experiences attempting to conquer China in the 1930s,

a deep-seated apprehension about, and aversion to, land wars in Asia entered into the U.S. military mind-set. The long-standing interest of the U.S. Navy in Pacific affairs and logical naval arguments about the advantages of mobility reinforced Army views in Asia. Against this background the emergence of the flexible island-hopping approach of MacArthur and the Pacific Fleet underscored a lesson that contemporary American strategic thinkers would do well to recall: namely, that the concept of maritime strategy is not synonymous with naval strategy. At its best, maritime strategy should not be considered exclusively naval because it necessarily includes naval, air, and ground combat and support forces operating in a maritime context. For all of MacArthur's reputation as a parochial glory-seeker, he nonetheless produced in WWII and Korea a strong maritime paradigm of air, ground, amphibious, and naval operations. His approach to war in the Pacific set him apart from his European theater contemporaries who displayed less understanding of such combined operations. In the Pacific the United States clearly came down on the side of the rimland-seapower approaches to geopolitics and strategy.

In the postwar period, the emergence of superpower bipolarity reinforced those tendencies. Despite the growth of strong continental commitments in Western Europe and Asia, the U.S. approach remained primarily one of control of, or influence over, the Eurasian rimland and the waters surrounding it. That is the essence of the whole exercise in postwar "containment" policy. The linkages and coordination between diverse global U.S. commitments since 1945 have been profoundly *maritime* in the best eclectic sense. Postwar U.S. strategic policy has been the joint legacy of Mahan and Spykman in response to fears that a Eurasian land power might achieve the continental dominance described by Mackinder. The fact that Soviet strategists had relocated the center of the "heartland" far to the east of Mackinder's locus is irrelevant, for the danger remained intact.

Gradually, several changes occurred in U.S. and Soviet strategic thinking. Partly as a result of the juxtaposition of the U.S. Army's successes in Europe, via deterrence of a war with the help of its NATO allies, and its reverses in Asia (Korea and Vietnam), the ground elements of U.S. grand strategy began to dominate the European theater and decrease in the Asia-Pacific region. The latter resulted in a reinforcement of the U.S. aversion to Asian land wars. Except for the unique circumstances in South Korea, where the continentalism of NATO doctrines is faintly echoed, the U.S. presence in the Western Pacific has intensified its maritime orientation. For a time in the mid-1970s, that regional orientation assumed an even more fluid aspect as notions of a so-called "swing strategy" were shunted about as though the Asia-Pacific theater were merely a corollary of the Atlantic-European theater.

Many Eurocentric Americans have often made such implicit assumptions, resulting in the sorts of priorities that MacArthur had to contend with in WWII, but presumably had been obviated during the 1960s and 1970s by the growth of worldwide U.S. commitments. Two things altered the resurgence of such cavalier U.S. attitudes toward the Asia-Pacific region. Most basic was the belated recognition by the United States of the intrinsic importance of certain big countries in the region, notably Japan, but increasingly the "new Japans," which clearly are as important as our European allies. The shift in U.S. world trade patterns from the Atlantic to the Pacific during the 1970s underscored the new realities. More narrowly, the United States found itself facing a newly reoriented Soviet Union that was shifting its emphasis, economically and strategically, toward Asia.

Despite the far more profound significance of the shift toward what many have taken to calling the birth of a "Pacific century," it was the Soviet responses to the emergent realities that sparked a U.S. strategic reassessment. The wisdom of these U.S. priorities may have been questionable, nonetheless, the results were positive because they led the United States to pay proper attention to an increasingly crucial region of the world. Out of this larger U.S. response has grown "The Maritime Strategy." But why "maritime"? Is it because of the long, local antecedents cited above? In part it is, of course, but in equal measure the nature of the U.S. response is attributable to the newly maritime nature of the Soviet strategic buildup. Under the leadership of Admiral Sergei Gorshkov, the loose Soviet equivalent of Mahan, Moscow had been building its own blue-water navy with a vengeance. That buildup had been occurring for years.[1] Despite the lengthy developmental process, non-Soviet experts on the Soviet Navy remained divided over its purposes. Uncertainties focused on whether Moscow had a clear-cut intention for its new naval forces and precisely how those forces related to Soviet grand strategy. Many U.S. specialists in the field remain doubtful as to whether it is proper to even speak of Soviet naval strategy in the way that phrase often is applied to Western navies. Complicating these uncertainties are the disputes among Western Soviet watchers and defense analysts over the ability of the U.S.S.R. to sustain a continued military buildup, the strengths and weaknesses of the Soviet economy in the midst of Gorbachev's "reformist" measures, and the extent to which such measures are true "reforms" or merely window dressings.[2] Security analysts should be prudent in evaluating these variables.[3] Be that as it may, it remains clear that the Soviet Navy is a much more formidable force than it was in the past.

Most important for the Asia-Pacific region is the greatly increased presence of the Soviet Navy in the Western Pacific.[4] Coming from virtually nowhere, relative to the postwar U.S. naval presence in the Pacific, Moscow has created a Pacific fleet with over 800 vessels of all types. This fleet, the U.S.S.R.'s largest, clearly has some purpose. Whether that purpose is a

relatively benign effort to show the flag or a precursor of more ominous plans, it marks a major change in Soviet strategy. No longer largely a global ground and air power, the U.S.S.R.—despite limitations—is now a world-class maritime power. If it has not been Moscow's intention all along, it seems only a matter of time before the U.S.S.R. will try to take simultaneous advantage of being the Eurasian continent's dominant land power and its largest naval power. The U.S.S.R. inherited from czarist Russia a fixation with the insecurity of its borders. This accounts for its almost paranoid preoccupation with security. If the Soviet naval buildup in the Pacific presages an active effort to secure its far-flung interests in that region of the world, the United States and its allies in the Western Pacific may be in for a new round of tensions. Clearly the Pacific is no longer an American "lake."

Characterization of the Pacific as a U.S. "lake" has been so widespread in the postwar period that we Americans and our allies have grown accustomed to it. A large degree of complacency evolved in that era. All that was shocked severely in the wake of the Vietnam war as, within a decade, the number of Soviet Navy vessels mushroomed and access to bases increased. It now enjoys first-rate sovereign facilities on its Japan Sea, Okhotsk Sea, and Pacific coasts. It also enjoys substantial access to former U.S. facilities in Cam Ranh Bay, Vietnam, allowing the U.S.S.R. to engage in a limited version of a "swing strategy" by deploying to both the Pacific and Indian Oceans. The still uncertain durability of U.S. access to its Philippine bases makes the U.S.S.R.'s Southeast Asian presence potentially that much more important. Moscow appears on the verge of obtaining new access in North Korea too.

To date, the expanded Soviet naval presence in the Asia-Pacific region has not been used in an overt military fashion. At most it has been used as a relatively discreet form of gunboat diplomacy, hoping to favorably influence states in the region. However, the naval potential for active intimidation, intervention, and interdiction is very real. While all this has proved upsetting to U.S. strategists and helped realize a reappraisal of U.S. policy, U.S. allies and nonaligned states have accepted the changes with greater equanimity. Unlike American leaders who often have short historical memories, most Asian leaders have never assumed that the U.S.S.R. has no legitimate place in Asian affairs. That difference in perspective has some major implications for U.S. policy in Asia that shall be addressed below. For now, however, we shall examine what the U.S. response to the Soviet naval buildup means for the Western Pacific.

Many experts have dissected the specifics of "The Maritime Strategy," so there is no need to reinvent that wheel here. The most important recognition for a regional affairs analyst is that the approach remains controversial. Precisely what "The Maritime Strategy" is (and is not) remains remarkably ambiguous for something which has been around for

some time now. As noted, the United States long has had *a* maritime strategy, but what is referred to as "*The* Maritime Strategy" is a product of the Reagan administration's first and outspoken Secretary of the Navy, John Lehman. He was the most prominent proponent of this latest version of U.S. maritime strategy.[5] Under Lehman's direction this version of The Maritime Strategy was brought to center stage and fleshed out considerably.[6]

This strategy probably has generated more controversy over the administration's defense policies than any other issue except for arms control. The controversy has centered on critics' perceptions of The Maritime Strategy as either a unilateralist military manifestation of a more assertive "Reagan Doctrine" out to engage the "evil empire," or merely a rationale for the U.S. Navy to grow to a 600-ship abstraction and reassert its presence as the "senior service." Some critics have been extreme,[7] while others have been balanced and judicious in their statements,[8] but both have been critical. What most critics and even some proponents of The Maritime Strategy do not adequately convey in their writings is that this latest version of U.S. strategy is part of an evolving process. It has a strong past from which it is a lineal descendant.[9] More important, in terms of countering premature criticism of the current version of U.S. maritime strategy, more conceptional work is needed.

As a strategy it is an evolutionary process, not a definitive document, though it is often treated as a final product in the media. There is no strategic cookbook labeled "The Maritime Strategy" on the bridge of every U.S. Navy warship that captains may consult in the event of war; nor is there likely to be one any time soon. This is important to bear in mind as one evaluates the role of critics and supporters alike. While The Maritime Strategy clearly has many supporters among the blue-suiters who will carry on the naval cause long after the Reagan-Lehman team is history, it also has some blue-suited doubters[10] who share some of the concerns expressed by civilian, Army, and Air Force strategic kibitzers.

Actually, most of these concerns focus on the issue of The Maritime Strategy as an excessively "unilateralist" and excessively "naval" approach. Anyone who delves into the broad implication of The Maritime Strategy should be able to discover for themselves that such concerns need not be debilitating. As noted earlier, no maritime strategy can be solely naval. By definition it embodies all service branches. The question causing difficulties seems to be one of interservice rivalry. Though that may never be eliminated, it should not be insurmountable. After all, the various military branches serve the same national interests. As long as parochialism is sublimated for the national interest, there is no reason a (or "The") maritime strategy cannot be the "coordinating" core of U.S. strategy. Postulating such a role in no way diminishes the fundamental contributions of ground or air power, it merely admits the necessity of flexibility and speed in U.S. responses to crises. Since

the oceans of the world are the only continuous links operationally tying together far-flung regions in which the United States has commitments (and some where it does not but where conflicts could emerge unexpectedly), it is not unreasonable to think of grand strategy in maritime terms. None of this casts doubts on the interdependence of all the U.S. services or the principle of "jointness."

The question of unilateralism also is a serious one, but, in many cases, it should be seen as a strawman. While U.S. rhetorical flourishes about "standing tall" in the face of aggressive Soviet behavior and arms buildup has generated much criticism of the Reagan administration for allegedly aspiring to a "Rambo" style, a close examination of existing U.S. strategy clearly shows that U.S. "unilateralism" is profoundly dependent upon the collective security arrangements Washington has fostered since 1945. Washington's options are sharply constrained by the willingness of friends, allies, and neutrals to behave the way U.S. planners and policymakers assume they will. While the United States can do, and has a perfect right to do, virtually whatever it wants in unilateral defense of the homeland, there is very little the United States can do in defense of overseas interests without the active cooperation of the country or countries whose territories are the locale of some proposed armed action.

Since the principle behind contemporary maritime strategy entails a forward deployment of U.S. forces ready to take the battle to the Soviet homeland and its offshore deployments, it is difficult to imagine this in terms of narrowly defined limited war. At the least, such a prospective armed engagement would tread near the threshold of a theater nuclear war, if not world war III. The whole point of engaging in such forward deployments is to be capable of reacting in ways that will minimize the need to cross that threshold. By no known definition can any conceivable resort to combat, based on The Maritime Strategy as it is presently configured, qualify as "short-term actions of a relatively small scale." Consequently, there are always some U.S. assumptions about the ability and willingness of allies to either lend a helping hand or not impede U.S. actions.

The probabilities of such maritime and political cooperation in the Atlantic, while somewhat more certain than those for Asia, are beyond the purview of this analysis. The naval capabilities of U.S. friends and allies in Asia are easy to ascertain.[11] No country in the Western Pacific possesses major naval forces yet. Japan's are the most important and its potential for creating truly major naval forces is considerable. However, unlike the Atlantic-NATO theater, the United States has not had much need for overt assistance in the Pacific, though that, too, may change if the U.S.S.R. manages to free itself from the constraints of the Japan and Okhotsk Seas.[12] If this occurs, the United States clearly will need overt assistance from Asia-Pacific supporters as it now does for the defense of West Europe and the

northeastern Atlantic. Because this strategic breakout by the U.S.S.R. is a real possibility, U.S. allies ought to be encouraged to create such capabilities. The problem associated with getting allies to build such capabilities is the same problem that causes a political dilemma for forward deployed U.S. forces with an assertive strategic mission: U.S. and allied threat perceptions do not necessarily coincide or even overlap. Compounding this problem is the trouble caused by the perception of, or confusion over, precisely what an assertive strategy—such as The Maritime Strategy—really means.

Given the wide array of U.S. opinion about The Maritime Strategy, it is no surprise that allied and friendly states might not be certain about what the United States intends to do and what such actions might mean for them. Some U.S. observers have expressed concern about the inadequacies of U.S. preparations for Third World contingencies in a strategic environment that focuses so heavily on the Soviet threat.[13] I think that concern should be expanded to examine *all* contingencies because the role of potential supporting actors in U.S. actions against the U.S.S.R. or any other state is inadequately considered. It is my experience that strategic planners and war gamers often make decidedly shaky assumptions that allies will see adversaries the way Americans do and will react the way we expect them to. Their assumptions may be most seriously flawed by unrealistic expectations of the allies readily granting access to their territory for U.S. use or transit in actions against the Soviet Union. There are numerous examples of such divergent views,[14] but the case of Japan provides egregious instances of unrealistic assumptions. If countries like the People's Republic of China (PRC) and South Korea, which harbor strong reasons to follow anti-Soviet postures, do not actually pursue overtly such policies and cannot be counted on to rally automatically to the American side in armed struggle against the U.S.S.R., it does not take much imagination to discern that Japan may be even less responsive.

As noted above, many Asian states are more willing than the United States to accept the U.S.S.R. as a legitimate participant in Asian-Pacific affairs. That is profoundly true of Japan. This is not to suggest that Japan likes or desires a major Soviet role in the region. Most Japanese are well aware of the problems the U.S.S.R. and its czarist predecessor have caused for Japan. Similarly, most Japanese are even more aware than most Americans of a palpable offshore Soviet threat. There is a great deal of ill will in Japan-Soviet relations. Moreover, Japan has taken a number of concrete steps to build up its self-defense capabilities, largely in response to U.S. urging that Japan more squarely confront the Soviet challenge. Tokyo's latest defense white paper was more explicit in that regard than most of its predecessors.[15] In the face of well-known Soviet opposition to SDI, Tokyo's decision to cooperate with the United States in SDI research sent a major signal to Moscow.[16] Furthermore, the Gorbachev regime's decision to improve its diplomatic image in Tokyo in

the wake of his July 1986 Vladivostok speech has received a lukewarm reception from most Japanese.[17] Despite all this, Japan's view of the Soviet threat is very different from that of most Americans and not truly in harmony with the Reagan administration's worldview that gave birth to, and nurtures, The Maritime Strategy.

There is no intrinsic reason why The Maritime Strategy cannot obtain allied understanding and support if it is properly explained to those allies. More convincing effort should be expended in that regard. Moreover, that effort cannot be relegated solely to a strategic "sales pitch" by the United States because the product almost certainly would not sell if handled that way. The United States is engaged in a diversified competition with the U.S.S.R. in the Asia-Pacific region, and the U.S. strategic message must be integrated into a broader context if it is to be believable and persuasive. As noted, the post-Vladivostok speech era in Asia has opened a new round of "peace offensives" by a Gorbachev regime that is more sophisticated than its heavy-handed predecessors. Sino-Soviet ties are improving in fits and starts, but the trends are upbeat.[18] U.S. naval access to PRC ports,[19] a graphic symbol of improved U.S.-PRC strategic cooperation, needs to be kept in perspective. None of that cooperation means that Beijing is necessarily in any greater harmony with Washington's views of the Soviet Union's threat potential than is Tokyo. We should not, as we are prone to, make premature assumptions about the existence of "common" security interests in U.S.-PRC strategic relations.[20] They will not come into existence merely because they are logical or because some Americans desire them. Actually, a better case can be made for incremental U.S.-Japanese strategic convergence, *vis-à-vis* a Soviet adversary, than for any sort of U.S.-PRC convergence. The latter seems nonexistent, with poor prospects.[21] U.S.-PRC parallelism is a more appropriate way to conceptualize what exists and is likely to remain in our strategic relations.

If the United States has problems in convincing its major ally, Japan, and its major defacto quasi-ally, the PRC, that Washington's view of Soviet intentions in Asia and the Pacific is a sound and prudent viewpoint, it has even greater problems in Southeast Asia and Oceania. When Washington tries to stress strategic affairs with East Asian states it gets a somewhat sympathetic hearing tinged with overt displays of tolerance for American ideological preoccupation with Moscow's sinister qualities. These states can grasp that the U.S.S.R. might do what Washington suggests it is preparing to do, but they often do not see the threat as being quite so imminent. They clearly require much more convincing about the threat before the United States can rely on them to respond, as we often assume they will.

The non-communist states of Southeast Asia and Oceania generally are even less disposed to see the world as Washington does. In both subregions the United States is engaged in a far more complex and nuanced contest with the

U.S.S.R. In Southeast Asia, Moscow, Beijing,[22] Tokyo, and Washington are *all* seen as major influences that need to be kept in rough balance. Most pointedly, Washington is not considered any more virtuous than Moscow. Both are seen in terms of assets and liabilities that should be balanced to local advantage. As much as Washington might like to portray Moscow's ambitions in the larger region in ways that would arouse support for U.S. positions—strengthen the durability of the U.S. presence in the Philippines and bolster the ASEAN States' defense consciousness—that line is rarely persuasive. Consequently, the selling of The Maritime Strategy in Southeast Asia is vastly complicated by inherent customer resistance on the part of the majority of Southeast Asians who seek nonalignment and freedom from superpower conflict.

What is true of Southeast Asian reluctance to be entangled can be multiplied for much of Oceania. This probably is the most vulnerable subregion in the Western Pacific. Since the area is the epitome of "maritime," the relevance of a maritime strategy is unquestioned. However, *The* Maritime Strategy, as a forward deployed assertive display of U.S. Armed Forces, represents something anathema to many people in these small states which harbor profoundly nonaligned sympathies. Clearly, their pacesetter has become New Zealand. Wellington's antinuclear positions regarding the U.S. Navy have seriously disrupted the once quintessential tranquility of the ANZUS Pact. The Kiwi's policy may be a matter of "stop the world, I want to get off," but it remains intact despite U.S. pressures.[23] Against this background, there is little sympathy or readiness to understand The Maritime Strategy in those quarters. Hence, in an area essential for U.S. maritime operations, there is little willingness to sanction the long-standing notion that the Pacific is some sort of American "lake" where U.S. forces can operate freely. As a result, the vast stretches of the central and south Pacific are increasingly attractive for Soviet activism of the post-Vladivostok speech variety. The United States, Japan, and other Pacific rim states are concerned about these regional dynamics,[24] but much remains to be done to bring this region up to even the limited levels of understanding displayed in East Asia, much less attain the degree of empathy and cooperation that are desirable region-wide.

Lest the levels of understanding of, and cooperation with, The Maritime Strategy among Asia-Pacific states be seen as uniquely poor, one should recall that West European enthusiasm for U.S. strategic assertiveness toward the U.S.S.R. has been markedly restrained. The concept of "Atlanticism" has been shaken severely in recent years, putting NATO into some jeopardy from within.[25] If it were not for post-Reykjavik fears among the NATO allies about a U.S. nuclear policy shift that could leave West Europe less protected from the U.S.S.R. than it is accustomed to being,[26] NATO probably would be more troubled today than it is. Clearly, Atlanticism needs shoring up and U.S.

explanations of the common interests served by The Maritime Strategy could help that process as well as aid understanding of U.S. purposes. In the Asia-Pacific region, however, Washington starts much further back. There is no Pacificism to equate to Atlanticism. Even a weakened Atlanticism is way ahead of its Pacific counterpart. Hence, the United States can only hope to explain its strategic purposes in the Western Pacific and Asia (via The Maritime Strategy or anything else) if it first builds a more cohesive set of common perceptions of shared interests and Soviet threats to those interests. Such perceptions are required for Pacificism to emerge. Without it, U.S. assumptions about allies, friends, and neutrals will remain flawed because of unreal and wishful thinking. The cultivation of such perceptions is not necessarily difficult; however, it will require the attention and coordination of both the policymaker and strategist. The task should be given a much higher priority than it now enjoys.

Notes

1. Literature covering this buildup is broad, but most of it remains classified. Among the most useful unclassified works are Sergei G. Gorshkov, *The Sea Power of the State* (Malabar, Fla.: Kreizer, 1983); James M. McConnell, *The Gorshkov Articles, The New Gorshkov Book and Their Relation to Policy* (Arlington, Va.: Center for Naval Analyses, 1976); and James L. George, ed., *The Soviet and Other Communist Navies* (Annapolis, Md.: Naval Institute Press, 1986). Two useful short surveys on the subject are "Sea Change in World Naval Power" and "Soviet Sea Strategy Murky to West," in *Insight*, 24 March 1986, p. 33 and 3 November 1986, pp. 30-31, respectively.

2. For an insightful analysis of those internal U.S.S.R. tensions, see Jan Vanous, "The Soviets' Dilemma: Will It Be Tanks or Tractors?" *The Washington Post Weekly*, 1 September 1986, p. 23.

3. The author adopted such prudence in two recent articles on U.S.-U.S.S.R. tensions in Asia. See his "The U.S.-U.S.S.R. Arms Race in Northeast Asia," *Journal of International Relations*, Winter 1986-87, pp. 171-187 and "Security in the Sea of Japan," *Journal of Northeast Asian Studies*, Winter 1986-87, pp. 48-66.

4. The author addressed that buildup and its possible meaning for Soviet policy in his "Vietnamese, Cambodian and North Korean Navies," James L. George, ed., *The Soviet and Other Communist Navies* (Annapolis, Md.: Naval Institute Press, 1976), pp. 335-351.

5. See John Lehman, "Rebirth of a U.S. Naval Strategy," *Strategic Review*, Summer 1981, pp. 9-15.

6. The best overall public statement of this strategy's diverse facets is in James D. Watkins, "The Maritime Strategy," U.S. Naval Institute *Proceedings* (supplement), January 1986.

7. Excellent examples of this harsh approach are Robert W. Komer, "Maritime Strategy vs. Coalition Defense," *Foreign Affairs*, Summer 1982, pp. 1124-1144; Jeffrey Record, "Jousting with Unreality: Reagan's Military Strategy," *International Security*, Winter 1983-84, pp. 3-18; and William M. Arkin and David Chappell, "Forward Offensive Strategy: Raising the Stakes in The Pacific," *World Policy Journal*, Summer 1985, pp. 481-500.

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9. A clear instance of this can be seen in a piece by a former "SECNAV," J. William Middendorf II, "American Maritime Strategy and Soviet Naval Expansion," *Strategic Review*, Winter 1976, pp. 16-25.

10. For a candid internal and personal, yet publicly available, assessment by a blue-suiter, see Stephen H. Clawson, "Narrowing Uncertainty About the Maritime Strategy," Unpublished Student Research Paper, U.S. Naval War College, Newport, R.I.: 10 May 1985. Available from Defense Technical Information Center (DTIC), Alexandria, Va., Doc. # AD-A165433.

11. One readily available and condensed source for such data is the regional review by J.V.P. Goldrick and P.D. Jones, "The Far Eastern Navies," U.S. Naval Institute *Proceedings*, March 1986, pp. 64-69.

12. This was the focus in Olsen, "Security of the Japan Sea."

13. For an example that examines the implications of this for The Maritime Strategy, see Michael Vlahos, "The Third World—U.S. Naval Planning," *ORBIS*, Spring 1986, pp. 133-148.

14. See, for example, the reservations of a Norwegian naval officer and aide to the Norwegian Defense Minister, in Jacob Boerresen, "Norway and the U.S. Maritime Strategy," *Naval Forces*, 1986, v. VII, no. VI, pp. 14-15.

15. *FBIS*, 8 August 1986, pp. C3-4.

16. *Christian Science Monitor* (hereafter cited as *CSM*), 10 September 1986, pp. 9-10.

17. For useful coverage of that interchange, see *Far Eastern Economic Review*, 13 November 1986, pp. 32-41; *CSM*, 5 November 1986, pp. 10-12.

18. See, *Far Eastern Economic Review*, 18 September 1986, p. 26.

19. *CSM*, 5 November 1986, pp. 10-12.

20. For a pointed example of this thesis, see John Lehman, "Successful Naval Strategy in the Pacific: How We Are Achieving It. How We Can Afford It," *Naval War College Review*, Winter 1987, p. 23.

21. Even more far-fetched is the notion that a Sino-Japanese security "orbit," "coalition," or "axis" is in the offing, apart from U.S. nexus. However, the orbit/coalition thesis was raised by Colin Gray in "Maritime Strategy in the Pacific: The Implications for NATO," *Naval War College Review*, Winter 1987, p. 18; and the axis thesis was raised by Robert Taylor, *The Sino-Japanese Axis: A New Force in Asia?* (New York: St. Martin's Press, 1985).

22. For interesting insights into the Sino-Soviet contest for Southeast Asian attention, see *CSM*, 24 October 1986, p. 11 and 23 December 1986, p. 9.

23. For an excellent rebuttal to New Zealand arguments, see U.S. Ambassador to New Zealand Paul Cleaveland's 15 April 1986 speech before the New Zealand Institute of International Affairs in the *Department of State Bulletin*, June 1986, pp. 74-78.

24. See, for example, Japan's views in *Far Eastern Economic Review*, 2 October 1986, pp. 26-28; and a Chilean view in Jose F. Merino, "Trouble in the Southern Pacific," U.S. Naval Institute *Proceedings*, December 1986, pp. 77-82.

25. There have been many learned articles on this disruptive trend, but for a useful condensation of the key issues, see Michael G. Eliott, "The Greatest Threat to NATO Could Come From Our Friends," *Washington Post Weekly*, 22 September 1986, p. 23.

26. For useful insights into European views, see *CSM*, 23 October 1986, p. 9.

New Delhi's Indian Ocean Policy

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New Delhi's concern for the integrity of its sea lines of communication and island possessions gained acceptance in the early 1960s. It was at that time that Indonesia began acquiring significant numbers of naval combatants from the Soviet Union, thereby providing reasonable evidence that Jakarta was interested in becoming a regional maritime power. This augmentation of naval security assets served as an underpinning for various Indonesian territorial aggrandizements, such as Jakarta asserting a claim to India's Nicobar Island chain. Bilateral relations worsened in 1965 when President Sukarno supported Islamabad in its war with India and dispatched a small flotilla of naval vessels to the port of Karachi.[1] With the collapse of the Sukarno government in 1966, relations between New Delhi and Jakarta took on a more harmonious tone. Nevertheless, these earlier threats and lesser challenges from Burma and Thailand highlighted Indian vulnerabilities. Indian leadership sees itself as the ascendant power in the region. This condition, in part, explains the Indian arms buildup and is the underpinning of India's Indian Ocean policy.

Viewing themselves as the major players in the Indian Ocean, senior Indian Navy (IN) officers became concerned over the size and composition of their fleet. One group entertained the view that IN procurement should focus on systems suitable for employment in waters contiguous to India's coasts. The opposition advocated development of a blue-water navy. This latter faction emphasized that the impending British withdrawal from areas east of Suez would create a power vacuum, allowing New Delhi to establish itself as principal security guarantor for Indian Ocean states.

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Today, Indian maritime strategy is not a contentious national issue. A consensus has formed, both within and without the Indian Navy, that New Delhi should seek to attain an ascendant power position in the Indian Ocean. Our motive here is to examine the several factors impelling adoption of the above policy alternative along with measures chosen by the Indian leadership to achieve their goals.

Indian Ocean Policy: Elements

New Delhi will most likely focus on the following elements to support its Indian Ocean policy:

- expansion of its arms inventory, including concomitant increases in maritime force projection capabilities;
- promotion of commercial interests in the Indian Ocean and broadened economic ties with Indian Ocean island and littoral states;
- protection of the lives and property of Indian nationals (and persons of Indian descent) resident in these states;
- reduction of the extraregional naval units in the Indian Ocean;
- neutralization of Pakistani securiry relationships with west Asian nations; and
- enhancement of Indian prestige and psychological factors.

Expanding Arms Inventory/Maritime Force Projection. Pakistan and China form the apex of New Delhi's threat hierarchy.[2] The Sino-Pakistani threat, in turn, has generated an Indian arms acquisition program that is out of proportion to any foreseeable threat from these states. Advanced weaponry procured by New Delhi includes: Soviet T-72 tanks, BMP infantry combat vehicles, MiG-23/27/Flogger fighter aircraft, IL-76/Candid heavy transport aircraft, and Mi-25/Hind helicopter gunships; French Mirage 2,000 multirole fighters; and Anglo-French Jaguar deep penetration strike aircraft. In addition, the Indian Navy today can successfully prosecute antishipping, antisubmarime, and amphibious warfare operations.

India's current military capability provides the necessary means to deal with both the Pakistani and Chinese threats. Therefore, the *ongoing* acquisition of sophisticated weaponry suggests that New Delhi now discerns a broader policy goal, one that includes the Indian Ocean and its periphery. Indeed, Indian force projection capabilities provide visible evidence of Indian aspirations to achieve politico-military predominance in the Indian Ocean.[3]

Commercial Interests in the Indian Ocean. Economic concerns play an important role in New Delhi's rationale for managing its Indian Ocean

security problems. India's 3,500-mile coastline, with more than 230 ports, and its significant mineral and fishing resources in its Exclusive Economic Zone remain vulnerable to seaborne threats.[4] For example, production at offshore oil fields satisfies nearly two-thirds of domestic petroleum requirements. Water contiguous to India's west coast contains deposits of phosphate, calcium, and barium, while manganese nodules have been discovered in many parts of the continental shelf.[5] India's economic development depends heavily on oceanic trade (increasing commercial activity has led to a concomitant expansion of India's merchant fleet, now numbering 700 vessels). Maintaining India's sea lines of communication thus forms a primary IN mission.[6]

New Delhi has placed considerable emphasis on broadened economic ties with Indian Ocean states. Joint ventures have proven a useful export promotion vehicle, yielding significant foreign exchange earnings. India's contribution to such undertakings includes the provision of plant, machinery, and technical expertise (typically in intermediate technology ranges). As of August 1984, India had established joint ventures with the following island/littoral nations: Malaysia (27 joint ventures), Singapore (20), Indonesia (12), Sri Lanka (12), Thailand (9), United Arab Emirates (9), Kenya (8), Saudi Arabia (3), Mauritius (2), Australia (1), Bangladesh (1), Kuwait (1). Indian technical consultancy services and civil construction firms are also employed throughout the region.[7] In this context, New Delhi hopes that economic involvement with west Asian states may induce Arab capital participation in its domestic enterprises in both public and private sectors.[8]

A novel element of India's regional trade relationships is the importance assigned to weapons/combat equipment export. Military sales were previously limited to small arms and ammunition; New Delhi now seeks consumers for light artillery, military vehicles, and electronics systems.[9] This export program is designed to augment India's foreign exchange holdings and lessen the dependence of Indian Ocean states on traditional arms sources.[10] Initial successes have been achieved, e.g., Iran has signed purchase agreements for large numbers of Indian-manufactured jeeps.[11]

New Delhi also has instituted a modest program of economic and military assistance to Indian Ocean states. As with arms sales, this undertaking serves to reduce dependence on Western and Soviet bloc aid, while increasing island/littoral state interaction with New Delhi—a politically acceptable alternative based on India's nonaligned status.[12]

Recurrent Threats to Overseas Indian Communities. Difficulties experienced by the Tamil minority in Sri Lanka evidence the vulnerability of Indian communities throughout the region. (Table 1 lists Indian nationals and foreign nationals of Indian descent residing in island/littoral states as of 1 January 1984. The number of Indians currently employed in west Asia has

Indians Residing in Indian Ocean Island/Littoral States

Country	Residents of Indian Origin
Australia	41,664
Bahrain	40,000
Bangladesh	452
Burma	300,000-400,000
Comoros	178
Djibouti	350
Ethiopia	2,960
Indonesia	20,000
Iran	20,000
Kenya	70,000
Kuwait	81,000
Madagascar	21,500
Malaysia	1,170,000
Maldives	126
Mauritius	697,000
Mozambique	20,707
Oman	160,000
Qatar	40,000
Saudi Arabia	197,100
Seychelles	612
Singapore	159,500
Somalia	1,167
Sri Lanka	1,027,862
Tanzania	50,100
Thailand	25,000
United Arab Emirates	250,000
Yemen (PDR)	100,000

Source: "Indians Residing Abroad," *Parliamentary News and Views Service* (New Delhi: Monsoon Session, 1984), pp. 16-21.

Table 1

probably decreased because of declining oil revenues and the efforts of these states to employ their own work force.) In addition to the ties of citizenship and national affinity, New Delhi's concern for the welfare of overseas Indian populations rests on commercial opportunities in Indian Ocean countries, foreign exchange revenues, and domestic politics. There is no evidence to suggest that New Delhi has influenced second-party trade policies by manipulating these communities, nevertheless they furnish a useful access mechanism for Indian entrepreneurs endeavoring to launch business initiatives. Indians residing abroad are an important source of foreign exchange, with remittances totalling $5 billion annually. Various strategies have been used to encourage investment in India by such persons—e.g., new deposits of maturities greater than 1 year and held in nonresident accounts provide significantly higher returns than local deposits of comparable maturities; nonresidents can purchase 12 percent, 6-year national savings certificates with no wealth, gift, or income tax obligation.[13]

Finally, the safety of Indians abroad has become an important domestic political issue. Thus, Sri Lankan communal violence has precipitated demands by Tamil politicians in India that the central government take coercive steps against Colombo. New Delhi's desire to protect overseas Indian communities has led to the adoption of two complementary policies, viz., broadened economic and diplomatic linkages with Indian Ocean states and an enhanced maritime power projection capability, allowing India to impose stability on some regional actors by military means.[14] Articulation of the "Indira Doctrine," asserting a right to intervene in the affairs of neighboring countries if internal disorder threatens Indian security, serves as a corollary measure.[15] Some commentators suggest that this principle be expanded to comprehend situations in which the lives and property of overseas Indians are at risk, even if Indian national security is not affected: "Mauritius, Seychelles, Maldives, and other republics and territories in the Indian Ocean littoral have substantial populations of Indian origin with strong cultural and emotional bonds to the subcontinent. They look to India not only for economic and technical assistance but also for their security. The security of these peoples is a legitimate concern for India."[16]

Presence of Extraregional Naval Units in the Indian Ocean. Indian Ocean deployment of naval combatants by extraregional states forms an additional Indian security concern. Perception of this threat was first occasioned by the positioning of the U.S. aircraft carrier *Enterprise* in the Bay of Bengal during the 1971 Indo-Pakistani war. The intervening years have witnessed a substantial augmentation of U.S. and Soviet regional maritime strength. In the case of the United States, it has stationed a carrier battle group in the Arabian Sea, upgraded its military installations on the island of Diego Garcia, and organized a rapid deployment force.[17] Soviet efforts to counter U.S. strategic capabilities in the area include, inter alia, acquisition of basing rights in Aden.[18]

New Delhi desires the withdrawal of U.S. and Soviet warships from the Indian Ocean. Most significantly, a materially reduced American and Soviet presence in the Indian Ocean would allow New Delhi to fill the resulting power vacuum (as the United States and U.S.S.R. filled the void left by Great Britain in the 1960s). This, in turn, would facilitate establishment of sponsor-client security relationships with island/littoral states. Indeed, government officials now discuss the possibility of demarcating a security zone encompassing both the Gulf of Oman and Strait of Malacca, with control of all Indian Ocean chokepoints as an ultimate objective.[19]

Pakistani-West Asian Security Relationships. New Delhi's concentration on Indian Ocean security issues, in part, arises from the need to limit

involvement of west Asian states—situated on the Indian Ocean periphery—in subcontinental affairs. Islamabad maintains a security presence with a number of Islamic nations—at least one augmented brigade of the Pakistani Army is stationed in Saudi Arabia, and servicemen have been seconded to other west Asian military forces as training program instructors.[20] These linkages increase Pakistani familiarity with advanced weapon systems and, more importantly, enhance prospects for third-party arms transfers during any future Indo-Pakistani conflict.[21] New Delhi is employing various measures to reduce the threat presented by Pakistani-west Asian defense ties—e.g., demonstrating consistent support for Arab causes in international forums, and alerting west Asian states to its growing military power through such mechanisms as port calls by IN warships.

Prestige and Psychological Factors. New Delhi's interest in controlling Indian Ocean affairs, with an attendant strengthening of maritime force projection resources, forms part of a larger effort to validate its image as an emerging middle power. Indeed, a number of Indian leaders now believe their country should assume a central position in world politics, and by upgrading its military and technological capabilities (the latter evidenced by the indigenous design and fabrication of satellite launch vehicles), they hope to induce similar perceptions by foreign governments. Such enhanced capabilities also serve to heighten national self-esteem, facilitated by extensive comment and analysis in the Indian press.

Indian Ocean Policy: Implementation Strategies

New Delhi's desire to become and be seen as the leading Indian Ocean power has lead to the adoption of the following measures:

- modernization and expansion of naval and naval aviation assets, the coast guard, and air force units performing maritime interdiction roles;
- provisions of defense training;
- economic/technical assistance to regional states;
- ship visits by the Indian Navy; and
- diplomatic initiatives.

Modernization of Naval Assets. The Indian Navy numbers over 70 combatant ships and approximately 50,000 men. It is the only fleet of an Indian Ocean nation to maintain an aircraft carrier. The INS *Vikrant* is a light carrier of the British *Majestic* class and although launched in 1945, it was not commissioned until 1961 and has since been refitted twice. The *Vikrant*'s air group includes British Sea Harrier V/STOL fighters and Sea King antisubmarine warfare (ASW) helicopters. Third-generation Sea Eagle air-to-surface missiles may be mated with the Sea Kings, furnishing a

significant antishipping capability.[22] The *Vikrant* is expected to remain in service until at least 1992. New Delhi recently concluded negotiations with Britain for the purchase of a second aircraft carrier,[23] and is interested in other capital ships, including Soviet Kresta-class guided missile cruisers.

Indian Navy air defense resources have been augmented materially by the acquisition of Soviet Kashin-class guided missile destroyers fitted with SA-N-1 surface-to-air and SS-N-2c surface-to-surface missile launchers. Some of these destroyers also carry KA-25/Hormone ASW helicopters. The Indian Navy has eight Soviet Foxtrot-class diesel submarines and these boats will be supplemented by six Soviet Kilo-class submarines. The first Kilo-class boat was delivered in the summer of 1986. Further, India is purchasing four SSK type-1500 submarines from West Germany.[24]

Construction of *Godavari*-class guided missile frigates—an Indian design based on the British *Leander*-class frigate—equipped with four surface-to-surface guided missile launchers, two Sea King ASW helicopters, a 76mm antiaircraft gun, and six antisubmarine torpedo tubes, forms another element of the Navy's acquisition program. Indian Navy modernization efforts also involve procurement of landing craft which supplement the existing inventory of six Polnocny-class LCTs and four LCUs.[25] Consequently, the Navy soon will be able to transport battalion-size formations along with armor and artillery support.[26] Coupled with these assets has been an increase in the frequency and magnitude of amphibious warfare exercises.[27]

The Indian Navy air arm consists of more than 35 combat aircraft and 20 helicopters, organized into a Sea Harrier attack squadron, an Alizé 1050 ASW squadron, IL-38/May and L-1049 Super Constellation maritime reconnaissance squadrons, and 4 ASW helicopter squadrons.[28] Airborne maritime reconnaissance operations have been inhibited by their limited number and the subsequent overcommitment of the IL-38s. The Indian Navy may obtain the Soviet TU-142M, a variant of the TU-95/Bear, to meet its strategic reconnaissance requirements.[29]

Table 2 compares the inventories of several regional navies, demonstrating that the Indian Navy remains the largest and most capable fleet possessed by an Indian Ocean state.

The Indian Navy's ability to discharge regional power projection responsibilities has been enhanced by the establishment of a coast guard which has assumed missions that were previously assigned to the navy—e.g., pollution monitoring and control, and marine search and rescue. Indeed, some Indian journalists now discuss a two-tiered maritime strategy, viz., force projection throughout the Indian Ocean by the navy, while the coast guard sanitizes immediate offshore areas.[30]

The Indian Air Force (IAF) contributes to power projection efforts through its IL-76/Candid transports (the IL-76 is a Soviet cargo aircraft, equivalent in payload and performance to the U.S. Air Force's C-141).[31]

Comparison of Major Indian Ocean Naval Powers

	Australia	India	Indonesia	Iran	Pakistan	Saudi Arabia	South Africa
Personnel in 1000s	16	47	37	20	15	3.5	9
Surface Combatants							
Carriers		1					
Cruisers		1					
Destroyers	3	3		3	8		
Frigates	10	23	13	4		4	1
Corvettes		3		1		4	
Fast Attack Craft		7	12	7	16	12	9
Patrol Craft	23	12	24	7	24	1	4
Submarines							
Attack	3	8	2		6		3
Mini-Subs					5		
Mine Countermeasures							
Vessels	1	19	2	2	3	4	6
Totals (Ships)	40	77	53	24	62	25	23
Amphibious							
Craft	6	13	52	5		19	

Source: *The Military Balance 1985-86* (London: The International Institute for Strategic Studies, 1985).

Table 2

Further, IAF land-based fighter-bombers can be employed in a maritime strike or interdiction role. In this context, an Indian Southern Air Command was recently established at Trivandrum and has been tasked with protecting the southern peninsula and offshore island territories.[32] Among the weapon systems likely to fall within the operational control of Southern Air Command are Jaguar aircraft armed with sophisticated antiship missiles.[33] Assigning maritime strike responsibilities to the IAF Jaguar, and perhaps Mirage 2000, may well reflect lessons learned from the Falkland Islands conflict which has been a focus of attention in Indian military writings.

An appreciation of New Delhi's growing ability to apply military power throughout the region may be derived from the accompanying chart (1). It divides the Indian Ocean into three force projection zones (with submarines

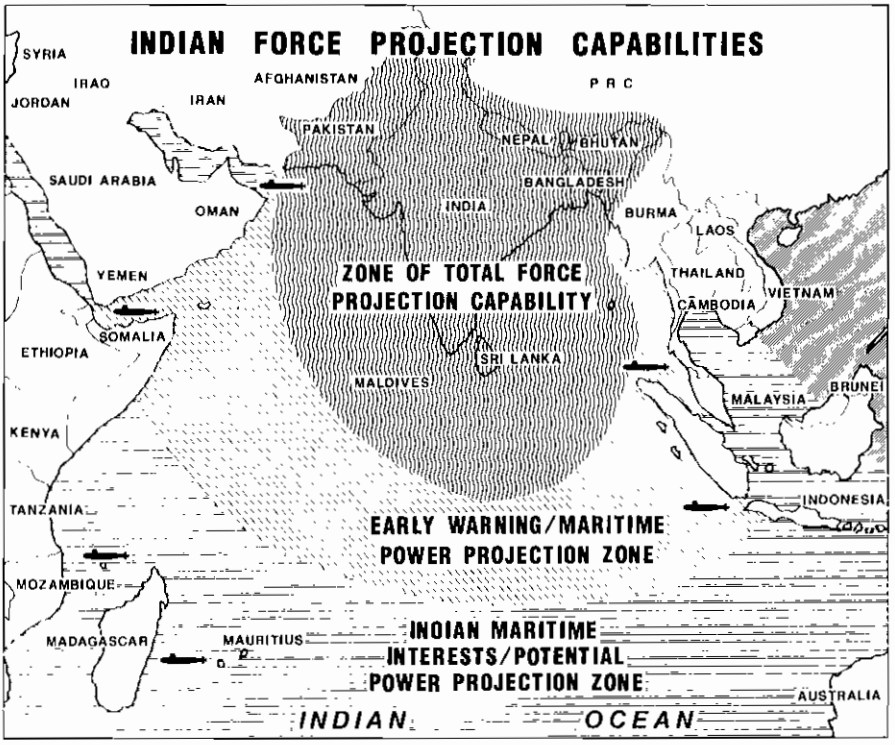

Chart 1

Source: *Jane's Fighting Ships 1985-86* and *Jane's All the World's Aircraft 1985-86*. (London: Jane's Publishing Company Limited).

designating principal chokepoints). Zone 1, the "Zone of Total Force Projection Capability," comprehends those areas in which all relevant IN and IAF systems, to include amphibious warfare assets and land-based maritime strike aircraft, can be deployed without refueling or replenishment. Zone 2, the "Early Warning Zone," indicates the operational range of IN surface combatants and reconnaissance aircraft. Zone 3, the "Potential Power Projection Zone," encompasses the entire Indian Ocean, making clear the greater range of surface vessels and reconnaissance aircraft presently being assimilated into the IN inventory or likely to be acquired in the next 10 years. Chart 2 illustrates the broadened options presented by a repositioning of maritime strike aircraft from the mainland to forward operating locations in the Andaman and Nicobar Islands. Such a move, long planned by the Indian Air Force,[34] would increase substantially the ocean area defended by these aircraft, make possible attacks against ships transiting the Strait of Malacca, and permit enemy naval and air forces to be engaged at considerable distances from the subcontinent.

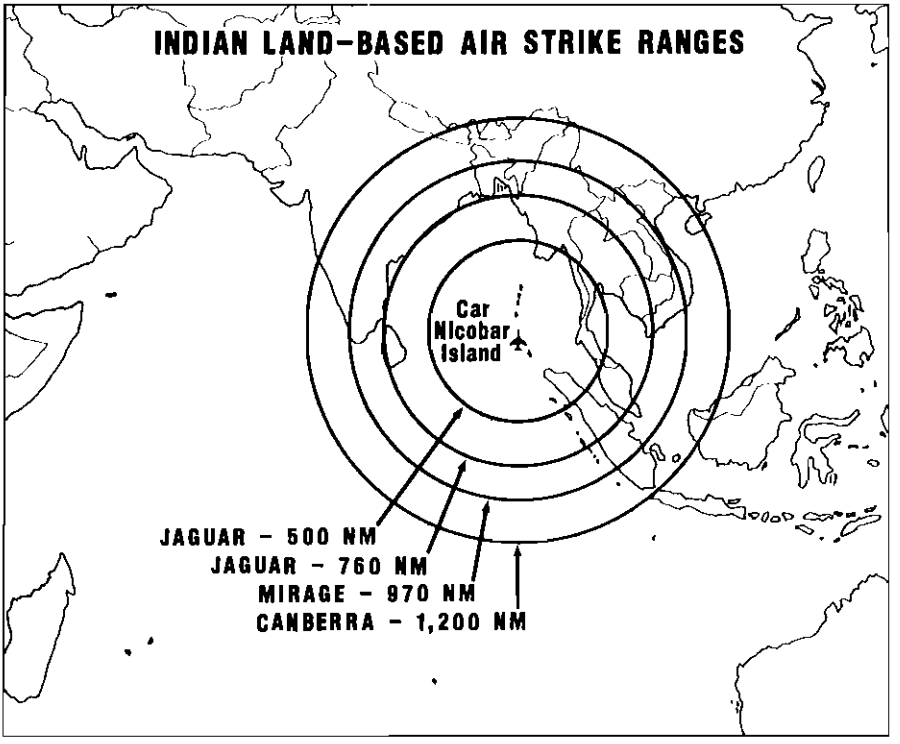

Chart 2

Source: *Jane's All the World's Aircraft 1985-86* (London: Jane's Publishing Company Limited).

Defense Training. The development and promotion of area defense training programs serves to acquaint regional states with the growing effectiveness of India's Armed Forces. Foreign student interaction with Indian military instructors can well contribute to a sympathetic view of New Delhi's security policies. The generation of such perceptions has an enduring effect, as many foreign trainees assume senior positions in their government's military and administrative bureaucracies.[35]

New Delhi has established military training relationships with extra-regional Indian Ocean states as well. Participating states can be grouped into four general categories with some overlapping membership. The first group, consisting of Commonwealth nations for which New Delhi has furnished instruction to their military personnel, includes Botswana, Ghana, Kenya, Malaysia, Mauritius, Nigeria, Seychelles, Singapore, Sri Lanka, Tanzania, Uganda, and Zambia.[36] By strengthening ties with Commonwealth states, India sees an opportunity to increase support for its policy stances in such

organizations as the Non-Aligned Movement and the United Nations. Countries with large Indian populations—citizens or persons of Indian ancestry—form a second training recipient category and include Burma, Kenya, Malaysia, Mauritius, Oman, Singapore, Sri Lanka, and Tanzania.[37] The conclusion of military training agreements with these states has most likely been driven by a desire to ensure the social and economic well-being of these Indian communities. A third category is principal trading partners, such as Iran and Iraq.[38] In this case, it is probable that New Delhi has initiated military training programs both to encourage broadened commercial linkages and guarantee the availability of various primary commodities. Involvement with this category of states is also designed to counter Pakistani-west Asian security relationships.[39] More than 30,000 Pakistani military personnel reportedly are serving as advisors, pilots, technicians, and training staff in Libya, Jordan, and the United Arab Emirates. Further, an augmented Pakistani infantry brigade is stationed near Riyadh, with additional units to be positioned in Saudi Arabia during crises.[40]

New Delhi has assigned military training groups to overseas posts as well. For example, a team of Indian instructors was employed by the Singapore Air Force at its Flying Training School in the early 1980s.[41] Further contingents of military personnel have been sent, inter alia, to Botswana, Iraq, Mauritius, Nigeria, and Oman.[42]

Economic/Technical Assistance. New Delhi is contributing significantly to the economic development of several Indian Ocean states. Cooperative efforts focus on reservation of seats for foreign students in medical, engineering, and other technical institutions; in-country provision for technical assistance by Indian experts (e.g., physicians, engineers, accountants, and public administrators); in-country operation of small-scale industrial facilities for training purposes; and execution of economic feasibility studies.[43] Further, India is transferring industrial technology to island/littoral nations through joint ventures and licensing agreements.[44] Adoption of these measures presumably results from New Delhi's desire to promote its image as a regional patron.

Indian Navy Ship Visits. Warship visits to foreign countries traditionally have served as influence-building measures, demonstrating the naval power available to national decision makers. New Delhi now employs this technique to promote its political influence throughout the region. Thus, the past decade has witnessed IN visits to virtually all Indian Ocean and Persian Gulf states.[45]

Diplomatic Initiatives. New Delhi's political agenda for the subcontinent and Indian Ocean contains three core elements: no foreign bases in South Asia; bilateralism in dealings with neighboring states; and establishment of an

Indian Ocean Zone of Peace (IOZP), entailing the removal of extraregional military and naval forces.[46] Accomplishment of these policy goals would greatly facilitate New Delhi's efforts to become the dominant power in the Indian Ocean.

India has fashioned a consensus among island/littoral states supporting the institution of an IOZP. (It should be noted, however, that IOZP definitions advanced by Indian Ocean states frequently envision a reduction in the force levels of all navies patrolling these waters, including the Indian Navy. New Delhi does not support such an expansive interpretation of the IOZP concept.) In the early 1970s, Sri Lanka was persuaded to introduce the IOZP proposal before a conference of the Non-Aligned Movement and the United Nations General Assembly. The IOZP concept was embraced by both organizations,[47] and has been endorsed by the U.S.S.R. Soviet acceptance is apt to rest on the assumption that demilitarization of the Indian Ocean (regarding nonlittoral states, at any rate) remains an infeasible proposition given U.S. hostility toward the arrangement. Additionally, Soviet proximity to the region provides them a clear geostrategic advantage should U.S. forces be withdrawn.

More recently, New Delhi has backed the demand submitted by Mauritius for retrocession of the Chagos Archipelago, including Diego Garcia.[48] Great Britain currently administers this island as part of the British Indian Ocean Territory. London has leased Diego Garcia to the United States and has permitted the United States to construct military installations on the island. Confirmation of Mauritius' title to Diego Garcia would severely inhibit U.S. operations in the Indian Ocean.

A growing force projection capability, in conjunction with supplementary influence enhancement measures, is evidence of New Delhi's predisposition to play a principal role as an Indian Ocean power. Beyond this, the planning staffs of extraregional navies deployed in the Indian Ocean must view the Indian Navy as a major player. Thus, such issues as IN force posture and weapon employment doctrine have become central to threat assessments prepared by these bodies.

Nevertheless, New Delhi still must take added steps if it is to achieve politico-military paramountcy in the Indian Ocean. *First,* it would be necessary for the Indian Navy to acquire more advanced strike aircraft, thereby facilitating establishment of sea control in war.[49] *Second,* amphibious warfare assets would have to be augmented to include procurement of large landing ships and creation of an independent naval infantry. The latter undertaking would end reliance on military units with limited training in amphibious operations.[50] An enhanced amphibious capability would materially strengthen India's military credibility in the region. In turn, it may also induce neighboring states to accept New Delhi, albeit reluctantly, as the

primary arbiter in resolving regional disputes. In New Delhi's view, these regional actors soon would be reluctant to launch major foreign and security policy initiatives in the absence of New Delhi's support or acquiescence. *Third,* India must revivify diplomatic efforts to exclude nonlittoral state navies from this region. Clearly, New Delhi cannot be considered the dominant actor in the Indian Ocean if significant extraregional forces are positioned at will in its contiguous waters during crises.

By effectively implementing these three measures, the Indian Navy would assume its policy role as a major arbitrator in the Indian Ocean.

Notes

1. S.M. Burke, *Pakistan's Foreign Policy* (London: Oxford University Press, 1973), p. 355.

2. Sino-Indian tensions have abated in recent years. Diplomatic interaction has focused on border demarcation in Ladakh and Arunachal Pradesh, as well as augmentation of economic, cultural, and scientific relations. Nevertheless, the humiliation suffered in the 1962 war with China and Beijing's issuance of an ultimatum (ostensibly dealing with military works on the Sikkim-Tibet frontier) during the 1965 Indo-Pakistani war, have had a lasting psychological effect on India's ruling elites. Thus, New Delhi still entertains doubts about Chinese military intentions, including a possible thrust into the Gangetic plain.

3. Richard Nations, "Pride and Paranoia," *Far Eastern Economic Review,* 16 August 1984, p. 27.

4. Subimal Mookerjee, "More Sinews for the Indian Navy," *Times of India,* 4 December 1984, p. 8.

5. Gary L. Sojka, "The Missions of the Indian Navy," *Naval War College Review,* January-February 1983, p. 4.

6. A.W. Grazebrook, "The Armed Forces of the Asia-Pacific Region, No. 5: Why is India's Big Navy Still Expanding?" *Pacific Defense Reporter,* August 1983, p. 10.

7. "Indian Joint Ventures Abroad," *India News,* 1 April 1985, p. 5.

8. G.K. Reddy, "Arab Financiers Keen on Investment in India," *Hindu,* 1 May 1982, p. 9.

9. "India Keen on Arms Exports," *Ceylon Daily News,* 8 February 1984, p. 4. India hopes to increase arms exports by means of low unit costs and the absence of political stipulations in sales contracts.

10. Onkar Marwah, "National Security and Military Policy in India," in Lawrence Ziring, ed., *The Subcontinent in World Politics* (New York: Praeger, 1982), p. 81.

11. "Indian Company Bags Iran Jeep Order," *India and Foreign Review,* 15 August 1984, p. 22.

12. R.C. Ummat, "India and the Developing World," *India and Foreign Review,* 1 April 1982, p. 12.

13. India, Parliament, *Lok Sabha Debates,* 7th ser., v. 28, 23 April 1982, col. 270.

14. Grazebrook, p. 25.

15. Nations, p. 26.

16. P.K.S. Namboodiri and J.P. Anand, *Intervention in the Indian Ocean for India* (New Delhi: ABC Publishing House, 1982), p. 234; see also *The United States and the Indian Ocean: Report of the Indo-American Task Force on the Indian Ocean* (Washington, D.C.: Carnegie Endowment for International Peace, 1985), p. 60.

17. G. Jacobs, "South Asian Naval Forces," *Asian Defense Journal,* December 1984, p. 44. The 1971 deployment of the *Enterprise* was accomplished in approximately 1 week; the continuing Indian Ocean presence of a U.S. carrier battle group will eliminate such delays in policy execution.

18. Marwah, p. 67.

19. Nations, p. 27; Pushpindar Singh, "India's Defense Perspectives and the Armed Forces," *Asian Defense Journal,* October 1982, p. 26.

20. Shirin Tahir-Kheli, "Defense Planning in Pakistan," in Stephanie G. Neuman, ed., *Defense Planning in Less-Industrialized States* (Lexington, Mass.: D.C. Heath and Co., 1984), p. 216.

21. Marwah, p. 76.

22. Dilip Bobb, "The Message from Moscow," *India Today,* 31 August 1984, p. 51.

23. "Aircraft Carrier for India," *Jane's Defence Weekly,* 11 October 1986, p. 767.

24. "The Military Balance," *Pacific Defense Reporter,* December 1984-January 1985, p. 141; Bobb, p. 51; "India Receives First Kilo Class Submarine," *Jane's Defence Weekly,* 27 September 1986, p. 679.

25. "The Military Balance," p. 141. Indian Navy headquarters is endeavoring to upgrade ASW, electronic warfare, and communications systems as well; for example, the Navy is building a VLF communication facility in southern India, making possible the receipt of messages by submarines at considerable depths and distances. "New Communication System for Navy in '88," *Hindu,* 19 February 1985, p. 1.

26. Brian Cloughley, "Trapped as Pawns in the Superpower Game," *Far Eastern Economic Review*, 31 May 1984, p. 31.

27. R.S. Bhandari, "Amphibious Warfare," *Sainik Samachar*, 28 August 1983, pp. 21-23.

28. "The Military Balance," p. 141.

29. "Defense Team Back After Finalizing New Deals with Moscow," *Hindu*, 2 May 1984, p. 7.

30. See, e.g., Cecil Victor, "Forward Maritime Defense," *Patriot*, 31 May 1985, p. 5. Coast Guard assets include ships and fast patrol craft with Chetak helicopters embarked on offshore patrol vessels. Its fixed wing air component will be the Dornier 228-100 maritime surveillance aircraft from West Germany; D. Banerjee, "Second Dimension to Coast Guard," *Sainik Samachar*, 29 January 1984, p. 8.

31. A.W. Grazebrook, "Soviet Equipment Lifts India as Military Power," *Pacific Defense Reporter*, April 1985, p. 44.

32. "Modernization a Priority for Indian Defense," *Jane's Defence Weekly*, 18 May 1985, p. 837.

33. In addition to air-to-surface ordnance, Jaguars are equipped with overwing air-to-air missiles. Also, Indian military aviation analysts have long emphasized the advantages of acquiring an air refueling capability. This capability would greatly facilitate Jaguar (or other fighter-bomber) mission execution in contiguous maritime areas by extending aircraft range and endurance; see e.g., Manoj Joshi, "For More Teeth to Air Defense," *Frontline*, 4-17 May 1985, p.45.

34. See, e.g., Ravi Rikhye, "The Island Scare," *India Today*, 15 May 1982, p. 107.

35. For example, a former prime minister of Malaysia served as a cadet at the Indian Military Academy. "Modernized Training at the IMA," *Asian Defense Journal*, February 1983, p. 86.

36. *Ibid.*; H.C. Tewari, "India Lends a Helping Hand to Friendly Nations," *Sainik Samachar*, Army Number 1981, pp. 60-61; "Air Force Planning to Train More Pilots," *Patriot*, 20 July 1981, p. 7; "India to Train Seychelles' Army, Navy Cadets," *Sunday Standard*, 28 June 1981, p. 5; H.S. Chhabra, "India's Africa Policy," in Surendra Chopra, ed., *Studies in India's Foreign Policy* (Punjab Univ.: Amritsar, 1980), p. 416.

37. "Modernized Training," p. 86; Tewari, pp. 60-61; "Air Force Planning," p. 7.

38. Tewari, p. 61; "Training at the Torpedo and Anti-Submarine School," *Hindu*, 9 January 1983, p. 7; H. Kusumakar, "Challenge of Soaring Up in Sky," *Times of India*, 18 September 1982, p. 5.

39. Tewari, p. 61; "Torpedo and Anti-Submarine School," p. 7.

40. Edgar O'Ballance, "Pakistan, Keystone of Southwest Asia," *Armed Forces*, June 1985, p. 220.

41. Chris Pocock, "The Republic of Singapore Air Force," *Armed Forces*, March 1985, p. 105.

42. Tewari, pp. 60-61.

43. H.S. Chhabra, "India and Africa: Partners in Progress," *New African*, February 1983, p. 55.

44. "Indian Joint Ventures Abroad," p. 5.

45. Sojka, p. 10; IN overseas port calls are reported in *Sainik Samachar*, a semiofficial military publication. See e.g., "Eastern Fleet Ships to Malysia," 1 July 1984, p. 19; "Goodwill Visit by Navy Ships to Middle East," 27 March 1983, pp. 16-17.

46. Nations, p. 26.

47. Leo Rose, "India and Its Neighbors: Regional Foreign and Security Policies," in Lawrence Ziring, ed., *The Subcontinent in World Politics* (New York: Praeger, 1982), p. 59.

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49. Appan Menor, "Of Aircraft Carriers and Hummingbirds," *Frontline*, 4-17 May 1985, pp. 35-36.

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The Future of the Marines in Small Wars

R. Lynn Rylander

The tactic of wearing an adversary down, one step at a time, without arousing him to meaningful response, was first articulated by Sun Tzu in the 4th century B.C. The revolution that gave birth to both the United States and the U.S. Marine Corps and served as the model for so many other struggles for freedom was in large part low-intensity conflict. Clausewitz wrote of the "people in arms" nibbling at the shell and around the edges in areas just outside the theater of war.

Roughly 50 years ago in China, Mao Zedong was combining centuries of low-intensity conflict with his own experience in works such as *On Guerrilla Warfare* and painting them with the ideological brush of Marxism-Leninism. "Wars of National Liberation" have been with us ever since. Meanwhile, the U.S. Marine Corps was distilling more than a century and a half of combat experience in its *Small Wars Manual*. In all probability this 1940 document is no longer widely read, but it should be, because it contains many truths about small wars that America has lost sight of.[1]

The Small War Threat

One of the greatest difficulties in dealing with small wars, or the contemporary term, "low-intensity conflict" (LIC), is coming to an understanding of its nature. The *Small Wars Manual* notes that such wars are "conceived in uncertainty, are conducted often with precarious responsibility and doubtful authority, under indeterminate orders lacking specific instructions."[2] In other words, by nature they are ambiguous, a point stressed repeatedly at the January 1986 Low-Intensity Warfare Conference sponsored by the Secretary of Defense.

For a definition, we need something more. Let me suggest this: Low-intensity conflict is that conflict between nations or between groups within a nation and the established government in which conventional military power

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plays a less decisive role than the exercise of capabilities or assets in the social, economic, political, psychological, or unconventional military arenas of conflict.

However we choose to define low-intensity conflict, certainly, it is not peace; nor is it a major, declared war. It is not conventional warfare and it is not nuclear deterrence, although these factors form its backdrop. It was not Vietnam, at least from the standpoint apparent in the U.S. approach to that conflict after 1965. We tried to make that war something that it was not—a small version of a war on the plains of Europe.

Such conflict shows itself in a number of ways. Chief among them are insurgency, state-sponsored terrorism, trafficking in illegal narcotics for political ends, and disinformation. While these forms of struggle differ in their tactics, they share the common strategic objective of changing the existing order. Individually or collectively, they represent a complex interaction of social, political, economic, psychological, and unconventional military factors. These assaults are protracted by nature, designed to erode the will of the opponent, and avoid provoking him into effective counteraction.

Conflicts of this sort grow out of real or perceived inequities such as population explosions that outstrip resources, poverty, collapsing demand for a country's exports, and political systems that concentrate power and wealth in the hands of a few at the expense of many. In some cases, the reaction can be a legitimate desire for freedom. In others, it can be an attempt to replace the existing order with one even more repressive and inequitable, although the practitioners seldom advertise their objectives in those terms. In revolutions supported by the Communists, it is common for them to show their true colors only after achieving power, as in Cuba and Nicaragua.

While much low-intensity conflict arises from the pervasive instability of the Third World, it is not restricted to the Third World. It is, however, highly susceptible to exploitation by third parties seeking to achieve their own ends. In fact, the Soviet Union and its surrogates, recognizing the strength of our conventional and nuclear deterrent, have seized on it as an attractive way to undermine our interests without direct confrontation. Those who have studied the problem agree that LIC will pose the most immediate threat to U.S. security for the foreseeable future, certainly through the end of this century. What it means today can be easily cataloged.

Today, one out of every four countries around the world is engaged in some sort of conflict. In our own hemisphere there are at least nine active insurgencies, including those in El Salvador, Colombia, Peru, and Chile. In short, armed combat is daily fare for some 4 million individuals on this planet.

Terrorism is a particularly vicious component of LIC, with its practitioners growing in sophistication and becoming increasingly intertwined internationally. Since 1968 there have been 8,000 recorded terrorist incidents

resulting in more than 5,500 dead and 11,000 wounded. In 1985 alone, there were nearly 900 deaths resulting from 851 incidents.

Today's terrorism is especially dangerous because of the availability of state support and the resources implicit with that backing. Generally we understand the role of countries such as Libya and Cuba and organizations such as the PLO. But the extent to which the Soviet Union pursues a two-track policy of conventional diplomacy and covert support for terrorism is less clear. According to the Director of Central Intelligence, every year some 600 individuals travel to the Soviet Union for terrorist indoctrination and paramilitary training.

Moreover, we are beginning to see relationships develop between terrorist organizations and international narcotics interests, relationships based more on mutual self-interest than on ideology. Drug trafficking is a profitable, relatively risk-free source of income for terrorists. The drug network, terrorists, and insurgents frequently coexist in the same regions as a matter of security, and armed terrorists and insurgents may even provide security for those in the drug manufacturing and distribution apparatus. Drug running, in part, is simply a garden-variety criminal activity motivated by the prospect of great wealth. Increasingly, however, it has a political component—as with the Revolutionary Armed Forces of Colombia (M-19) and Sendero Luminoso, in Peru—and, thus, must be considered part of the low-intensity assault on the West. In either case, the toll in human suffering and societal degradation is apparent.

In 1985, terrorists attacked people or their property in some 90 countries. American citizens are now targets of about 25 percent of all these attacks. In 1985, terrorists killed 38 American citizens and wounded 160. From January 1986 through the Karachi hijacking in early September, they killed 12 Americans and wounded 100. Overlying all this activity is the Soviet use of "active measures," which includes disinformation, front activities, propaganda, and agents of influence. One estimate suggets that some 15,000 Soviets are engaged in active measures and that Moscow spends approximately $3-4 billion every year on this activity.

Since the end of World War II, the West has been under subtle assault. For too many years we viewed the various components of this assault as isolated and unconnected. Having tried without success to respond in Indochina, we closed our eyes to the threat. We can no longer ignore it and we can no longer accept the premise that low-intensity conflict is the exclusive domain of our antagonists or an inevitable, irreversible force of history.

The U.S. Response

Strategy. The U.S. response to LIC is motivated by our recognition of "the consequences of failing to deter conflict at the lowest level possible,"[3] and

shaped by three realities: First, while most of the world's instability stems from local causes, the Soviet Union seeks to exploit this instability for its own purposes. Second, we are witnessing what President Reagan has called "The Democratic Revolution," local resistance to Communist regimes installed or maintained by the Soviet Union and its surrogates. Third, just as we share our stake in freedom with others, we must look to them to assume a proper part of the burden of gaining or maintaining their own freedom.

These realities and the ambiguous nature of low-intensity conflict dictate a two-pronged U.S. strategy. First, we must both deal with the underlying instability that fuels such conflict and counter Soviet and surrogate exploitation. This requires a comprehensive and coordinated program of: economic, humanitarian, and security assistance; diplomatic initiatives designed to resolve regional conflicts; the use of military forces in counterterrorism, contingency response and peacekeeping operations; and a national program of drug interdiction.

Second, we must deny the practitioners of this form of conflict the benefits of legitimacy and sanctuary accorded by law to states engaged in normal international relations. We need not and do not accept the pretension that Soviet gains are inevitable or irreversible and will, therefore, support indigenous resistance to repressive regimes. We view terrorism as a criminal activity and should take steps to disrupt and preempt the operations of state-supported terrorist organizations. We recognize that interdiction alone will not resolve the problem of illicit drugs and should act to disrupt and eradicate the underlying manufacturing and distribution mechanisms.

Components of the Strategy. The key to successful U.S. response to low-intensity conflict is to deal comprehensively with its manifestations as elements of a single threat and use every foreign policy tool at our disposal, including our military strength and the vitality of our economy. President Reagan has identified four key elements:[4]

- **Security Assistance and Arms Transfer**—to support the efforts of others who seek to strengthen their defense;
- **Economic Assistance**—to help others earn their own way;
- **Diplomatic Initiatives**—to begin resolving regional conflicts; and
- **Support for Freedom Fighters**—to give others the chance to fight their own battles.

These efforts must constitute a coherent, carefully integrated, and coordinated whole. Recent legislation has created a Low-Intensity Conflict Board within the National Security Council structure and, as a sense of Congress, proposes the establishment of a Deputy Assistant to the President for National Security Affairs for Low-Intensity Conflict. Thus, the coordinating mechanism is in place.

The Role of the Department of Defense. Low-intensity conflict poses a serious dilemma for any defense establishment, and the United States is no exception. It is not punctuated by galvanizing events such as Pearl Harbor. It is not susceptible to solution through the application of mass and firepower. In fact, it is predominately nonviolent. It offers no prospect of decisive victory. But, because it is a protracted struggle, it does lay open the use of the military ever more widely to criticism.

Reflecting this dilemma, Secretary Weinberger has described the bounds for employment of U.S. *combat* forces in terms of six major tests:[5]

1. The U.S. should not commit forces to *combat* unless the circumstances are deemed vital to our national interest or that of our allies.
2. If we commit forces to combat, we should do so with the clear intention of winning.
3. If we commit forces to combat, we should have clearly defined political and military objectives.
4. Forces committed must be consistent with our objectives.
5. We must have the sustained support of the American people and Congress.
6. Commitment of forces to combat should be a last resort.

Clearly, the Secretary's six tests place constraints on the Defense Department's role. Yet, we have taken steps in the last 5 years to enhance our capabilities within those bounds:

- As an outgrowth of the 1980 hostage rescue attempt, we have created highly ready counterterrorist forces drawn from all four services.
- Reacting to a decade of neglect, we have made revitalization of our Special Operations Forces (SOF) one of our highest priorities.
- In recognition of the need to institutionalize the required capability, we have recently established a unified Special Operations Command.

So What about the Marines?

Old Roles and New Challenges. By law, the Marine Corps is organized, trained, and equipped for the "seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign."[6] The Marine Corps also has primacy in the field of amphibious operations.

From 1800 to 1934, the Marines landed 180 times in 37 countries. In the 100 years preceding publication of the *Small Wars Manual*, the Marines were actively engaged in small wars in all but 15 years.

Traditionally, the Marines Corps' role consisted of two major components. The first was contingency response, as in the Boxer Rebellion and unrest in Latin America. The second was peacekeeping operations, as in Lebanon. However, the face of low-intensity conflict began to change in the 1940s.

What was once the domain of the dispossessed became the vehicle for the spread of ideologically motivated "wars of national liberation." The postwar breakup of the old empires provided both the fuel and the test bed for such wars. More recently, the phenomenon of state-supported terrorism has been added as an important dimension of low-intensity conflict.

The breakup of the empires also meant that the traditional colonial powers would no longer maintain the established order in the Third World. Equally apparent was the disinclination of the United States to serve as "the world's policeman," a fact of life reinforced by our experience in Southeast Asia. The changed nature of conflict in the Third World poses a significant challenge to the Marine Corps. Clearly, traditional roles such as contingency response and peacekeeping operations will continue to be a critical part of our response. The Marine Corps is well prepared to meet such challenges.

Similarly, terrorism counteraction is essential to our national security. While the Marine Corps does not possess the specialized skills held by our forces dealing with terrorism, the nature and extent of Marine forward deployments argue that Marines may be called upon to engage in such operations *to the extent their organization, training, and equipment* permit them to do so. The real challenge for the Marine Corps is to deal with the civil-military nature of low-intensity conflict.

Clausewitz called war an "act of mutual slaughter."[7] This act is characterized by extreme violence with opposing forces employing mass, firepower, and maneuver. In low-intensity conflict, opposing forces still go head-to-head employing a much-modified form of mass, firepower, and maneuver. However, the most critical element is the struggle for the people's allegiance. It is a war that cannot be won—and should not be fought—through conventional military means.

As important as they are, contingency response, peacekeeping, and counterterrorism must constitute a small portion of the U.S. response to low-intensity conflict. In fact, the nature of low-intensity conflict argues for a response that relies heavily, if not exclusively, on local capabilities. Under these circumstances our response must be one of support—foreign internal defense on the one hand, and unconventional warfare on the other. The key elements are such things as security assistance training, humanitarian assistance, and civic action. This emphasis can be seen clearly in the components of the Reagan doctrine. By deduction, it is also reflected in Secretary Weinberger's six tests for the employment of combat forces.

The challenge to the Marine Corps is vexing. The Corps' critical, traditional roles are substantially circumscribed both by the nature of modern small wars and the fundamentals of contemporary U.S. policy. Clearly, the essence of our proper response places a premium on military capabilities that, at least in the postwar era, have not been a fundamental part of Marine philosophy.

This is not to suggest that the Marine Corps lacks the capacity to extend its operations into the broader range of activities demanded by low-intensity conflict. In fact, the Marine Corps' Combined Action Platoons in Vietnam were one of the most well-reasoned and successful approaches to the kind of conflict we confronted there. However, the Marine Corps is not now focusing on such a broad range. This being the case, the questions become: Should the Marine Corps reorient itself to the changed nature of "Small Wars"? If so, what changes are required, and can they be undertaken without degrading current capabilities?

Recent Experience. In 1985, the Marines decided to strengthen their well-tried Marine Amphibious Unit (MAU). The new version was to be titled Marine Amphibious Unit (Special Operations Capable)—or MAU(SOC).[8] The Marines made this change because they saw that the Corps had an inherent capability to conduct a broad spectrum of special operations. They sought to enhance that capability through specialized organization, training, and equipment of their normal MAU. These enhancements, now in process, will improve conventional Marine operations, as well. When fully implemented, the Marine Corps will have MAU(SOC)s in both the Atlantic and Pacific Fleet Marine Forces.

Though, in large measure, the MAU(SOC) is a response to the threat of low-intensity conflict, its role is circumscribed because the Marine Corps has properly sought not to duplicate existing special operations units such as Special Forces, SEALs, or Rangers. And those forces by themselves constitute a small, if important, part of our response to low-intensity conflict. Thus, the spectrum of MAU(SOC)s *missions* is limited.

Special Operations Forces (SOF) possess a broad range of skills of which many are applicable only at higher levels of violence. Yet, low-intensity conflict must draw heavily on medical, engineering, and other military capabilities that are found only outside the special operations community.

Two key points need to be made about the MAU(SOC) concept. First, it signals no change in Marine Corps doctrine. Rather, the intent is to enhance the traditional maritime capabilities of units routinely deployed with the fleets. Within the framework of existing doctrine, however, the Marine Corps is exploring the consequences of joint special operations when and where the situation warrants involvement.

Second, the MAU(SOC) remains essentially a direct action unit focused specifically on the introduction of forces from the sea—the Marine Corps' specialty. This means that even with the creation of the MAU(SOC), Marine Corps capabilities in low-intensity conflict remain largely concentrated in the areas of peacekeeping, contingency response, and counterterrorism. Specifically, with regard to the last of these, the most visible component—hostage rescue—is seen as a MAU(SOC) mission only *in extremis*, when dedicated hostage rescue forces are not available and immediate action is required.

In low-intensity conflict, U.S. forces, and especially SOF, have six primary missions:

- **Foreign Internal Defense (FID).** FID encompasses the military facets of nation-building—military and paramilitary training, intelligence, psychological operations, and civil affairs—conducted in conjunction with other components of the Government and designed to support another government's efforts to free and protect its society from subversion, lawlessness, and insurgency. The classic counterinsurgency mission is absorbed within this category of functions.
- **Unconventional Warfare (UW).** UW missions include military and paramilitary operations such as guerrilla warfare, evasion and escape, sabotage, and subversion conducted in hostile, denied, or politically sensitive territory. In this instance, U.S. forces or the indigenous troops they advise seek to create the instability FID is designed to overcome.
- **Psychological Operations (PSYOP).** PSYOP includes psychological warfare against adversaries as well as political, military, economic, and ideological actions designed to create in neutral or friendly foreign groups the emotions, attitudes, or behavior to support the achievement of national objectives.
- **Civil Affairs (CA).** CA includes those activities that affect the relationship between U.S. forces and the indigenous civilian population, authorities, institntions, and resources. They can play a key role in the nation-building process.
- **Reconnaissance.** Reconnaissance encompasses the collecrion of intelligence either separately or in support of other SOF operations.
- **Strike (Direct Action).** Strike missions include operations such as interdiction, raids, and personnel recovery conducted in hostile or denied areas, either unilaterally or in conjunction with indigenous forces.

The last two—reconnaissance and strike—come under the categories of peacekeeping, contingency response, and counterterrorism. They are, in fact, part of the Marine Corps' specialty. But the first four, to a much greater degree, require the organization, training, and equipment that one finds in the existing special operations community—a line the Marine Corps has vowed not to cross.

Speaking before the corps of Cadets at West Point in 1962, President Kennedy said of this type of war: "war by guerrillas, subversives, insurgents, assassins, war by ambush instead of by combat; by infiltration instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him. . . . It requires in those situations where we must counter it, and these are the kind of challenges that will be before us . . . a whole new kind of strategy, a wholly different kind of force, and therefore a new and wholly different kind of military training."[9]

This "different kind of military training" means, for example, that Army Special Forces are specialists in the paramilitary component of LIC, largely

training. Hence, Special Forces account for roughly one-third of U.S. Mobile Training Teams. Army and Air Force psychological operations units are designed for highly specialized missions, as are Army Civil Affairs units.

Though Marines do not specialize in those fields, they can play a training role; although, again, they are limited by doctrinal considerations. They can, for example, play a role in Civil Affairs through their two reserve component Civil Affairs Groups.

The following chart illustrates these constraints by comparing MAU(SOC) missions to the four major components of our response to low-intensity conflict.

MAU(SOC) Missions and Low-Intensity Conflict

	Counter-terrorism	Peace-keeping	Contingency Response	FID and UW
Amphibious Raids	X		X	
Security Operations	X	X	X	
Limited Objective Attack	X		X	
Mobile Training Teams		X		X
Noncombatant Evac. Ops (NEO)	X	X	X	
Show of Force Operations	X	X	X	
Reinforcement Operations		X	X	
Civil Affairs		X		X
Deception Operations	X	X	X	
Fire Support Control	X	X	X	
Counterintelligence	X	X	X	
Initial Terminal Guidance	X		X	
Electronic Warfare	X	X	X	
Hostage Rescue	X		X	

Integrating the Marine Corps' Capability

Limits. I have focused on the bounds within which the Marine Corps can fulfill its role in low-intensity conflict. First is the changed nature of low-intensity conflict. Before World War II, the Marine Corps was the leading edge of our response to small wars. This is no longer the case. Next is the changed nature of our response. Contemporary U.S. policy with regard to low-intensity conflict takes fully into account the inherent civil-military nature of the problem. It stresses economic and security assistance and places severe limits on any potential U.S. combat role.

Given these bounding factors, we can say the following about the Marine Corps' role in low-intensity conflict:

- By virtue of its routine forward deployment, the Marine Corps will continue to be a key element in U.S. contingency response.
- Even in this traditional area, the development of specialized U.S. capabilities in areas such as hostage rescue means that the Marine Corps may act only *in extremis* situations.
- The Marine Corps is unlikely, as a matter of policy, to be involved in sustained combat operations (as opposed to contingency response) in the low-intensity conflict environment.
- In the absence of doctrinal change and specialized organization, equipment, and training, the Marine Corps will play a very small role in the areas of foreign internal defense and unconventional warfare that account for the bulk of the military effort under these circumstances.

These facts do not mean that the Marine Corps has been "squeezed out of the market" by the changing world order, or that the Marine Corps should scrap its doctrine, built upon 200-plus years of tradition.

They do, however, suggest the need for a proper appreciation of those facts, and a need to optimize Marine Corps capabilities in the context of that reality. This is a two-part proposition: enhancing traditional capabilities and changing the focus.

Enhancing Traditional Capabilities. Creation of the MAU(SOC)s is an excellent example of the Marine Corps' response to challenge in the traditional arena. Reduced to its simplest form, it makes an outstanding force even better. The concept today is limited because it concentrates solely on deployed MAUs and those preparing to deploy. Thus, the benefits derived from specialized training and equipment tend to be transitory. With time, experience, emphasis, and money, these benefits could be extended to all Marine elements regardless of their deployment status.

Changing the Focus. This arena poses the greatest challenge to the Marine Corps, for it raises the prospect of weakening the direct link between Fleet and Marine Corps deployments. Simply put, the critical element in small wars, or low-intensity conflict is not the introduction of forces ashore but rather the operations of those units on shore. The second critical element is that those operations, in most cases, will be nonviolent.

All this must be considered in the context of changes in the national security structure signed into law in October 1986. First, a Low-Intensity Conflict Board is being established by the National Security Council to provide centralized oversight for the civil-military U.S. response to LIC. Oversight within the Department of Defense is being enhanced through creation of an Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict, and our special operations capability has been improved with the activation of a unified combatant command for special operations.

This organizational structure clearly recognizes the difference between low-intensity conflict and special operations. At the same time, we must realistically expect that the new Special Operations Command will play a central role in our response to low-intensity conflict. By the same token, we can expect our response to LIC to take on a decidedly joint flavor.

The challenge here can be simply stated but will be exceedingly difficult to resolve: What is the relationship between the Marine Corps—the MAU(SOC)s in particular—and joint special operations? On the one hand, the MAU(SOC)s need not, in fact should not, be assigned to the command. On the other, the capabilities must be integrated as part of the overall effort.

The second challenge is to assess the prospect of an increased nonviolent role for the Marine Corps. This may require increased attention to, and further expansion of, the Marine Civil Affairs capability. It may mean the employment of Marine Corps medical, engineering, and other combat service support units in nation-building operations. Clearly, such operations run the risk of reducing the support essential to deployed units and may, therefore, again require increased attention and expansion, no doubt at the expense of some other elements.

The question of organization in this regard is crucial, whether in a Marine Corps or a joint context. One possible model is the Security Assistance Force (SAF) concept developed by the Army in the 1950s. (The SAF remains a part of Army doctrine in name only.) The SAF was a deployable package of medical, engineering, psychological operations, civil affairs, and other relevant military capabilities organized under a Special Forces headquarters. While they existed, they provided the U.S. with a readily available, comprehensive way of dealing with the unstable civil-military factors that underlie low-intensity conflict. For the most part, the Marine Corps possesses the same broad range of capabilities and could move to organize them in this manner within the confines of existing doctrine.

In sum, the Marine Corps is likely to play a modest role in low-intensity conflict for the foreseeable future. The traditional part of that role will remain extremely important but will not resemble the Marine Corps' first 150 years in scope or intensity. The Marines can play a less traditional nonviolent role within the confines of existing doctrine if they choose to do so. Choosing the roles they will play will be the Marines' greatest challenge for the rest of this century.

Notes

1. See U.S. Marine Corps, *Small Wars Manual*, (Washington: U.S. Govt. Print. Off., 1940).

2. *Ibid.*, p. 9.

3 Caspar W. Weinberger, "The Uses of Military Power," Remarks to the National Press Club, Washington, D.C.: 28 November 1984, p. 2.

4. Ronald W. Reagan, *Freedom, Regional Security, and Global Peace*, (Washington: U.S. Govt. Print. Off., 1986), pp.7-9.

5. Weinberger, pp. 5-6.

6. U.S. Laws, Statutes, etc., "General Military Law," *U.S. Code, Title 10—Armed Forces*, (Washington: U.S. Govt. Print. Off., 1982), sec. 5013.

7. Carl von Clausewitz, *On War*, trans. Howard and Paret (Princeton, N.J.: Princeton University Press, 1976), p. 149.

8. See Commandant of the Marine Corps Memorandum 02-85, "The Marine Corps and Special Operations," 22 July 1985.

9. John F. Kennedy, *Public Papers of the Presidents, John F. Kennedy* (Washington: U.S. Govt. Print. Off., 1962), pp. 453-454.

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The Self-Designing High-Reliability Organization: Aircraft Carrier Flight Operations at Sea

Gene I. Rochlin, Todd R. La Porte and Karlene H. Roberts

A hundred things I have no control over could go wrong and wreck my career . . . but wherever I go from here, I'll never have a better job than this. . . . This is the best job in the world.

Carrier Commanding Officer

Recent studies of large, formal organizations that perform complex, inherently hazardous, and highly technical tasks under conditions of tight coupling and severe time pressure have generally concluded that most will fail spectacularly at some point, with attendant human and social costs of great severity.[1] The notion that accidents in these systems are "normal," that is, to be expected given the conditions and risks of operation, appears to be as well-grounded in experience as in theory.[2] Yet, there is a small group of organizations in American society that appears to succeed under trying circumstances, performing daily a number of highly complex technical tasks in which they cannot afford to "fail." We are currently studying three unusually salient examples whereby devotion to a zero rate of error is almost matched by their performance—utility grid management (Pacific Gas & Electric Company), air traffic control, and flight operations aboard U.S. Navy aircraft carriers.

Of all activities studied by our research group, flight operations at sea is the closest to the "edge of the envelope"—operating under the most extreme conditions in the least stable environment, and with the greatest tension between preserving safety and reliability and attaining maximum operational efficiency.[3] Both electrical utilities and air traffic control emphasize the

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importance of long training, careful selection, task and team stability, and cumulative experience. Yet the Navy demonstrably performs very well with a young and largely inexperienced crew, with a "management" staff of officers that turns over half its complement each year, and in a working environment that must rebuild itself from scratch approximately every 18 months. Such performance strongly challenges our theoretical understanding of the Navy as an organization, its training and operational processes, and the problem of high-reliability organizations generally.

It will come as no surprise to this audience that the Navy has certain traditional ways of doing things that transcend specifics of missions, ships, and technology. Much of what we have to report interprets that which is "known" to naval carrier personnel, yet seldom articulated or analyzed.[4] We have been struck by the degree to which a set of highly unusual formal and informal rules and relationships are taken for granted, implicitly and almost unconsciously incorporated into the organizational structure of the operational Navy.

Only those who have been privileged to participate in high-tempo flight operations aboard a modern aircraft carrier at sea can appreciate the complexity, strain, and inherent hazards that underlie seemingly routine day-to-day operations. That naval personnel ultimately accept these conditions as more or less routine is yet another example of how adaptable people are to even the most difficult and stressful of circumstances.

We have now spent considerable time aboard several aircraft carriers in port and at sea, and our team of non-Navy academics retains a certain distance that allows ns to recognize and report on the astonishing and unique organizational structure and performance of carrier flight operations.[5] We do not presume that our limited exposure to a few aspects of operations has given us a comprehensive overview. Nevertheless, we have already been able to identify a set of causal factors that we believe are of central importance to understanding how such organizations operate.

In an era of constant budgetary pressure, the Navy shares with other organizations the need to defend those factors most critical to maintaining performance without, at the same time, sacrificing either operational reliability or safety. Following many conversations with naval personnel of all ranks, we are convinced that the rules and procedures that make up those factors are reasonably well-known internally, but are written down only in part and generally not expressed in a form that can be readily conveyed outside the confines of the Navy.

The purpose of this article is to report some of our more relevant findings and observations to our gracious host, the Navy community; to describe air operations through the eyes of informed, yet detached observers; and to use our preliminary findings to reflect upon why carriers work as well as they do.

Self-Design and Self-Replication

> So you want to understand an aircraft carrier? Well, just imagine that it's a busy day, and you shrink San Francisco Airport to only one short runway and one ramp and gate. Make planes take off and land at the same time, at half the present time interval, rock the runway from side to side, and require that everyone who leaves in the morning returns that same day. Make sure the equipment is so close to the edge of the envelope that it's fragile. Then turn off the radar to avoid detection, impose strict controls on radios, fuel the aircraft in place with their engines running, put an enemy in the air, and scatter live bombs and rockets around. Now wet the whole thing down with salt water and oil, and man it with 20-year old's, half of whom have never seen an airplane close-up. Oh, and by the way, try not to kill anyone.
>
> Senior Officer, Air Division

Today's aircraft carrier flight operations are as much a product of their history and continuity of operation as of their design. The complexity of operations aboard a large, modern carrier flying the latest aircraft is so great that *no one*, on or off the ship, can know the content and sequence of every task needed to make sure the aircraft fly safely, reliably, and on schedule. As with many organizations of similar size and complexity, tasks are broken down internally into smaller and more homogeneous units as well as task-oriented work groups.[6] In the case of the Navy, the decomposition rules are often ad hoc and circumstantial: some tasks are organized by technical function (Navigation, Weapons), some by unit (Squadron), some by activity (Handler, Tower), and some by mission (Combat, Strike). Men may belong to and be evaluated by one unit (e.g., one of the squadrons), yet be assigned to another (e.g., aircraft maintenance).

In order to keep this network alive and coordinated, it must be kept connected and integrated horizontally (e.g., across squadrons), vertically (from maintenance and fuel up through operations), and across command structures (Battle Group—Ship—Air Wing). As in all large organizations, the responsible officer or chief has to know what to do in each case, how to get it done, whom to report to and why, and how to coordinate with all units that he depends upon or that depend upon him. This is complicated in the Navy case by the requirement for many personnel, particularly the more senior officers, to interact on a regular basis with those from several separate organizational hierarchies. Each has several different roles to play depending upon which of the structures is in effect at any given time.[7]

Furthermore, these organizational structures also shift in time to adapt to varying circumstances. The evolution of the separate units (e.g., Ships, Air Wing, Command Structures), and their integration during workup into a fully coordinated operational team, for example, have few, if any applicable counterparts in civilian organizations.[8] There is also no civilian counterpart for the requirement to adapt to rapid shifts in role and authority in response to changing tactical circumstances during deployment.

No armchair designer, even one with extensive carrier service, could sit down and lay out all the relationships and interdependencies, let alone the criticality and time sequence of all the individual tasks. Both tasks and coordination have evolved through the incremental accumulation of experience to the point where there probably is no single person in the Navy who is familiar with them all.[9] Rather than going back to the *Langley*, consider, for the moment, the year 1946 when the fleet retained the best and newest of its remaining carriers and had machines and crews finely tuned for the use of propeller-driven, gasoline-fueled, Mach 0.5 aircraft on a straight deck.

Over the next few years the straight flight deck was to be replaced with the angle deck, requiring a complete relearning of the procedures for launch and recovery and for "spotting" aircraft on and below the deck. The introduction of jet aircraft required another set of new procedures for launch, recovery, and spotting, and for maintenance, safety, handling, engine storage and support, aircraft servicing, and fueling. The introduction of the Fresnel lens landing system and air traffic control radar put the approach and landing under centralized, positive on-board control. As the years went by, the launch/approach speed, weight, capability, and complexity of the aircraft increased steadily, as did the capability and complexity of electronics of all kinds. There were no books on the integration of this new "hardware" into existing routines and no other place to practice it but at sea; it was all learned on the job. Moreover, little of the process was written down, so that the ship in operation is the only reliable "manual."

For a variety of reasons, no two aircraft carriers, even of the same class, are quite alike. Even if nominally the same, as are the recent *Nimitz*-class ships, each differs slightly in equipment and develops a unique personality during its shakedown cruise and first workup and deployment.[10] While it is true that each ship is made up of the same range of more or less standardized tasks at the micro level, the question of how to do the job right involves an understanding of the structure in which the job is embedded, and that is neither standardized across ships nor, in fact, written down systematically and formally anywhere. If they left the yards physically different, even such apparently simple matters as spotting aircraft properly on the deck have to be learned through a process of trial and error.[11]

What is more, even the same formal assignment will vary according to time and place. Carriers differ; missions differ; requirements differ from Atlantic to Pacific, and from fleet to fleet; ships have different histories and traditions, and different equipment; and commanding officers and admirals retain the discretion to run their ships and groups in different ways and to emphasize different aspects. Increased standardization of carriers, aircraft loadings, missions, tasks, and organizational structure would be difficult to obtain, and perhaps not even wise.[12] There is a great deal to learn in the Navy, and much of it is only available on the spot.

Shore-based school training for officers and crew provides only basic instruction.[13] It includes a great deal about what needs to be done and the formal rules for doing it. Yet it only provides generalized guidelines and a standardized framework to smooth the transition to the real job of performing the same tasks on board as part of a complex system. NATOPS and other written guidelines represent the book of historical errors. They provide boundaries to prevent certain actions known to have adverse outcomes, but little guidance as to how to promote optimal ones.

Operations manuals are full of details of specific tasks at the micro level, but rarely discuss integration into the whole. There are other written rules and procedures, from training manuals through Standard Operating Procedures (SOPs), that describe and standardize the process of integration. None of them explain how to make the whole system operate smoothly, let alone at the level of performance that we have observed.[14] It is in the real-world environment of workups and deployment, through the continual training and retraining of officers and crew, that the information needed for safe and efficient operation is developed, transmitted, and maintained. Without that continuity, and without sufficient operational time at sea, both effectiveness and safety would suffer.

Moreover, the organization is not stable over time. Every 40 months or so there is an almost 100 percent turnover of crew, and all of the officers will have rotated through and gone on to other duty. Yet, the ship remains functional at a high level. The Navy itself is, of course, the underlying structural determinant. Uniforms, rank, rules and regulations, codes of conduct, and specialized languages provide a world of extensive codification of objects, events, situations, and appropriate conduct; members who deviate too far from the norm become "foreigners" within their own culture and soon find themselves outside the group, figuratively, if not literally.[15]

Behavioral and cultural norms, SOPs, and regulations are necessary, but they are far from sufficient to preserve operational structure and the character of the service. Our research team noted three mechanisms that act to maintain and transmit operational factors in the face of rapid turnover. First, and in some ways most important, is the pool of senior chiefs, many of whom have long service in their specialty and circulate around similar ships in the fleet.[16] Second, many of the officers and some of the crew will have at some time served on other carriers, albeit in other jobs, and bring to the ship some of the shared experience of the entire force. Third, the process of continual rotation and replacement, even while on deployment, maintains a continuity that is broken only during a major refit. These mechanisms are realized by an uninterrupted process of on-board training and retraining that makes the ship one huge, continuing school for its officers and men.

When operational continuity is broken or nonexistent, the effects are observable and dramatic. One member of our research group had the

opportunity to observe a new *Nimitz*-class aircraft carrier as she emerged from the yard and remarked at how many things had to be learned before she could even begin to commence serious air operations.[17] Even for an older and more experienced ship coming out of an ordinary refit, the workup towards deployment is a long and arduous process. Many weeks are spent just qualifying the deck for taking and handling individual aircraft, and many more at gradually increasing densities to perfect aircraft handling as well as the coordination needed for tight launch and recovery sequences. With safety and reliability as fixed boundary conditions, every moment of precious operational time before deployment is devoted to improving capability and efficiency.

The importance of adequate workup time—for flight operations to be conducted safely at present levels of technical and operational complexity and at the tempo required for demonstrating effectiveness—cannot be overemphasized. During our research we followed one carrier in which the workup was shortened by "only" 2 weeks, for reasons of economy. As a result, the ship was forced to complete its training during the middle of a difficult and demanding mid-ocean exercise; this placed an *enormous strain* on all hands. While the crew succeeded—the referees adapted compensating evaluation procedures—risks to ship's personnel and equipment were visibly higher. Moreover, officers and crew were openly unhappy with their own performance, with an attendant and continuing impact on morale.[18]

The Paradox of High Turnover

> As soon as you learn 90% of your job, it's time to move on. That's the Navy way.
> Junior Officer

Because of the high turnover rate, a U.S. aircraft carrier will begin its workup with a large percentage of new hands in the crew, and with a high proportion of officers new to the ship. The U.S. Navy's tradition of training generalist officers (which distinguishes it from the other military services) assures that many of them will also be new to their specific jobs. Furthermore, tours of duty are not coordinated with ship sailing schedules, hence, the continual replacement of experienced with "green" personnel, in critical as well as routine jobs, continues even during periods of actual deployment.

Continual rotation creates the potential for confusion and uncertainty, even in relatively standardized military organizations. Lewis Sorley has characterized the effects of constant turnover in other military systems as "rurbulence," and has identified it as the prime source of loss of unit cohesion.[19] A student of Army institutional practices has remarked that the constant introduction of new soldiers into a unit just reaching the level of competence needed to perform in an integrated manner can result in poor evaluations, restarting the training cycle, and keeping individuals perpetually frustrated by their poor job performance.[20]

Negative effects in the Navy case are similar. It takes time and effort to turn a collection of men, even men with the common training and common background of a tightly-knit peacetime military service, into a smoothly functioning operations and management team. SOPs and other formal rules help, but the organization must learn to function with minimal dependence upon team stability and personal factors. Even an officer with special aptitude or proficiency at a specific task may never perform it at sea again.[21] Cnmulative learning and improvement are also achieved slowly and with difficulty, and individual innovations and gains are often lost to the system before they can be consolidated.[22]

Yet we credit this practice with contributing greatly to the effectiveness of naval organizations. There are two general reasons for this paradox. First, the efforts that must be made to ease the resulting strain on the organization seem to have positive effects that go beyond the problem they directly address. And, second, officers must develop authority and command respect from those senior enlisted specialists upon whom they depend and from whom they must learn the specifics of task performance.

The Navy's training cycle is perforce dictated by the schedule of its ships, not its personnel. Because of high social costs of long sea-duty tours, the Navy has long had to deal with such continual turnover—it attempts as best it can to nitigate the negative effects. Most important is the institutionalization of continual, cyclic training as part of organizational and individual expectations. This is designed to bring new people "up to speed" with the current phase of the operational cycle, thus stabilizing the environment just before and during deployment; however, this is accomplished at the cost of pushing the turbulence down into individual units. Although the deployment cycle clearly distinguishes periods of "training" from those of "operations," it is a measure of competence and emphasis, not of procedural substance, that applies primarily to the ship as a unit, not its men as individuals.

The resnlt is a relatively open system that exploits the process of training and retraining as a means for socialization and acculturation. At any given moment, all but the most junior of the officers and crew are acting as teacher as well as trainee. A typical lieutenant commander, for instance, simultaneously tries to master his present job, train his juniors, and learn about the next job he is likely to hold. If he has just come aboard, he is also engaged in trying to master or transfer all the cumulated knowledge about the specifics of task, ship, and personnel in a time rarely exceeding a few weeks.[23] In addition to these informal officer-officer and officer-crew interactions, officers and crew alike are also likely to be engaged in one or more courses of formal study to master new skills in the interest of career advancement or rating.

As a result, the ship appears to us as one gigantic school, not in the sense of rote learning, but in the positive sense of a genuine search for acquisition and improvement of skills. One of the great enemies of high reliability is the usual

"civilian" combination of stability, routinization, and lack of challenge and variety that predispose an organization to relax vigilance and sink into a dangerous complacency that can lead to carelessness and error.[24] The shipboard environment on a carrier is never that stable. Traditional ways of doing things are both accepted and constantly challenged. Young officers rotate in with new ideas and approaches; old chiefs remain aboard to argue for tradition and experience. The resulting dynamic can be the source of some confusion and uncertainty at times, but at its best leads to a constant scrutiny and rescrutiny of every detail, even for SOPs.

In general, the Navy has managed to change the rapid personnel turnover to an advantage through a number of mechanisms that have evolved by trial and error. SOPs and procedures, for example, are often unusually robust, which in turn contributes another increment to reliability. The continual movement of people rapidly diffuses organizational and technical innovation as well as "lessons learned," often in the form of "sea stories," throughout the organization. Technical innovation is eagerly sought where it will clearly increase both reliability and effectiveness, yet resisted when suggested purely for its own sake. Data is logged with grease pencils by operators who read sophisticated radar systems; indicators for the cables to arrest multimillion dollar aircraft are set and checked mechanically, by hand. Things tend to be done in proven ways and changed only when some unit has demonstrated and documented an improvement in the field. The problem for the analyst and for the Navy is the separation of functional conservatism from pure tradition.

Authority Overlays

> Here I'm responsible for the lives of my gang. In civilian life, I'm the kind of guy you wouldn't like to meet on a dark street.
>
> Deck Petty Officer

Our team noted with some surprise the adaptability and flexibility of what is, after all, a military organization in the day-to-day performance of its tasks. On paper, the ship is formally organized in a steep hierarchy by rank with clear chains of command and means to enforce authority far beyond that of any civilian organization. We supposed it to be run by the book, with a constant series of formal orders, salutes, and yes-sirs. Often it is, but flight operations are not conducted that way.

Flight operations and planning are usually conducted as if the organization were relatively "flat" and collegial. This contributes greatly to the ability to seek the proper, immediate balance between the drive for safety and reliability and that for combat effectiveness. Events on the flight deck, for example, can happen too quickly to allow for appeals through a chain of command. Even the lowest rating on the deck has not only the authority, but the obligation to suspend flight operations immediately, under the proper

circumstances and without first clearing it with superiors. Although his judgment may later be reviewed or even criticized, he will not be penalized for being wrong and will often be publicly congratulated if he is right.[25]

Coordinated planning for the next day's air operations requires a series of involved trade-offs between mission requirements and the demands of training, flight time, maintenance, ordnance, and aircraft handling. It is largely done by a process of ongoing and continuing argument and negotiation among personnel from many units, in person and via phone, which tend to be resolved by direct order only when the rare impasse develops that requires an appeal to higher authority. In each negotiation, most officers play a dual role, resisting excessive demands from others that would compromise the safety or fnture performance of their units, while maximizing demands on others for operational and logistic support.

This does not mean that formal rank and hierarchy are unimportant. In fact, they are the lubricant that makes the informal processes work. Unlike the situation in most civilian organizations, relative ranking in the hierarchy is largely stable and shaped by regular expectations, formal rules, and procedures. Although fitness reports and promotion review boards are not free of abuses or paradoxes, the shipboard situation tends to promote cooperative behavior, which tends to minimize the negative effects of jealousy and direct competition.[26] Although officers of the same rank are competitively rated, each stands to benefit if joint output is maximized and suffer if the unit is not performing well. Thus, we rarely observe such strategies as the hoarding of information or deliberate undermining of the ability of others to perform their jobs that characterize so many civilian organizations, particularly in the public sector.

Redundancy

> How does it work? On paper, it can't, and it don't. So you try it. After a while, you figure out how to do it right and keep doing it that way. Then we just get out there and train the guys to make it work. The ones that get it we make PO's. The rest just slog through their time.
> Flight Deck Chief

Operational redundancy—the ability to provide for the execution of a task if the primary unit fails or falters—is necessary for high-reliability organizations to manage activities that are sufficiently dangerous to cause serious consequences in the event of operational failures.[27] In classic organizational theory, redundancy is provided by some combination of duplication (two units performing the same function) and overlap (two units with functional areas in common). Its enemies are mechanistic management models that seek to eliminate these valuable modes in the name of "efficiency."[28] For a carrier at sea, several kinds of redundancy are necessary, even for normal peacetime operations, each of which creates its own kinds of stress.

A primary form is technical redundancy involving operations-critical units or components on board—computers, radar antennas, etc. In any fighting ship, as much redundancy is built in as is practicable. This kind of redundancy is traditional and well-understood. Another form is supply redundancy. The ship must carry as many aircraft and spares as possible to keep its power projection and defensive capability at an effective level in the face of maintenance requirements and possible operational or combat losses. Were deck and parts loading reduced, many of the dangers and tensions involved in scheduling and moving aircraft would be considerably lessened. Here is a clear case of a trade-off between operational and safety reliability that must be made much closer to the edge of the envelope than would be the case for other kinds of organizations. Indeed, for a combat organization, the trade-off point is generally taken as a measure of overall competence.[29]

Most interesting to our research is a third form, *decision/management* redundancy, which encompasses a number of organizational strategies to ensure that critical decisions are timely and correct. This has two primary aspects: (a) internal cross-checks on decisions, even at the micro level; and, (b) fail-safe redundancy in case one management unit should fail or be put out of operation. It is in this area that the rather unique Navy way of doing things is the most interesting, theoretically as well as practically.

As an example of (a), almost everyone involved in bringing the aircraft on board is part of a constant loop of conversation and verification taking place over several different channels at once. At first, little of this chatter seems coherent, let alone substantive, to the outside observer. With experience, one discovers that seasoned personnel do not "listen" so much as monitor for deviations, reacting almost instantaneously to anything that does not fit their expectations of the correct routine. This constant flow of information about each safety-critical activity, monitored by many different listeners on several different communications nets, is designed specifically to assure that any critical element that is out of place will be discovered or noticed by *someone* before it causes problems.

Setting the arresting gear, for example, requires that each incoming aircraft be identified (for speed and weight), and each of four independent arresting gear engines set correctly.[30] At any given time, as many as a dozen people in different parts of the ship may be monitoring the net, and the settings are repeated in two different places (Pri-Fly and LSO). During a trip aboard *Enterprise* in April 1987, she took her 250,000th arrested landing, representing about 1 million individual settings.[31] Because of the built-in redundancies and the personnel's cross-familiarity with each other's jobs, there had not been a *single* recorded instance of a reportable error in setting that resulted in the loss of an aircraft.[32]

Fail-safe redundancy, (b), is achieved in a number of ways. Duplication and overlap, the most familiar modes of error detection, are used to some extent;

for example, in checking mission weapons loading. Nevertheless, there are limits to how they can be provided. Space and billets are tight at sea, even on a nuclear-powered carrier and, unlike land-based organizations, the seagoing Navy cannot simply add extra departments and ratings. Shipboard constraints and demands require a considerable amount of redundancy at relatively small cost in personnel. In addition to the classic "enlightened waste" approach of tolerance for considerable duplication and overlap, other, more efficient strategies that use existing units with other primary tasks as backups are required, such as "stressing the survivor" and mobilizing organizational "reserves."[33]

Stressing-the-survivor strategies require that each of the units normally operate below capacity so that if one fails or is unavailable, its tasks can be shifted to others without severely overloading them. Redundancy on the bridge is a good example.[34] Mobilizing reserves entails the creation of a "shadow" unit able to pick up the task if necessary. It is relatively efficient in terms of both space and personnel but places higher demands on the training and capability of individuals. What the Navy effects, through the combination of generalist officers, high job mobility, constant negotiation, and perpetual training, is a mix that leans heavily on reserve mobilization with some elements of survivor stressing. Most of the officers and a fair proportion of senior enlisted men are familiar with several tasks other than the ones they normally perform and could execute them in an emergency.

The Combat Decision Center (CDC, or just "Combat"), for example, is the center for fighting the ship.[35] Crucial decisions are thereby placed nominally in the hands of relatively junior officers in a single, comparatively vulnerable location. In this case we have noted several of the mechanisms described above. There is a considerable amount of senior oversight, even in calm periods. A number of people are "just watching," keeping track of each other's jobs or monitoring the situation from other locations. There is no one place on the ship that duplicates the organizational function of combat, yet each of the tasks has a backup somewhere—on the carrier or distributed among other elements of the battle group.[36]

In an "ordinary" organization these parameters would likely be characterized in negative terms. Backup systems differ in pattern and structure from primary ones. Those with task responsibility are constantly under the critical eyes of others. Authority and responsibilities are distributed in different patterns and may shift in contingencies. In naval circumstances, where reliability is paramount, these are seen as positive and cooperative, for it is the *task* that is of primary importance.

Thus, those elements of Navy "culture" that have the greatest potential for creating confusion and uncertainty turn out to be major contributors to organizational reliability and robustness under stress. We believe this to be an example of adaptive organizational evolution to circumstance, for it responds

very well to the functional necessities of modern operations. In the days of great, compact flotillas, loss of navigational or deck or gun capability by one ship could be compensated for by shifting or sharing with another. There is only one carrier in a Battle Group and only a handful of other ships spread over many hundreds of square miles. Each, and most particularly the carrier, must internalize its own processes and modalities for redundancy.

Some Preliminary Conclusions

> The job of this ship is to shoot the airplanes off the pointy end and catch them back on the blunt end. The rest is detail.
>
> Carrier Commanding Officer

Even though our research is far from complete, particularly with regard to comparisons with other organizations, several interesting observations and lessons have already been recorded.

First, the remarkable degree of personal and organizational flexibility we have observed is essential for performing operational tasks that continue to increase in complexity as technology advances. "Ordinary" organizational theory would characterize aircraft carrier operations as confusing and inefficient, especially for an organization with a strong and steep, formal management hierarchy (i.e., any "quasi-military" organization). However, the resulting redundancy and flexibility are, in fact, remarkably efficient in terms of making the best use of space-limited personnel.

Second, an effective fighting carrier is not a passive weapon that can be kept on a shelf until it is needed. She is a living unit possessed of dynamic processes of self-replication and self-reconstruction that can only be nurtured by retaining experienced personnel, particularly among the chiefs, and by giving her sufficient operational time at sea. This implies a certain minimum budgetary cost for maintaining a first-line carrier force at the levels of operational capability and safety demanded of the U.S. Navy.

The potential risk of attempting to operate at present levels under increasing budgetary constraints arises because the Navy is a "can-do" organization, visibly reluctant to say "we're not ready" until the situation is far into the red zone.[37] In time of war, the trade-off point between safety and effectiveness moves, and certain risks must be taken to get units deployed where and when they are needed. In peacetime, the potential costs of deploying units that are less than fully trained are not so easily tolerated. If reductions in at-sea and flying time are to be taken out of workups to preserve operational time on deployment, training and evaluation procedures will have to be adapted to reduce stress—perhaps by overlapping final readiness evaluations into the beginning of the deployment period.

Third, as long-term students of organizations, we are astounded at how little of the existing literature is applicable to the study of ships at sea.

Consider, for example, the way in which the several units that make up a Battle Group (carrier, air wing, supply ships, escorts) are in a continual process of formation and reformation. Imagine any other organization performing effectively when it is periodically separated from, and then rejoins the unit that performs its central technical function.[38] More importantly, most of the existing literature was developed for failure-tolerant, civilian organizations with definite and measurable outputs. The complementary body on public organizations assumes not only a tolerance for failure, but, at best, an ambiguous definition of what measures failure (or, for that matter, success).

Fourth, we have been encouraged to reflect on the new large Soviet nuclear carrier now being fitted out in the Black Sea.[39] The Soviet Navy is completely without experience or tradition in large carrier operations. Their internal structure is more rigid and more formal than ours and with far less on-the-job training, especially for enlisted personnel.[40] It will be very interesting to watch their workup time, deck loading, and casualty rates. Of course, it is not clear that they will be trying to emulate U.S. carrier operations rather than the somewhat different style and objectives of the British or French.[41] In either case, we estimate a minimum of several workups (each taking perhaps 2-3 years) before they begin to approach the deck loads and sortie rates of comparable Western carriers and, unless they are remarkably lucky, there will be some loss of lives in the learning process.[42]

Notes

1. See, for example, Charles Perrow, *Normal Accidents* (New York: Basic Books, 1984).

2. Examples that have attracted recent attention include Bhopal, Séveso, Three-Mile Island, and Chernobyl. All four meet Perrow's criteria for coupling, response time, and complexity. The essence of a "normal" accident is that the potentiality inheres in the design of the system and, despite attempts to fix "blame," is not primarily the result of individual misbehavior, malfeasance, or negligence.

3. By comparison, civil air traffic controllers deliberately stay far away from the edge. Fixed rules such as maintaining 5-mile intervals are designed to err broadly in the direction of safety. Moreover, the turnover rate for controllers is relatively low (barring extraordinary events such as the recent strike); even equipment changes are few and far between.

4. From this point we refer to carrier personnel as "men," since as yet the Navy does not allow women to serve aboard combat vessels.

5. We have followed both the U.S.S. *Carl Vinson* (CVN-70) and the U.S.S. *Enterprise* (CVN-65), under a total of four different captains, through their training and workup from Alameda and San Diego and across the Pacific into the South China Sea. In additiou, one of us (Roberts) has been able to observe the iuitial sea trials of the U.S.S. *Theodore Roosevelt* (CVN-71).

6. In formal organizational terms, we refer to this as "decomposability." The basic notion was introduced by Herbert A. Simon in "The Architecture of Complexity," *Proceedings of the American Philosophical Society*, December 1962, pp. 467-482, reprinted in Herbert A. Simon, *The Sciences of the Artificial* (Cambridge, Mass.: The MIT Press, 1981).

7. Dnring our interviews, one senior officer on flag staff suggested that the several different functional and hierarchical modes of organization might be viewed as a set of "overlays" that are superimposed upon the formal organization at different times, depending upon the task or circumstance at hand. Many of the officers mnst shift roles numerous times during the course of a single active day of flight operations.

8. The few examples that come to mind are large construction projects, e.g., nuclear power plants, the Alaskan pipeline, etc. However, these usually have considerable oversight from a separate firm whose sole task is to coordinate and schedule the work properly.

9. This point was brought home sharply by the effort to bring up the ZOG computer system on the U.S.S. *Carl Vinson*, which would have required that almost complete knowledge about all details of ship operations be known and entered if the system were to function as originally intended. In retrospect, this can be seen as a near-impossible requirement without the mounting of a considerable special effort to collect and organize the data.

10. Furthermore, a strong captain is capable of altering both the character of a ship and the way it operates, if he so chooses.

11. Given the size of modern jet aircraft and the number carried at full load, the matter of spotting is far from trivial. Inefficient spotting can greatly reduce the ability to move aircraft about quickly. Incorrect spotting can lead to serious interference with operations, or even to a "locked" deck on which it becomes impossible to move aircraft at all. In a trial using the deck model in Flight Deck Control, one of us managed to lock the deck so thoroughly that an aircraft would have had to be pushed over the side to free it.

12. Some nonfunctional variations are being reduced. For example, all LSO platforms will soon be located at the same level and position relative to the arresting gear wires. However, it is nearly impossible to upgrade all of the ships at once when new equipment is introduced, therefore, each is at a different stage of modification and upgrade at any given point in time.

13. To some extent this situation is improving. Landing System Officers (LSO), for example, now work with simulators. Although this is no substitute for experience when "eyeball" judgment is concerned, it helps.

14. As one senior chief remarked to us: "You have to know it, but it rarely helps when you really need it."

15. Roger Evered, "The Language of Organizations: The Case of the Navy," in Louis R. Pondy et al., eds., *Organizational Symbolism* (Greenwich, Conn.: JAI Press, 1983), pp. 125-144.

16. A very few stay on one ship for many years, but such "plank owners" are rare in the modern Navy.

17. For example, the first crew was unable to spot the deck effectively; Flight Deck Control was laid out with the deck model at right angles to the deck (interfering with spatial visualization) and obstructing the Aircraft Handling Officer's direct view of the deck from his only window.

18. The recent grounding of the U.S.S. *Enterprise* on Bishop Rock off San Diego may be at least partially due to her participation in a difficult exercise combining the elements of what were usually two exercises. The effect on ship's morale was very visible. See Karlene H. Roberts, "Bishop Rock Dead Ahead: The Grounding of U.S.S. *Enterprise*," submitted to U.S. Naval Institute *Proceedings*.

19. Lewis Sorley, "Prevailing Criteria: A Critique," in Sam C. Sarkesian, ed., *Combat Effectiveness* (Beverly Hills, Calif.: Sage Publications, 1980), pp. 57-93.

20. L.R. Giguet, "Coordinating Army Personnel Agencies Using Living Systems Theory: An Example," U.S. Army TRADOC, 1979, as quoted by Sorley at pp. 76-77.

21. The term "proficiency" is used in the special sense of Hubert L. Dreyfus and Stuart E. Dreyfus, *Mind Over Machine* (New York: Free Press, 1986), who classify five steps of skill acquisition: novice; advanced beginner; competence; proficiency; and expertise. For most officers, mastery of a specific assignment means at most the acquisition of proficiency—the ability to identify situations and act upon them without having to systematically think through the procedural steps involved. The most advanced stage, expertise, involves moving past "problem solving" to "intuition" in decisionmaking. Examples of relevance here include the flying skills of experienced pilots and the specific expertise of senior chiefs—in each case representing many years of continuous practice of a small range of specific skills.

22. We have observed several mechanisms used by the Navy to prevent such loss, including incentives for reporting successful innovation and formal procedures for their dissemination. The most general mechanism, however, is the informal dissemination of information by the movement of personnel, and through those responsible for refresher and other forms of at-sea training. A most remarkable combination of trainers and active personnel is the recently formed Association of Air Bos'ns, which holds annual meetings where information is exchanged and formal papers are presented.

23. Often, officers near the end of their tours, with new assignments in hand, are also trying to learn as much as they can about their future tasks and responsibilities.

24. K. Weick, "The Role of Interpretation in High Reliability Systems," *California Management Review*, v. 39, 1987, pp. 112-127.

25. Roberts observes that similar rules would operate to similar advantage on the Navigation Bridge, which of necessity operates under more formal and traditional rules.

26. Even when fitness report ratings are based solely on merit, they are necessarily subjective to some degree. It is inherently difficult to compare ratings taken on different ships, in different peer groups, by different superiors, even under the best of circumstances. But, the general opinion among those we have interviewed is that direct abuses of the system are relatively rare. As with all hierarchical organizations, politics will begin to enter as one moves to higher rank, but is thought to be a minor factor below the level of captain.

27. We note that the kinds of redundancy required to assure continued effectiveness in combat—e.g., in situations where physical damage to ship or command chains is anticipated—are qualitatively different from redundancy directed primarily to assuring the performance of safety-critical tasks. Elements of the former, however, are often major contributors to the latter.

28. Martin Landau, "Redundancy, Rationality and the Problem of Duplication and Overlap," *Public Administration Review*, November-December 1973, pp. 316-351.

29. In this context, we note that the tempo and character of U.S. carrier operations are so qualitatively different from those of other navies—including the French, British, and prospective Russian—that the envelope itself can only be measured by our own expectations and capabilities.

30. The engines are in different compartments and hand-set by separate operating teams so that collective failures in setting can only occur at the command level, i.e., in the Tower, where a number of other independent measures for cross-checking and redundancy are in place.

31. During heavy flight operations there may be anywhere from 600 to 1,000 settings of the engines in a single day. A typical deployment will have 8,000 to 10,000 arrested landings (traps), involving 30,000 to 40,000 settings over a 6-8 month period.

32. Although the probabilities are low, the possibility does exist. A minor error may simply result in too much runout, cable damage, or some damage to the aircraft. But an engine set for too heavy a weight can pull a tail hook out, leading to aircraft loss; setting for too low an aircraft weight can result in its "trickling" over the end of the angle deck and into the sea. Experienced air bos'ns and chiefs estimate that perhaps six or seven such serious errors have occurred throughout the entire U.S. Fleet over the past 20 years. Our estimate for the rate of uncorrected wrong settings with serious consequences is therefore about one in a million—roughly comparable to the probability of a mid-air collision in a domestic commercial airline flight. Setting errors that are corrected are "nonreportable" incidents and therefore not documented. We also note that on the U.S.S. *Carl Vinson*, a much newer ship with a still unbroken memory, no reportable incident of any kind could be recalled in the first 70,000 traps since its commissioning.

33. Allan W. Lerner, "There Is More Than One Way To Be Redundant," *Administration & Society*, November 1986, pp. 334-359.

34. This was brought home to us during a general quarters drill in which the bridge took simulated casualties.

35. During the period of observation, CDC was also the center for fighting the Battle Group, a task that will be increasingly supervised by the new Tactical Flag Command Centers (TFCC) as they are installed. Depending upon the physical arrangement of the ship, the CDC area contains the Combat Information Center (CIC), antiair warfare control consoles, and perhaps air operations and ship air traffic control (CATCC); other warfare modules, such as those for antisubmarine or antisurface warfare, may also be included or in physically adjacent spaces.

36. For example, control of fighter aircraft can be done from the carrier, from an E-2, or from one of several other ships in the group.

37. Evered lists qualities of "responsiveness to authority," "being ready," "can do," and "not fazed by sudden contingencies" as among the more "obvious" character traits of naval officer culture. These are transmitted by training programs, ceremonies, and historical models. The latter is particularly important for the "can do" aspect of the officer culture.

38. Not only are the ship and its air wing parted, but the wing itself is split into component squadrons that train under different functional commands.

39. No definite name for this 1000-foot-plus angle-deck, 65 to 70,000-ton nuclear-powered carrier has been ascertained at this time.

40. See Bruce W. Watson and Susan M. Watson, *The Soviet Navy: Strengths and Liabilities* (Boulder, Colo.: Westview, 1986).

41. Although it is currently believed that arresting gear and catapults will be fitted—and the deck mock-up at Saki airfield in the Crimea is so equipped—ski-ramps for a total loading of 60-70 STOL aircraft appear more likely in the short term, with possible future retrofit of catapults into pre-existing deck slots at some future date. See, for example, Norman Polmar, *Guide to the Soviet Navy*, 4th ed. (Annapolis, Md.: Naval Institute Press, 1986), pp. 164-165.

42. As a group, we doubt they will be able to approach the operating conditions and efficiency of U.S. carriers in this century, if at all, even if they master the associated naval and aircraft technologies.

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Naval War College Museum Briefs

The Naval War College Museum, located in Founders Hall, is currently exhibiting the naval works of well-known artist-illustrator Frederick Freeman of Essex, Connecticut. The display opened in August and will close on 30 October. Billed as "War at Sea, a Historical Perspective in Drawings and Paintings by Fred Freeman," it includes 65 selections dealing with naval historical themes in general and the U.S. Navy in particular. Our cover features Mr. Freeman's artistry.

Mr. Freeman established his career in New York City in the 1930s. During the Second World War he served three years in the Navy, chiefly in the Pacific where he commanded three ASW ships—he participated in the Guadalcanal melee and later in the Aleutians. After the war his illustrations were published in several Navy books, and he became the chief historical artist for the submarine service. He has illustrated for several popular publications, including works by his close friend Werner von Braun. One of three artists associated with the space program, Mr. Freeman participated in the National Aeronautics Space Administration Fine Arts Program and seven of his paintings of outer space are now in the NASA Permanent Collection. Works by Mr. Freeman hang in the Mariners Museum, the National Air and Space Museum, the Naval Academy Museum, the New Jersey State Museum and the New Britain, Connecticut Museum of American Art.

The Naval War College Foundation supported the publication of an exhibit catalogue and an evening reception to open the exhibit, which was attended by Mr. Freeman.

Tentative plans for the coming winter months include a "Naval Art of the Vietnam War Period" show consisting primarily of drawings and paintings on loan from the Navy Art Collection in Washington, D.C. It will also be a time for serious work on the first segment of a permanent "History of Naval Warfare" exhibit. This presentation is expected to occupy two-thirds of the museum's second floor and will identify milestones in the evolution of war at sea (i.e., tactics and strategy) from ancient to modern times. The first segment will cover the Battle of Salamis in 480 B.C. and will be followed by the Battle of Actium, 31 B.C.

Earlier this year, in February, the museum opened an exhibit titled "Old Ironsides, Drawings and Paintings of Navy Artist John C. Roach" in the east gallery on the second floor. Mr. Roach (formerly Commander Roach, USNR) is well-known for his many fine works on contemporary naval subjects; his drawings of the U.S.S. *Constitution* reflect an extraordinary effort and have received high praise. The collection, consisting of 66 pen and ink drawings and 2 oil paintings, was assembled for the Bicentennial celebration and depicted a panoramic history of the construction of the vessel and life on board during the first half of the nineteenth century.

In addition to the Roach materials, the exhibit included ship models, artifacts, and prints from the museum's collection reflecting the ship's affiliation with Narragansett Bay. The *Constitution*, a training ship attached to the U.S. Naval Academy when the school was temporarily located in Newport during the Civil War, was one of the first recruit training squadron ships of the Newport Naval Training Station (the first naval training station) in the early 1880s.

Armed Forces Day, 16 May, marked the opening of "Fighting Ships of the Second World War," an exhibition of ship models and Navy World War II combat art. Models of every major class of U.S. Navy combat vessel from 1941-1945 were displayed. Museum collection holdings that include models of the U.S.S. *Yorktown* (CV-5), U.S.S. *Langley* (CVL-27), U.S.S. *Cassin Young* (DD-793) and U.S.S. *Samuel B. Roberts* (DE-413) were augmented by selections from the Taylor Ship Model Basin in Carderock, Maryland, the Submarine Museum in Groton, Connecticut, The Boston National Historical Park, the battleship *Massachusetts* in Fall River, Massachusetts, and from private individuals. The works of art, drawings, and paintings of prominent World War II Navy combat artists were acquired on loan from the Navy Art Collection, Washington, D.C. This exhibit continued through the summer and is scheduled to close 31 October.

Each July, Newport commemorates the 1854 opening of commerce with Japan by native son Commodore Matthew C. Perry with a "Black Ships Festival." The College museum participates through its exhibits and on 20 July opened "Black Ship Scrolls, the Perry Expedition of 1853-1854 through Japanese Eyes." This summer's show centered around 13 large Japanese hand-painted panoramic 1853-1854 illustrations on loan to the museum from the Preservation Society of Newport County. The exhibit also included elements from the museum's own collection dealing with Japanese Samurai culture of the pre-Meiji restoration, early U.S. Navy expeditions to Japan, Japanese naval developments in the years before the First World War, and Matthew C. Perry's Official Report of 1856.

IN MY VIEW . . .

Jon Oliver

Ideas: The Ultimate Force Multiplier

Sir,

The Navy, from times past until now, caught up in its current concepts of weapons and strategies, has had a very hard time accepting new ideas.

Two examples of this from times past are: (1) In 1907 the Wright Brothers offered their airplane patents both to the Royal Navy and to our Navy. Neither considered the airplane to be of any practical use to their naval services. Even after the Royal Naval Air Service in World War I demonstrated both the tactical and strategic capabilities of naval air power, our battleship admirals did not grasp its importance and considered our carriers to be merely an adjunct to the battle line. It was not until after Pearl Harbor, 34 years later when most of the battle line was sunk by planes from the Japanese carriers, that the carrier became the primary weapon system of all navies; (2) similarly, in 1918 Lawrence Sperry demonstrated the world's first successful precision-guided cruise missile to our Navy. Except for an aborted Regulus program, it was not until our bombers continued to be shot out of the sky, trying to knock out the then Hoa bridge in Vietnam, that precision-guided missiles came into their own, successful in their first attempt. This, almost 50 years after Sperry's original idea.

The same lack of acceptance of new ideas is prevalent in our Navy today in the cases of directed energy weapons and manned space planes—two new weapons concepts that could completely revise warfighting as we know it today.

Directed energy weapons could well be the answer to defending our naval ships from coordinated and repeated severe missile attacks from Soviet aircraft, ships, submarines, and land bases. Yet, the Navy seems to have given up all priority efforts to develop and acquire these weapons. In the early 1980s, under the direction of Captain Skolnick, the Navy's beam weapons program was progressing in a most promising fashion with the prospect of having an operational effective defensive beam weapons system available for installation on our ships by the late 1980s. In 1983 this development program was terminated as DARPA took over all developing beam

weapons programs and reoriented them away from weapons development, towards the long-range goal of the President's Strategic Defense Initiative.

Under this program, oriented toward strategic growth, development of more powerful defensive beam weapons has progressed in a most promising fashion. Our naval leaders should be pressing to install tactical revisions on their ships as soon as research and developments substantiate their effectiveness against cruise and even ballistic missiles. The potential capabilities of these systems should provide a quantum improvement in task force defenses against coordinated enemy missile attacks.

Even more worrisome is the urgent requirement to find the ideas to perfect defenses for our pilots, planes, missiles, and low-flying satellites that will enable them to survive Soviet beam weapons attacks—initially high-energy lasers, and ultimately particle beams. The latest issue of "Soviet Military Power" predicts the Soviets will have their forward troops defending important targets with these weapons by the early 1990s, and their naval ships will be equipped with them by the mid-1990s. Unless we can come up with a defense against these weapons our tactical air warfare capability may be relatively useless if called upon to fight the Soviets.

Another recent idea our naval leaders have ignored is manned space planes. In spite of the fact that the Navy, more than any other service, makes use of space-based systems and that many of the historical early space flights, from Alan Shepard on, were made by Navy/Marine aviators (15 of the first 18 space shuttle flights were commanded by Navy-Marine aviators), the Navy has permitted the Air Force sole assignment to the mission of manned space flights vice fighting for coequal responsibility.

Since the advent of carrier air power, navies without their own air forces have been quickly overcome by those who do have their own. The same fate could befall the U.S. Navy task forces in a future war with the Soviets unless they have their own manned space planes to carry out vital wartime tasks and control space over our ships at sea and around satellites.

In summary, the Navy should take urgent actions to adopt new ideas of directed energy weapons and manned space planes for their use. New, worthwhile ideas that could change the very character of warfighting are not worth much unless they are enthusiastically pursued. As Giulio Douhet once said: "Victory smiles upon those who anticipate the changes in the character of war, not upon those who wait to adapt themselves after the changes occur."

John Lacouture
Captain, U.S. Navy (Ret.)

Intelligence Exchange and Jointness

Sir,

In reading the President's Notes (Summer 1987) dealing with the fighting efficiency and effectiveness of our Armed Forces and the spirit of "jointness," I could not help reflecting on the "intelligence exchange" as a critical element in joint warfare prosecution.

The Armed Forces of the United States lay claim to the fact that they are the best ever assembled in this country's history. The areas of technology, training and morale have reached an all-time high. They opine that they can achieve the desired results in dealing with any threat to our national security. A quick examination of their abilities versus possible aggressors generally supports these contentions. A closer inspection, however, reveals that these statements are only credible in a parochial sense—when they are engaged against a potential enemy's similar service, i.e., land versus land, sea versus sea, etc. The war envisioned for the future will be more of the combined arms variety. Because of the limitations of warfighting resources, increased weapon lethality, and the envisioned rapid movement and deployments of forces, it becomes critical that the services appreciate and participate in the mutual support they can offer to one another. Both theoretical and actual examples indicate that when the various services are required to operate together in a unified manner, the requirements for coordination become tediously endless and effectiveness diminishes.

Historically, the services have worked together successfully, i.e., the operations in World War II, Korea, Vietnam, etc. When one examines these operations more closely, it becomes apparent that the requisite coordination and cooperation were mainly the result of difficult negotiations and the willpower of strong-minded leaders. As a result, these mutually supporting operations were transitory, and the bulk of lessons learned have generally not been inculcated into the services' "joint operations knowledge" in any permanent fashion. We rely on memoirs and chronicles for these insights.

Whether it be in war game play or in an actual exercise, the absence of mutual support deleteriously affects the outcome. For example, in a global type war game scenario, the battle on the central front might not be going well. Allied air forces are hard pressed to establish the air superiority needed to undertake an effective follow-on forces attack. Ground forces commanders are somewhat successful in blunting the initial echelon attack but unable to stand firm when the unimpeded following echelons weigh into the battle. Meanwhile, naval forces are successfully executing and accomplishing their warfighting strategy; they virtually eliminate all resistance on the central battle flanks, pushing the Red force navy east of the North Cape and back into the Black Sea. Flawless execution leaves most of the allied naval combat power intact.

Granted this is "a scenario" and the results are only applicable and conclusive for this particular set of circumstances, however, games are designed to raise issues and identify possible problem areas for further consideration. Yet, this scenario parallels others that identify the same issue—the sea campaign proceeds acceptably while the land battle does not. One wonders if consideration could be given for the naval forces to assist the ground forces more directly in the battle on the central front. Unfortunately there is virtually no system or process at the campaign/operational level for this assistance to be coordinated in a real-time manner.

The absence of communications resources which could provide direct intelligence exchanges between the land and naval forces is the principal inhibitor for this type of assistance. Other inhibitors include inadequate training, munitions, and doctrine. The omission of experience in this sort of operational activity is not conducive to useful interaction. As a result, the naval assets, i.e., the carrier air wings in this case, are not

even considered as an option for the resolution of the central battle issue, though naval air could be the decisive ingredient in the prosecution of rear area security. If an operational maneuver group breakthrough materializes, it would be less costly to the firepower in the main battle area if naval air could be used in a role akin to Marine air support to the forces ashore. At present, due to lack of prior planning, incompatible resources, and an absence of joint agreements, it would take an inordinate amount of time and coordination to execute such a plan. The entire joint warfighting capability suffers and will continue to suffer until we prepare to do this prior to combat.

Other more localized and regional war game scenarios also illustrate this operational deficiency. Mutual land and sea support is effected only after a time-consuming passage of requests and intelligence data up and down command channels. While the Marines and Navy do operate well together within the ANGLICO system and the Army and Air Force within the Air/Land Battle Doctrine, the Army and Navy simply do not interact effectively or efficiently.

The recent real-life example of this lack of an effective process to interact operationally and tactically was witnessed during the Grenada operation. The Army and Navy components in that operation could not communicate with each other and, therefore, were unable to pass vital intelligence information which could have served as a catalyst for possible joint battle actions. Since that time, to the credit of the services, commands have been seeking to rectify this situation. Impromptu measures and ad hoc systems are now employed to satisfy the requirements, and while they ofttimes do suffice, their use is heavily dependent on the personalities involved.

What is really required is a doctrine and commitment to establish a permanent system. In the current climate emphasizing jointness, there exists tremendous opportunity, and the Joint Chiefs of Staff, at least in an oversight capacity, must take the lead in this area. Only in this way will the direction, authority, and responsibility be centralized and uniform.

A major part of this system has to be the intelligence exchange process which is the cornerstone for any successful operation. This system must encompass the where (what level), how and with what resources and understandings (doctrine) that is required to insure effective joint operations. Such an enterprise, encompassing the entire military structure, would be herculean and invariably nonstarting. Rather than attempt to wrap one's arms around the entire issue, it would seem prudent to take on one function or subfunction at a time. A logical place to start is the intelligence exchange process, designed to operate at the lowest level practicable. If successful, the results of this effort should eventually enable the practitioner to take bigger and bigger bites of the entire system until it is effectively formulated in its entirety.

John H. Prokopowicz
Colonel, U.S. Army

Philippines: Soviet Support for the New People's Army

Sir,

In the Winter 1987 issue of the *Review*, the article "A Peacetime Strategy for the Pacific" by Admiral James A. Lyons, Jr., CINCPAC Fleet, states that the Soviets "are

establishing ties to the [Philippine] left, and to front organizations of the Communist Party of the Philippines (CPP)." More recently, Admiral Lyons stated flatly that, "There is no doubt in my mind" that the Soviets are supporting the New People's Army (NPA) (*Washington Times*, 27 April 1987, p. 10A). Unlike many fainthearted officials in Washington, Admiral Lyons is following in the tradition of George S. Patton, Jr. and demonstrating guts—to confront erroneous conventional wisdom that the CPP is "homegrown and independent," and brains—to understand why this prevailing view is wrong.

While precise dates in the evolution of any relationship are always difficult, Soviet policy toward the CPP can be broken down roughly into four stages, which in turn represent an escalation ladder in Soviet involvement or influence in the CPP. In stage I (1969-1973) the Soviet Union really had no links to the party. The party was Maoist, pro-Chinese and dependent on Chinese material assistance. Following its abortive armed struggle, the party began to reassess its revolutionary strategy, and it increasingly looked to the Communist Party of the Soviet Union (CPSU) for support.

During stage II of Soviet policy (1974-1979) the Kremlin refused to provide the CPP with any appreciable material assistance. No Soviet military aid was given to the party. Instead, the CPSU provided the CPP with political guidance and advice. Unlike the Chinese, the Soviets said that revolutionary conditions were absent. According to Moscow, CPP political cells needed to be set up all over the Philippines. Soviet material assistance and the armed struggle of the NPA would come only after a nationwide organizational infrastructure was in place.

By 1979 the revolutionary conditions were improving and the CPP infrastructure was growing throughout the Philippines. During stage III (1979-1983) of Soviet policy, the Soviets began to provide sizeable amounts of indirect material assistance to the CPP. Most of the support was financial, although some military assistance was provided. At times the CPP was a witting recipient of this material assistance, at other times it was not.

By about 1984, revolutionary conditions in the Philippines were no longer just improving; they were now considered favorable by Moscow. During stage IV (1984-1987) of Soviet policy, the Soviets established direct political links to the party. Direct Soviet military and financial assistance was extended to the CPP/NPA. And by 1986, Soviet operatives were playing a direct role in the NPA insurgency.

Back in 1984 a decision was made in the Kremlin to sharply increase direct Soviet support for the NPA insurgency in the Philippines. While there are now numerous sources documenting Soviet support to the NPA, some of the best information about stage IV of Soviet relations with the CPP/NPA comes from former CPP Chairman Rodolfo Salas, who was captured by Philippine authorities in September 1986. Salas says the Soviets and the Vietnamese began direct negotiations with the CPP in 1984 and 1985. During these negotiations, Salas reveals, Moscow and Hanoi made proposals to give direct material assistance to the CPP/NPA. Rodolfo Salas agreed to accept Soviet/Vietnamese material support to the NPA because it was consistent with his view that the NPA could not come to power unless it reached its goal of 25,000 weapons. Salas argued that the NPA goal of 25,000 weapons could only be reached with foreign (i.e., Soviet bloc) assistance.

Other informed sources confirm Salas' account of Soviet-CPP relations, at least by late 1985 and early 1986. For instance, at the December 1985 CPP Party Congress, a Soviet representative offered direct financial and propaganda support to the party. Then in early 1986, the CPSU began direct negotiations with the CPP in Australia at the Soviet consulate in Sydney and at the Soviet Embassy in Canberra. The key personality link here was Vladimir Sampang of the CPP's National Democratic Front (NDF). Sampang regularly visited Australia to negotiate with the Soviets.

By 1986 it was becoming increasingly difficult to be unaware of what the Soviets were doing inside the Philippines. For instance, during 1986 the Soviets were beefing up their presence in the Philippines. A larger Soviet presence was needed to build up the infrastructure for more direct Soviet covert operations to support the NPA insurgency. Building up the operational infrastructure included pressing the Aquino government to: let more Soviet ships in Philippine waters, let more Soviet ships dock at Philippine ports (especially NPA strongholds in Cebu in the south) and let more Soviet ships undergo repairs. Moscow is currently pressing Philippine Vice President and Foreign Minister Salvador Laurel to increase the size of the official Soviet presence. In addition, the Russians are making plans to open a consulate in Cebu and possibly one in Mindanao. Perhaps the most telling sign of Moscow's intentions is the Soviet construction of an $800,000 three-story building in Manila, conveniently overlooking the Philippine Army post at Fort Bonifacio, a vital communications center. The Soviets have all sorts of listening devices, probably geared for relaying information on the Armed Forces of the Philippines (AFP) counterinsurgency operations against the NPA.

In October 1986, a former CPP leader revealed that the Soviets were using both the Vietnamese and Japanese Communists as surrogates to support the NPA. Japanese Communists were financing a shipment of Soviet arms from Vietnam to the Philippines via Malaysia. The CPP official referred to the Vietnam supply line as the Soviet connection to the NPA. In late 1986, he indicated that a huge shipment of Soviet arms was in the pipeline.

The Soviets worked closely with the CPP to take advantage of the 60-day ceasefire between the AFP and the NPA, which took place roughly during the months of December 1986 and January 1987. KGB operatives infiltrated at least 100 agents into NPA strongholds. They avoided immigration by leaving Soviet ships supposedly docked for ship repairs. With this KGB infrastructure in place, Soviet weapons were successfully smuggled into the Philippines, apparently from Cam Ranh Bay, Vietnam, only 700 miles away. During the period since the start of the ceasefire, KGB operatives have supplied the NPA with arms, training money and intelligence. KGB operatives are now solidly entrenched in places like Mindanao and Cebu. They pose as tourists, businessmen and even gold panners. Further evidence of Soviet support to the NPA surfaced in January of 1987. Rene Espina, Secretary General of United Democratic Opposition (UNIDO) (Vice President Salvador Laurel's political coalition), revealed that an unmarked ship delivered Soviet-made weapons to an NPA stronghold in Samar.

Because of the blatant nature of Soviet support, the CPSU and the CPP are giving up the fiction that the CPP is independent. For instance, at the recent 9th CPP Party Congress, the CPSU switched its support from the Partido Komunista Ng Pilipinas

(PKP) to the CPP. This shift was apparent in official CPSU greetings to the CPP. In addition, the NDF admitted for the first time in January of 1987 that "foreign governments" were supporting the NPA. Also in January of 1987, the NDF publicly revealed that the Soviets offered the NPA "all the arms and money it needed." The deal is still pending because of an undisclosed Soviet string.

In response to the growing Soviet involvement in the NPA insurgency, the United States is expanding its intelligence operations (*Washington Times*, 24 March 1987, pp. 1A and 6A). Informed sources say that up to 150 CIA agents are keeping track of at least the same number of KGB operatives who are showing up all over the Philippines and supplying arms and money to the NPA guerrillas. This CIA activity is reportedly part of a recently approved Reagan administration $10 million, two-year plan for increased CIA involvement in the Philippine Government's anti-insurgency effort.

If the Communist insurgents win in the Pbilippines, there is no question that the United States will lose access to Clark Air Force Base and Subic Naval Base. Would this matter to U.S. and ASEAN security? Are there alternatives? CINCPAC Fleet Commander Admiral James A. Lyons, Jr. states that there are "no good alternatives to these bases." He calls the bases the "key to our remaining a western Pacific power. Without them," he says, "I would need in certain categories two to three times the amount of forces I have today." He concludes by warning that if the bases are lost, it would amount to "turning over our friends and allies to Soviet political and military domination in that region" (*New York Times*, 11 December 1986, p. A18).

Leif R. Rosenberger
U.S. Army War College

More on Mine Countermeasures

Sir,

Commander Resing's article, "Mine Countermeasures in Coastal Harbors: A Force Planner's Dilemma," was interesting and timely. The mine threat is indeed significant and U.S. forces are probably inadequate to perform the task of mine clearance in a timely manner. Nonetheless, as enthusiastically as I greeted Commander Resing's thoughts, I found some of his statements misleading and part of his recommendations dubious at best.

Having spent some 3 years on MSOs, and as commanding officer of U.S.S. *Excel* (MSO-439), I think I am qualified to comment on their capabilities. Commander Resing's dismissal of MSOs as "antiquated, unreliable, and offering only marginal MCM capability" is unjustified. Considering that many of the Soviet and Third World mines are old, a capability to sweep all types of mines is necessary. The MSO, though among the oldest ships in our inventory, possesses essentially the same capability as the new MCM class for sweeping moored mines. This capability is vastly superior to Airborne Mine Countermeasures in depth, stay time, and reliability. In the area of influence mine sweeping, the MSO and MCM again have similar capabilities which complement the RH53 helicopters in that the RH53 specializes in shallow water, and the MSO/MCM force is more capable at greater depths.

In the area of mine hunting, the SQQ 30 sonar of the MCM class is a digitalized version of the SQQ 14 on the MSO. The capabilities of the two sonars, with the exception of depth, are the same. The real advantage of the MCM over the MSO is in navigation automation and speed of neutralization because the MSO uses a manpower-intensive navigational system for mine hunting which limits on-station time.

In the area of mine classification and neutralization, the MSO defines "mine-like" by how it appears on sonar. Since explosive cost is an insignificant factor during actual mine clearance operations, policy is to neutralize all mine-like objects with an explosive charge dropped near the object. Neutralization is done by vectoring the Z-bird to within a certain distance and releasing a charge; a slow and tricky process. The MCM possesses a significant improvement in this area by carrying a Mine Neutralization Vehicle (MNV). The MNV is a tethered submersible equipped with a bow sonar, lights, two TV cameras, an explosive charge, and cable cutters. It has great depth capability and can quickly identify and neutralize all classes of mines.

So, when comparing the capabilities of the MSO with the most modern of Mine Counter Measures ships, the MCM-1, you find their capabilities are very similar. However, the real significant improvement is in the area of Mine Classification and Neutralization, an area that Commander Resing identifies as the sole purview of the EOD community. The MNV can classify those objects as mines or non-mines; identify the type of mine and neutralize it much faster, safer and at greater depths than the EOD diver; and MNV on-station time is limited only by operator endurance.

Having worked with EOD divers on several occasions, I found them to be enthusiastic and well-trained. However, their endurance, speed, and depth limitations were a great hindrance for timely minesweeping. The MNV solves all these problems.

Commander Resing further stated that "the five MCM-1s currently under construction have several serious design problems, and the MSH-1 is barely past the design stage." This statement is inaccurate in two respects. First, as the original prospective commanding officer of MCM-2, I know of no present design problems; the shipyards are having start-up difficulties, but the design is sound. Second, the MSH-1 program is not "barely past the design stage." It is canceled. MSH-1 (*Cardinal*) will be constructed, but no others because the shock tests on the MSH test hull reportedly caused it to delaminate. This resulted in the decision that the Navy will go for an entirely different type of coastal mine hunter, designated MHC-51, to be based on a modification of the Italian *Lerici* hull design.

The EOD plays an important intelligence role in MCM operations. EOD divers can recover a mine and by subsequent disassembly determine the most effective sweeping method. The expanded use of EOD in minesweeping is improbable as increased numbers of MNVs come into use. The MSO, with scheduled re-engining, will remain the backbone of MCM operations. If any improvement to these ships is considered, a smaller MNV and an automated navigation system will increase their effectiveness and provide a credible MCM capability well into the 1990s.

W.A. Weronko
Lieutenant Commander, U.S. Navy

Mine Countermeasures in Coastal Harbors

Sir,

Commander Resing's article, although containing some inaccuracies concerning projected MCM ship construction and MCM capabilities, rings true as to the shortfall of emphasis on MCM by force planners. I would stop short of stating it has been "largely ignored," however, and note with dismay the absence of any mention of one of the U.S. Navy's most important planning and readiness assets.

With the implementation of the Maritime Defense Zone Organization in 1985, a renewed emphasis on port security and coastal and harbor defense and readiness has been evident. These U.S. Navy commands (USMARDEZLANT and PAC), staffed by Navy and Coast Guard personnel, have taken an active role in maritime defense planning and the conduct of exercises. Particularly, in the area of mine warfare, exercises have contained more and better mine countermeasures play. Renewed emphasis has been placed on the Q-Route Survey Program as a force multiplier and integrated mine countermeasures tactics have been tested for improvement and validation. Yes, we still have a long way to go to bring our mine countermeasures readiness to a level commensurate with the threat, but the Maritime Defense Zone Organization is concerned, and progress is being made. Given the excellent track record of this infant organization to date, our mine warfare posture will recognize real improvement over the next several years.

Gregory L. Shaw
Commander, U.S. Coast Guard

PROFESSIONAL READING

*A Thoroughly Efficient Navy**

Captain John B. Bonds, U.S. Navy

This book is a polemic rather than a serious piece of work. Mr. Kaufmann has two objectives: to discredit The Maritime Strategy and to sink the 600-ship Navy. Both are probably decent targets, as neither represents a precisely defined objective but rather a conveniently rounded approach to two problems. These are: how best to bring maritime power to bear in the unlikely event of a central European conventional war; and of what the U.S. Navy should consist to enable it to fulfill its missions (including, but not limited to, conventional war in Europe). These are tough problems with so many variables that a definitive solution (or a formula for "An Efficient Navy") is probably impossible. It seems certain that such a solution is totally impossible without recourse to very sensitive information about Soviet capabilities *and* intentions. To some extent, the most important factor in both problems is how the Soviets might react to the various options in force employment and force composition. To this degree the two problems overlap, since characteristics precisely tailored to one set of circumstances may not be useful in altered circumstances. We have termed this process "suboptimization"; it produces forces which have narrow ranges of employment. Too often this results in a system which is obsolete before it has been deployed or is unusable even for the mission intended due to the misperception of the threat by the analyst. The McNamara era produced several examples of this

* Kaufmann, William W. *A Thoroughly Efficient Navy*. Washington, D.C.: Brookings Institution, 1987. 90pp. $8.95

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tendency to apply cost-effectiveness as the primary consideration in the name of "thorough efficiency."* This is the danger in tailoring families of forces too closely to current perceptions of a threat which can change much faster than our ability to respond to it. Forces with excess capabilities for the bare-bones mission (SLOC protection in this case) are much more likely to cope with that mission in the out-years than a force possessing "thorough efficiency."

Therefore, from the onset the concept of specifically tailoring a navy to one mission is bothersome. More bothersome are Kaufmann's analyses of comparative effectiveness. Authoritative-looking charts of effectiveness appearing throughout the monograph have as their basis, "author's estimate." Even the most basic of data is questionable. For SLOC losses, the following are assumed:

- 67 Soviet submarines committed,
- 12 torpedoes each,
- .25 Pk for each torpedo,
- 40 percent loss to Soviet subs transiting barriers and screens, and
- 6 percent additional loss to SSNs in forward areas.

My recollection is that the correct number of torpedoes might be something like 20-24 each. If the sub successfully penetrates the screen (one assumes the 40 percent loss figure implies that those that are not included in that figure have done so), then a Pk of .25 may be quite low given the warhead size of Soviet torpedoes. Thus, the loss figures derived (in table 7-2) may be seriously underestimated. For example, the 109 ships lost in the first month could increase to 278 with 22 torpedoes and .35 Pk assigned. This would result in more than one-half of the ships deployed to Europe in the first month going to the bottom and might mean that the front would collapse on D+45 because of the lack of logistics support. Such a look illustrates the danger of precise calculation in dealing with this issue.

The real issue here is capability—to protect the SLOCs to be sure, but also to cause a defensive reaction so as to reduce the number of Soviet submarines sent forward to interrupt the SLOC. Using Mr. Kaufmann's figures, if a declaratory forward strategy caused the Soviet Navy to withhold 20 of those 67 submarines, first-month ship losses could drop from 109 to 68; or, using my figures, from 278 to 195. The latter is particularly significant as that difference may be the critical margin for staying on the European Continent in the second month of the war. (It delivers over 3M tons vice 2.2M, a difference that equates to materiel for 4+ divisions/air wings, using Mr. Kaufmann's figures.)

* Examples are the DE-1052 escort that was forced on the Navy as a replacement for WWII general purpose destroyers since convoy escort is a primary mission. With a single screw, 1200-psi steam plant, no AAW, and little ASU capability, the ships could not be used for anything but convoy or escort duty. Yet, in their life cycle, they have seen no convoy duty—the only role for which they are adequately suited. Other examples of suboptimization include the A-7 (all the disadvantages of a single engine and the complexity of a modern fire control system—for a single pilot); the LHA (efficient movement of the BLT—but very vulnerable to a single hit in comparison with the dispersion of more, cheaper vessels); the F-111 (a misguided attempt to bridge the gap between required capabilities which resulted in a fighter without maneuverability and a bomber without range or payload).

Sending the carriers forward to the Norwegian Sea is a risky endeavor that should not be done without very careful thought; but it seems to me that we must have the capability to do so if we are to stand a chance of keeping the Soviet Navy in their own backyard and out of the sea-lanes. The analogy of the German Navy in WWI is appropriate, but not as Mr. Kaufmann used it. It is doubtful the Germans would have stayed home had the British lacked the capability to challenge them to that decisive battle that never occurred. That the British decided *not* to risk their fleet by going into German waters to force the issue is really beside the point. Had the Brits possessed only a "thoroughly efficient" navy, optimized for convoy escort, the Germans could have chosen the time and place of decisive interaction—perhaps in the sea-lanes of the Western approaches, or more likely by closing the Channel ports to transatlantic traffic through mining and blockade, with possible disastrous results to the Allied effort in France.

One factor that seems to elude many analysts is this: With nuclear power or any other weapons system, parity reduces the likelihood of use. There is a tendency for power to be used more when a preponderance is perceived. Subjugation results when the opponents agree with this perception; war results when they dispute it. It is obvious that this equation provides the impetus for arms races.

There are other factors which analysts find difficult, too. A primary imperative of a land power is to maintain at least parity with its neighbors in terms of land military forces. Such a power engages in maritime pursuits only to the extent that the former objective will allow. The corollary is that a maritime power must maintain at least parity with its rivals in terms of maritime power and engage in continental pursuits to the extent that is allowed by its primary requirement. Our choices in Europe are limited to stalemate or loss. It is highly improbable that the Western alliance will ever be able to defeat the Soviet Army and occupy the Soviet Union, should that ever be a goal, but we can lose. Our objective as a maritime power must be to force a similar recognition by the Soviets regarding interaction at sea, even in their adjacent waters, with the intention of driving their force composition into defensive postures rather than one that can challenge effectively the Western maritime supremacy elsewhere in the world. In short, the objective of a U.S. national strategy is stalemate in Europe and freedom of action elsewhere through maritime power projection.

Mr. Kaufmann concedes the desirability of power projection capability, but questions the Watkins/Lehman strategy (or is it a campaign?) of early forward deployment of carriers and the numbers postulated by the Navy as required. He would allow 12 CVBGs, not the 15 advocated by the Navy. These are really two different arguments which are not as closely linked as Mr. Kaufmann assumes.

Kaufmann's central argument against forward deployment is that few, if any, of the attacking force would survive. To "prove" this point, he offers a table

(9-1, p. 102) which crosses surviving U.S. and Soviet units following commitment of 0 to 12 CVBGs. Interestingly, if nine or less CVBGs are committed to the attack, *no* element of the attacking force will survive. That is, casualties are 100 percent if the Soviets commit 20 submarines and 100 bombers to oppose this force. That seems excessively pessimistic to say the least, based on current exercise data against similar threats. The source for this surprising conclusion? "Author's estimates." It is a crucial element in the decision calculus of force commitment and must be based on hard intelligence data and careful assessments of exchange ratios. No commander would commit forces to a calculus of the sort envisioned by Mr. Kaufmann. The question remains, is the Kola Peninsula attack worthwhile in view of the losses that would be sustained by the air wings and the CVBGs? Mr. Kaufmann's negative conclusion is probably correct. Support of Norway, however, is another matter altogether, as is protection of the Channel debarkation ports with maritime air power. The flexibility and mobility of the CVBG could make the essential difference in those two locations, which would have major impact on the ability of the West to sustain a war on the central front. Airfields ashore have definite limitations on numbers of aircraft that can be accommodated, and it is not sufficient to simply state that we can increase fighter/bomber assets there to fill the need. Although the systems analysis approach might suggest that the Allies should so commit, the real-world intrusion of politics makes that particularly unlikely. The potential of CVBG support of the Allied Norway campaign could make the difference in deterrence if Soviets perceive (as does the U.S. Navy) that three carrier air wings in close tactical support could stop their advance and prevent the attainment of their objectives in Norway. Given the centrality of the SLOC campaign and the great advantage the Soviets would accrue by occupying Norway, this additional calculation might be the deciding factor in a war/peace decision by them. If deterrence fails, and we can prevent (or even delay for a month) the Soviet occupation of northern Norway, how many CVBGs would that be worth? If it made the difference in logistics resupply to Europe, perhaps we would be willing to lose all three which might be committed.

What is the difference? Again, Mr. Kaufmann uses the "author's estimates" for most of his argument. As noted above, these are subject to wide variations in result when the assumptions are adjusted to uncertainty. But more crucial to his conclusion is the use of "tonnage delivered in the first four months of the war." If the war on the central front goes as some analysts conclude, tonnage delivered after the first 60 days may not count at all unless we seek to trade with the Soviets from the Channel ports. This is particularly true if the delivery of materiel is savaged by Soviet submarine attack in the first month. That initial resupply is critical to stabilization of a new front following initial withdrawal under attack. (Kaufmann assumes that 45 days' worth of supplies have been pre-positioned in the theater and that enemy action has destroyed no more than 9 days' worth of that; a rather optimistic prediction.) Using the author's

estimates, 18.5M tons of materiel are required during the first 4 months. That equates to 4.6M tons in the first month, if one assumes that demand is steady through the period—hardly a likely case. The actual situation would probably be significant front loading of the demand curve over this 4-month period.

Assuming 4.6M tons are required to conduct the war in that first month: even using Kaufmann's rather low assessment of Soviet reaction to forward deployment, first-month deliveries of materiel could increase from 3.9M tons to 4.25M tons. This represents a gain of some significance, from 15 percent shortfall to 9 percent shortfall, which could make a huge difference in stabilization of the front. It is essential to keep in mind that these figures are widely variable, depending on the assumptions one uses. For example, if the Soviets commit 20 SSNs to CVBG opposition *and* 20 SSNs to their own ASW effort to oppose U.S. SSNs surging forward to attack Soviet naval units, the tonnage increases to 4.5M tons in that first month, very nearly the requirement posed. Each increment toward sufficiency may be critical on the central front.

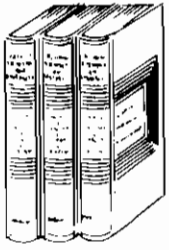
Kaufmann acknowledges this contribution of forward deployment, but contends that the funds could be better expended on more convoy escorts. That is possible, but not likely. The difficulty in convoy defense is that it is essentially point defense whereby the submarine chooses the time and location of attack. There are many tactics available to the submarine attacking a convoy—not the least of which is "skinning the onion" by targeting the escorts first to eliminate the defense threat. If the .25 Pk is assigned to the escort force initially, the convoy may be decimated before its arrival by nearly unopposed submarines farther down the track. The approach that will result in greater survival of convoyed units is to put the submarine on the defensive early and continuously—or to keep him home. The larger point is that SLOC viability is *essential* to the central front, and that we must do *all we can* to ensure it. The option of forward deployment is part of that equation. If we have the capability to challenge the Soviet Navy in its own backyard, it must defend itself with forces that otherwise could come out to challenge the SLOC. We may choose not to deploy forward, but like the German Navy in WWI the Soviets know that they can only win the decisive battle close to home—and consequently may stay away from what is really our vital interest, the SLOC.

Finally, Mr. Kaufmann's argument comes down to numbers and a disagreement with the Navy on how many CVBGs are required. He derives a figure of 12, chiefly by reducing the Sixth and Seventh Fleet population from 2 to 1. A 13th carrier is assumed to be in SLEP. Actually, this is not very different from the Navy's objective. Given overhaul and maintenance requirements, it will take 15 CVs to ensure that 12 are deployable at any moment; their escorts and supporting vessels have similar requirements. That is, with a 5-year overhaul cycle (lasting approximately 1 year), three ships will be in overhaul at any one time. For a 650-ship navy, 130 of them will be in maintenance status at any moment. That provides a deployable force of 520. The "efficient navy"

postulated by Mr. Kaufmann requires 570 deployable ships. If 5-year overhauls are to be assumed, then that number would require a fleet of 712 ships, somewhat larger than that proposed by the Navy.

In summary, Mr. Kaufmann has done little more than point out some obvious points:

- Attacks on the Kola Peninsula will be very costly (although just how costly is not certain, and certainly less significant than he assumes).
- Support of land operations in northern Norway may be worthwhile but will cost more to provide with maritime air than with land-based air. However, he does not address the problem of basing and supporting land-based air, either politically or logistically. The CVBGs are a force in being, capable of commitment quickly, while the alternative exists only as his conception. The former has more deterrence effect than the latter, and that is really the objective as much as warfighting potential.
- SLOC protection is the Navy's primary mission in a central front campaign. Early arrival of resupply materiel may be crucial to stabilization of the front and eventual war termination. Even small marginal improvements in the deliveries of that materiel in the first month or two are of crucial importance. The author's use of a 4-month window probably is misleading.
- Assumptions regarding viable alternatives to SLOC protection are suspect. Indeed his whole calculus of risk and relative effectiveness is highly unpredictable, depending on manipulation of critical variables. Sensitivity analysis of those tables renders them virtually useless in supporting any argument. Given the critical nature of the outcomes derived, far more attention must be given to these calculations before using them for force level inputs. Suboptimization must be avoided, with excess capabilities provided as a hedge against uncertainty.
- Capability is as critical in deterrence as it is in combat, perhaps more so. By declaring a forward strategy (has it not occurred to any of the critics that "The Maritime Strategy" has been a very public expression, nearly unique among military plans?) and maintaining a viable capability to execute it, even at great cost, we are forcing the Soviets to respond to that threat in force composition, capability, and planning. This supports our primary mission of SLOC protection better than additional escorts or other ASW investments which can only be used defensively.
- Finally, the power projection mission of the Navy is affirmed by Mr. Kaufmann. Alone among naval forces, the CVBG provides significant capability throughout the spectrum of international confrontation; from presence through isolation of conflict, to measured application of military force. And this can be done anywhere in the world, with few requirements for supporting facilities, diplomatic compromises, and the untimely restrictions forced upon one in periods of crises. Mr. Kaufmann actually agrees with the Navy's 15-carrier requirement by postulating 12 deployable units to fulfill these missions.



BOOK REVIEWS

"But for those who have been at the pointy end of the spear and who have also participated in developing and choosing between 'valid' alternatives competing for scarce resources, the difference between 'How much is enough?' and 'How much is too much?' is far from trivial."

Colonel Eric E. Hastings, U.S. Marine Corps

Epstein, Joshua M. *Strategy & Force Planning: The Case of the Persian Gulf.* Washington, D.C.: The Brookings Institution, 1987. 168pp. $28.95

In his brief 1981 study titled "Planning Conventional Forces, 1950-1980," William W. Kaufmann says: "Force planning is a military art more practiced than studied in the United States." Among other things, I think Mr. Kaufmann meant that the military art of force planning could be improved by some prior preparation—or study—before one sallies off to practice the art form. Joshua Epstein has obviously been studying.

Mr. Epstein's purpose is "to illuminate general issues of strategy and force planning through the rigorous examination of an important and analytically rich special case: the Persian Gulf." The author develops his thesis around a proposed Persian Gulf campaign plan. Most of the book is given over to the determination and rationalization of the forces required to carry out the chosen strategy. He has developed an adaptive model—a dynamic net assessment process—to help reveal the force requirement and to test the sensitivity of the force to changing influences.

This effort is timely for two reasons. First, the potentially synergistic national debt, trade deficit, and budget deficit problems forecast little, if any,

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defense budget real growth for the near term. Meanwhile force effectiveness, efficiency and sufficiency will continue to receive close public and political scrutiny. Second, current arms control talks appear to have Washington and Moscow on the verge of a mid- and possibly short-range nuclear arms reduction agreement. Yet some Europeans would argue that raising a nuclear war threshold by zeroing mid-range missiles correspondingly lowers the conventional war threshold. In short, the conventional balance between NATO and the Warsaw Pact takes on greater meaning as conventional forces necessarily shoulder a greater strategic burden.

If one considers the art form of operational campaign planning, Mr. Epstein appears to invert the traditional planning sequence as he develops the feasibility (strength) of the force required only after he has developed the acceptability (cost-benefit or risk) of the selected course of action. Yet, considering the art form of force planning, what Mr. Epstein is really trying to do is evaluate the sufficiency of a given force over time. In other words, given constrained resources, regional objectives, chosen policies, a threat, a strategy, and a requirement for a credible set of forces to achieve the objectives through the chosen strategy, *how much is enough*? He offers his case study as a specific example from which enduring problems can be illuminated, some specific conclusions drawn, and—*a posteriori*—general force requirements induced as his model is applied to other scenarios.

After first deterring a direct Soviet nuclear attack against the United States, the author's next defense priority for the United States is to deter an attack against NATO and to assure the security of Western Europe. It is principally within the context of a NATO-Warsaw Pact conflict that Southwest Asia (SWA) and control of the Persian Gulf becomes sufficiently important to warrant planning for full-scale operations in simultaneous theaters—potentially requiring additive force structure. For Mr. Epstein, the two contingencies (NATO-Europe and SWA-Persian Gulf) are inextricably linked. At that point, strategic credibility, the forces which are required by the chosen strategy, and the marginal use of constrained resources become the immediate issues. He wants to ensure that both the strategy and the resources can be effectively and efficiently used.

> "How much spending [by NATO members] depends on the measures required to compensate; the requisite compensatory efforts hinge on the scale and nature of the diversion to the Gulf; the entire issue thus turns on *this book's basic question: how much U.S. force is required in the most demanding plausible case*? What strategy, and what force structure, will provide the most credible deterrent to large-scale Soviet aggression [in the Persian Gulf]?"

The chosen force planning scenario evolves from the threat of a Soviet invasion of Iran in order to possess or dominate the oil fields of Khuzestan. The case study then proceeds to indentify and discuss strengths and weaknesses of three strategies that have competed for applicability to that

region: (1) "vertical escalation," relying on a conventional force tripwire and tactical nuclear weapons; (2) "horizontal escalation," threatening attack in other regions; and (3) a "conventional-only defense" of the region.

His analysis of vertical escalation is a brief intellectual romp through alternative answers and implications of the fundamental nuclear strategy question: Can nuclear war be limited (controlled)? The analysis of horizontal escalation is a similarly stimulating discussion of the variable elements of the question: How does one deter certain Soviet actions (if deterrence equals capability, plus will, plus incalculability—all modified by *the enemy's* perception)? And if deterrence fails, how does one end the war with war aims remaining limited, i.e., avoiding a predictable or inevitable slide into a war that becomes global in scope or total in aim? For Epstein's Persian scenario, both the vertical and horizontal escalation strategies fail the credibility logic test. While the friendly campaign courses of action may be feasible and suitable, they are not acceptable (principally a matter of risk). They would constitute "asymmetric responses" to a threat which does not jeopardize *U.S. national survival.* In Epstein's judgment, he expects the Soviets would also perceive such flaws. In short, the strategies do not deter because they are not credible.

After a rigorous analysis, Epstein finds that strategy for conventional defense is both credible and symmetrical. The issues he develops around the "symmetry" of strategies and forces include crisis stability, precipitate behavior, escalation control, escalation dominance and accomplishment of limited war aims. His exposition of this strategy is an interesting and intellectually challenging comparison of four distinctive campaign analyses. (Read the footnotes and check the appendices in order to assess his choice of static measures and assumptions.)

The objective for each of the opposing forces is to control Khuzestan. The process begins with a net assessment which is, of course, initially supported by static measures and (arguably optimistic) assumptions. After studying the Soviets' capability, Epstein divides their acceptable campaigns into two distinct options: a fluid, forceful and direct drive for the objective (with all that that means in terms of obstacles, logistics supportability and time) or; a buildup in northern Iran (after the first obstacle/barrier breakthrough) followed by a drive south for the objective. Depending on who gets to the objective first, (principally a function of warning time and political will to intervene) the two Soviet attack options are modified by who has the initial "advantage" of defending the objective area. Epstein proposes a countervailing conventional campaign strategy which delays Soviet movement and attrites their usable forces (with varying effectiveness) regardless of which option Moscow chooses.

Moving into the realm of simulation, war gaming, and modeling, Epstein develops an "adaptive" model that projects (sequentially measures) both opponents' relative unit lethality remaining over time. He develops the

model as a response to the severe limitations he perceives in standard Lanchesterian theory-based modeling. His aim is to produce a model that he hopes is situationally responsive and sufficiently "dynamic" to produce legitimate, credible results in measuring net remaining combat power over time. In short, his "adaptive" model produces much more than mere quantitative analysis. But of course it also produces much less than revelations about some future, predestined events.

Many force planning issues remain: the strengths and weaknesses of scenario-based force planning; the difficulties in accommodating or quantifying incommensurables (e.g., judgment, maneuver, time, will, morale, etc.); the implications of simultaneous or sequential theaters; central reserves versus forward deployment and/or land-basing; a go-it-alone or a coalition strategy; regional or flexible mission force tailoring; pre-positioning or strategic air and sealift; and perceptions of limits on the legitimate use of U.S. forces. Epstein grasps opposing force capabilities, vulnerabilities, and constraints and simultaneously examines them through a demonstrably "fair" and clear prism. It would be a mistake to forget that his model is just that—a prism that distorts while it focuses. Of course, threat intentions, as ever, are tough to predict and deal with and therefore may require some hedging. But Soviet threat capabilities are not overdrawn, while simultaneously U.S. capabilities are not undervalued and regional circumstances are not overlooked—for all that that may mean to crisis and arms-race stability as well as selection of acceptable strategies to accomplish general U.S. national security objectives.

Overall, Mr. Epstein proposes a solid—if arguable—link between ends and means while taking care to identify any perceived force-strategy mismatches. While giving insight to "enduring questions," the results of his campaign comparison are situationally dependent. He reminds the reader of the effect of what he views as inexorably precipitate events in 1914 along with the "peace-in-our-time" mentality and lost opportunities of 1938-1940. In sum, he wants to revise the future crisis calculus by adding stability through procurement of sufficient, credible, and deterrent force structure.

Having said that, Mr. Epstein has *not* provided the last word on horizontal or vertical escalation strategies. Nor has he proven the applicability of his strategy and his forces across the vast array of legitimate U.S. defense objectives. Equally, it is well to remember that things change even as they are being observed. Current events reflect an unsettling profusion of interests, objectives, and threats in the Gulf region. "Worst-case" threat honors may go to the Soviets but "most-vexing" or "-likely" may go to an entirely different threat. Additionally, some of Mr. Epstein's conclusions are weakened by assertions regarding the past motivation of U.S. planners for Southwest Asia. Yet I believe he has made a valuable contribution by demonstrating (at least to his professional satisfaction) containment of a sizeable threat through credible, conventional means at bearable, preparatory cost and acceptable risk.

But for those who have been at the pointy end of the spear and who have also participated in developing and choosing between "valid" alternatives competing for scarce resources, the difference between "How much is enough?" and "How much is too much?" is far from trivial. Cost-effectiveness is pertinent; yet cost-effectiveness can be illusory or transient. On balance, Mr. Epstein has provided a well-supported case study, a tool which will be useful in preparing future planners for their force planning responsibilities. At the very least, he has demonstrated the political flexibility that can be offered by military preparedness, while suggesting some of the potentially negative consequences when overestimating or undervaluing forces.

Department of Defense, *Soviet Military Power*. Washington: U.S. Govt. Print. Off., 1987. 160pp. $7.50

"However absorbed a commander may be in the elaboration of his own thoughts, it is sometimes necessary to take the enemy into account." With these words, Winston Churchill tells us why the sixth annual edition of *Soviet Military Power* is worth our while to read and think about. It is a comprehensive treatment of Soviet military hardware, capabilities, strategies, policies, and trends.

Beginning with a chapter on Soviet strategic military policies, the authors move to strategic and nuclear forces, theater forces including naval forces, forces for readiness and sustainability, Soviet weapons research and production, and regional policies. They conclude with some brief notes on U.S. response to all this. It is well-written—better indeed than many of the classified publications—and contains more information than most of us will absorb in a single reading. Bearing in mind the readership of the *Naval War College Review*, this review will concentrate on the Soviet strategic and naval forces.

In his preface, Caspar Weinberger makes two interesting observations. First, the West has relied on technological superiority to offset the sheer mass of the Soviet forces. This advantage is under vigorous challenge. Second, it behooves us to give some thought to why a nation with severe internal economic problems would devote 15 to 17 percent of its GNP to establishing and maintaining such a large military buildup. The authors suggest that the answer lies in a Soviet desire to achieve a military posture "that provides for absolute security as it continues to seek world domination."

In their opening analysis on the Soviet view of strategic war, the authors observe that while the Soviets recognize the catastrophic consequences of a global nuclear war, they also appear to believe that they can ultimately prevail in such a contest. Their force structure seems to reflect both a nuclear war-winning posture and, increasingly, a posture for

managing a protracted conventional war. Soviet force buildup includes weapons systems for both extended conventional war and for winning nuclear war.

Soviet strategic nuclear force modernization has focused on survivability and variety. To this end they keep an amazing number of old systems, and they dig with an enthusiasm unmatched since the demise of trench warfare. The cornerstone of these forces remains the hard target-busting SS-18 which is kept in the world's hardest silos. It is accurate and throws more warheads than most modern U.S. ICBMs. New strategic system development seems to be focnsed on mobile ICBMs for survivability, including the road-mobile SS-25 and the rail-mobile SS-X-24, both of which may be well-suited as reserve weapons for a protracted war.

Soviet SSBN operations also appear to be organized for survivability and reserve use. Although the SSBNs are dispersed in war, they remain where they can be protected by surface, air, and submarine forces.

Air-breathing strategic systems are a growing part of the Soviet nuclear force. The AS-15 subsonic long-range cruise missile has been on the Bear bomber force since 1984. Sea and land-launched versions are now under development and could soon appear on submarines off the U.S. coast.

For a nation so concerned about the destabilization effects of U.S. strategic defense initiatives, as the Soviets were at Reykjavik, they show no small enthusiasm for trying to do the same thing. They have put large efforts into high-energy lasers, particle beams, high-power microwaves, kinetics, and antisatellite weapons.

Turning to the Soviet Navy, recent years seem to have heen devoted to ahsorbing and developing the remarkable array of new platforms that they have lately introduced. Building on the largest nuclear-powered submarine force in the world, they have introduced the Mike SSN with a wide variety of weapons systems, the Sierra SSN with capabilities well beyond the not-so-old Victor III, and the Oscar SSGN with 24 antiship cruise missiles. Clearly the Soviets have undertaken a high priority national program of submarine development reflecting Admiral Gorshkov's view of the submarine as the capital ship of the 20th century.

In surface ships, the Soviets dropped the shoe with the launch, in December 1985, of their first CTOL aircraft carrier, the 65,000-ton *Leonid Brezhnev*. We await with interest the dropping of the other shoe—the deployment and operational workup of this high-value target. The mission of this ship remains to be seen. The authors of *Soviet Military Power* seem to lean towards an air defense mission, both to provide air defense for Soviet surface action groups and to extend the air defense perimeter of the homeland. However, they do not discount completely a power projection mission.

The quality of the photographs of Soviet naval ships deserves mention.

Some of them are stunning in their detail, clarity, and perspective. The absence of sailors on the decks of Soviet ships is always curious. The *Typhoon* looks as menacing as one imagines Captain Nemo's *Nautilus* did. Surely the *Typhoon* is the first real submarine with space enough fot a pipe organ in the wardroom.

Readers of *Soviet Military Power* should be aware that it is not a net assessment and does not purport to tell us who might "win." No estimate is made of the quality or reliability of Soviet weapons nor of the caliber of the men who might use them. U.S. systems are shown for comparison as they are the familiar reference point. The publication should be treated only as a list of problems with which the Defense Department must deal in program planning.

At the same time, the publication can be faulted for not distinguishing clearly between matters of hard, observable fact, such as the speed of an airplane, and matters of judgment, such as Soviet political and military intent. It would have been better had the authors used the traditional intelligence analysis words such as "estimated" or "assessed," for the latter.

As noted, *Soviet Military Power* covers many areas beyond strategic and naval forces. We will leave them for the reader to discover and ponder. The authors do not paint the Soviets as 10-feet tall, just a very robust and thought-inducing 6 feet.

FRANK C. MAHNCKE
Naval War College

Kaufmann, William W. *A Reasonable Defense*. Washington, D.C.: The Brookings Institution, 1986. 113pp. $8.95

This is the latest addition to what is arguably the most prestigious series of titles devoted to U.S. military matters, the Brookings' *Studies in Defense Policy*. The title is not only fully worthy of that honor, but it seems to this reviewer that the work is somewhat less driven by the parochial aspirations of the political party not presently occupying the White House, than have been past efforts.

Politics aside, this concise and brilliant study suffers from only one significant fault: its title is excessively bland. Mr. Kaufmann offers much more than just a few hackneyed ways to slash the defense budget and make it more "reasonable" in cost. Rather, he examines three distinctly different defense postures for America, weighing them against each other in terms which should allow vastly better *reasoning* in debates over what we buy and why. As a result, this book is already required reading for students at the Naval War College.

Mr. Kaufmann has quite a number of theses, most of which contradict rather starkly the current Pentagon wisdom. The book begins with a review of the historical trends in defense spending, debating points, and the "net assessments" which dominate the force planning process. He then evaluates three alternative (and to varying extents hypothetical) constructs as a basis for testing his arguments: the *baseline force* (predicated on what the Reagan administration

inherited in 1981); the *combat force* (based on Kaufmann's personal beliefs about defense planning); and the administration's *programmed force*. His core contention is that the administration's *programmed force* is vastly more expensive than, but also inferior in performance to, the *combat force*, which he advocates. These are the same arguments which the Congressional "Military Reform Caucus" has been making for the past several years, but Mr. Kaufmann gives them stronger academic backing and broader impact than they have previously enjoyed.

He attributes the supposed disadvantages of the *programmed force* to: the declining power of the Secretaries of Defense since McNamara, whom he eulogizes; the decline of the Planning-Programming-Budgeting System (PPBS), which he analyzes with vigor and concise insight not available from other sources; and to exaggerated threat estimates from the Defense Intelligence Agency (DIA). These chestnuts are old, but Kaufmann shows his willingness to distribute blame evenhandedly by also faulting Congress for its inexperience or lack of "time and inclination to grapple with the important issues of force planning." He directs some of his sharpest harpoons at the armed services, accusing them of inherent inefficiency caused by their proclivity for needless rapid modernization of older weapons, redundant purchases, and incoherent preparations for drastically different wars, according to the diverse hopes or fears of the Army, Navy, and Air Force.

These are important criticisms which have been reverberating for some time throughout the defense community. They deserve careful attention from anyone seeking to understand or implement the growing concern for "jointness" in military education, training, planning, and organization.

Precisely because of Mr. Kaufmann's superb credentials for writing this ground-breaking study, his rare displays of bias or haste are doubly annoying. One is struck by his description of Soviet behavior in the 1970s as relatively "cautious," compared to the "rambunctious" actions in Berlin and Cuba decades ago. He devalues this partial truth by failing to contrast those spectacular failures with the more recent pattern of successful—(albeit costly)—intrusions by the Soviets and their proxies into Afghanistan, Vietnam, Kampuchea, Angola, Ethiopia, and Nicaragua. His one-paragraph indictment of the "inefficiency of the nuclear force planning process" seems similarly weak, since it explores none of the rationale for maintenance of the strategic triad which Mr. Kaufmann understands perfectly well and which he has analyzed so cogently elsewhere. Military professionals may object to these occasional oversimplifications, but they will find the conceptual core of his study to be an analytical *tour de force*.

G. PAUL HOLMAN, JR.
Naval War College

Vigor, P.H. *The Soviet View of Disarmament*. New York: St. Martin's Press, 1986. 189pp. $25

With what appears to be new arms control initiatives coming from Gorbachev's Kremlin, it would seem that this book is just what the public needs for a better understanding of this important facet of Soviet-American relations. Unfortunately, because of the time lag in the availability of documents relating to arms control proposals and agreements, Vigor's analysis terminates with 1980, leaving the question of how applicable this volume is to more recent Soviet leadership. Nonetheless, it is an important compilation of past Soviet behavior in the conduct of arms negotiations. If his analysis is correct, it should serve as a general guide to the Soviet view of disarmament despite differences in leadership style.

The value of this book is in its occasional references to Soviet considerations that are often overlooked by the West. While the book is intended to depict a Soviet view, only brief mention is made of Soviet concerns with China, unrest in Eastern Europe, and nationalism within the non-Russian Soviet Union itself, all of which must certainly play important roles in the Soviet perception of just what constitutes national defense.

A final section on the Soviet attitude toward control provides a good discussion of the problems inherent in verification schemes, given the differences in the U.S. and Soviet political systems. Vigor's command of the Russian language enables him to explain in detail the differences in interpretation of even seemingly simple concepts like the English 'control,' and Russian 'kontrol,' which continue to be translated incorrectly in verification proposals and agreements. Small wonder that verification remains one of the biggest stumbling blocks in the negotiation process.

The methodology used in the *Soviet View of Disarmament* is scholarly and sound and, while there are no surprise conclusions, it does serve as a thoughtful recap of virtually all arms control proposals put forth by the Soviet Union from the period 1917 to 1980. Its worth lies in understanding and evaluating current and future Soviet arms control proposals.

DALLACE L. MEEHAN
Lieutenant Colonel, U.S. Air Force

Burrows, William E. *Deep Black*. New York: Random House, 1986. 401pp. $19.95

Taking his title from the deep black of space and the deep black character of U.S. intelligence and reconnaissance satellite programs, Burrows turns the bright light of an experienced aerospace reporter onto the subject. His book has three themes: a history of reconnaissance satellite and aircraft development, an analysis of the vital role played by these systems in national security and arms control verification, and revelation of all the details he can find of code words and system performance. The first is interesting, the second laudable, but the third is of question-

able utility and perhaps serves only to authenticate his work.

After sketching the history of the military's need to peer down at their opponents from balloons and aircraft, Burrows jumps into the interagency fights over control of overhead surveillance assets in the cold war. Eisenhower, and later Kennedy, would not allow the military to control these assets because that would have given them control of the interpretation of the product which could be "used" to further their budget requests. Following the U-2 and early photographic satellites, space surveillance and reconnaissance became so widely accepted and reliable that they were the cornerstone to verification of the SALT I and ABM agreements. Both agreements contained clauses about noninterference with "national technical means" of verification, a euphemism for satellites.

Burrows raises the question of why, if satellite surveillance is so crucial to national security, is the national program so cloaked in secrecy. His answers, which lie in the political arena, miss the most fundamental point: if the technical details of the capabilities of the systems were open, then the surveilled would know how to hide the very things we must see to maintain stability and mutual security.

The bulk of Burrow's work is devoted to describing what he believes to be the technical details of code words, bureaucratic connections, ground station locations, intercept capability, and photographic resolution. While this makes interesting reading, it contributes little to understanding the value these systems have to the Nation. While Burrows does substantiate the case for overhead surveillance systems as a requisite to any successful arms control agreements, it is regrettable that he did not devote more of his efforts to developing that case fully. Had he done so, this would have been an important, rather than a merely interesting book.

F. LEITH
Washington, D.C.

Moore, John Norton. *The Secret War in Central America: Sandinista Assault on World Order.* Frederick, Md.: University Publications of America, Inc., 1987. 195pp. $17.95

This important book presents carefully documented and well-argued international legal justification for U.S. assistance to the Nicaraguan resistance forces (the "contras") as well as a well-documented account of the actions of the Sandinista regime which provoked our legal and political intervention. Supporters of U.S. intervention will find arguments of world order and legal principle transcending the more often-heard rationale of U.S. national interest, of anticommunism or of protection of human and democratic rights. Open-minded opponents will be disabused of the ideas that the Sandinistas are not the major source or funnel of support for Salvadoran and other Central American insurgents and that

their obvious Soviet/communist links and internal human rights violations may have been a reaction to, rather than a cause of, U.S. hostility.

Both sides will find copious, well-researched footnotes conveniently grouped after each chapter to substantiate Moore's claims. The notes and appendices accompanying the texts of key documents constitute half of the book's pages and are valuable as a guided bibliography and handy reference.

Moore's book is divided into two major parts. The first, written in a fact-packed, easily readable style, gives the background of the Sandinista takeover of Nicaragua; their consistently close ties to Cuba, the Soviet Union, and other communist states; their immediate, almost continuous and multifaceted support for the Salvadoran guerillas; and the phased U.S. reaction. He shows that this support and guidance to the Salvadoran guerillas began as soon as the Sandinistas took power. The United States was simultaneously offering the new Nicaraguan Government assistance unprecedented during the Somoza years. The second part is written more like the legal brief it probably was in its original draft (Moore was a special counsel for the United States in the jurisdiction phase of Nicaragua's complaint before the International Court of Justice). It justifies U.S. actions against Nicaragua (including support of the "contras") as collective defense authorized by Article 51 of the U.N. Charter and perhaps even required by Article 3 of the Rio Treaty.

In making his case, Moore shows that Sandinista support for the Salvadoran guerillas meets the legal definition of aggression and then excuses the subsequent and continuing U.S. support of the "contras" from the "aggression" category as being only a response to the Sandinistas' aggressive acts, a response that is clearly proportional to the provocation. He quotes even the Soviet Union as defining the attacker as that side which *first* supports armed bands "or refuses, on being requested by the invaded State, to take in its own territory any action within its power to deny such bands any aid or protection."

Following chapters address what Moore considers to be factual and legal misperceptions of the Central American conflict, and the danger to world order and international law caused by "radical regime assaults" not effectively stopped by collective defense when the target state is too weak to squelch the attack with its own resources. Moore, correctly, in this reviewer's opinion, places major responsibility for the Sandinista takeover of Nicaragua on U.S. actions during the 1970s, particularly the policy of the Carter administration—which first disengaged from Central America with termination of military assistance and then deliberately strangled the right-wing authoritarian but would-be friendly regimes of Guatemala, El Salvador, and Nicaragua with arms embargoes. Finally, the United States pressured the few other nations still selling arms to the Nicaraguan Government to join the

embargo, turned a blind eye to Cuban and other arms flowing to the Sandinistas, and backed an extraordinary Organization of American States (OAS) resolution calling for the overthrow of the Somoza regime in the face of its, by then, rapidly deteriorating war with the Sandinista insurgents.

With this degree of responsibility for the Sandinista takeover, Moore argues—as an additional ground for intervention, though subsidiary to collective defense—that the United States and the OAS have a responsibility to ensure that the Sandinistas carry out their formal written pledge to the OAS, upon whom they relied to withdraw legitimacy from a member government. That pledge promised, inter alia, "full respect for human rights" and "free elections." Ironically, many of the current, most vocal U.S. advocates of "hands off Nicaragua" were, in the 1970s, loudly proclaiming a moral if not a legal duty of the United States to overthrow the Somoza regime because of arguably similar U.S. involvement in the establishment of the first Somoza-controlled government almost 50 years earlier.

Though Moore brings in rationale for U.S. anti-Sandinista actions other than collective self-defense, he insists that the "principal motivating factor" for critics' use of "snippets taken out of context from presidential press conferences" is to allegedly show that the U.S. aim is really to overthrow the Nicaraguan Government. He believes that the United States made an error in refusing to follow through to the merits phase of the International Court case after the court ruled against us on jurisdiction. With the persuasive facts and legal arguments Moore presents for the defense in this book, at least this juror is inclined to agree.

WADE H. MATTHEWS
Naval War College

Jones, Rodney W. and Hildreth, Steven A., eds. *Emerging Powers: Defense and Security in the Third World*. New York: Praeger, 1986. 441pp. $45

This is a clearly written study by a group of well-chosen chapter authors, introduced effectively by the two editors in the first chapter and then summarized in the last. In between are six chapters on the Asian powers, one each on the Middle East and Africa, and three on Latin America. The chapter authors, in order, are Gerrit W. Gong (China), Edward A. Olsen (Korea), John Blodgert (Vietnam), Donald E. Weatherbee (Indonesia), Rodney W. Jones (India), Joseph J. Malone and J.E. Peterson (Egypt), Pauline H. Baker (Nigeria), William Perry (Brazil), Perry, again (Argentina), and George Fauriol (Mexico).

Each chapter author was asked to provide a general discussion of four problems: national ambitions, threat perceptions, defense problems, and strategic responses, and their impact on the regional and international behavior of the nation being discussed. This objective is carried out,

although naturally some of the objectives are more obviously relevant in some cases than in others. The material is up-to-date, the language stays completely away from academic jargon, and the book fills a need by providing information and analyses which are, in some cases, such as Nigeria or Mexico, not always simple to come by.

There are very useful tables on Third World arms imports and exports, arms production (South Korea), and Indian and Pakistani field forces.

The study was done under the auspices of Georgetown's Center for Strategic and International Studies.

FREDERICK H. HARTMANN
Naval War College

Solomon, Richard H. and Kosaka, Masataka, eds. *The Soviet Far East Military Buildup*. Dover, Mass.: Auburn House, 1986. 301pp. $29.95

Academics, and to some extent government analysts, have developed a cottage industry of sorts by holding "conferences" at locations that are often quite exotic and comfortable. Here they present arcane papers which are then published as a means of writing off the costs of the "conference." This is to be understood since academic salaries rarely provide the average professor with enough disposable income to afford vacations to exotic and comfortable locales. This book, unfortunately, is merely a collection of papers presented at such a conference—the 1984 Security Conference on Asia and the Pacific (SECAP) held in San Diego, California. While the attendees represented a diverse and distinguished group of defense intellectuals from the United States and various Pacific nations, their presentations were, in the mind of this reviewer, shallow and broad, offering very little to the defense specialist that could not be gleaned from a periodic reading of the *Far Eastern Economic Review*. The edited book is further weakened by the attempts of Professors Solomon and Kosaka to organize the diverse presentations into some semblance of order and, in so doing, creating a very diffused and disjointed progression of barely related pieces. In short, it is a shambles. It will be of little utility to either the expert or casual reader.

Having said this, it should be pointed out that a few of the pieces in this work, when taken in isolation, offer some useful insights. Robert Scalapino addresses the strategic issues for the Soviet Union in Asia and draws a very clear and concise picture of the challenge of the Soviet Union to China and the limits and vulnerabilities of the Soviet position. Hiroshi Kimura also presents an interesting piece on the impact that the Soviet military buildup in North Asia will have on Japan and how it may affect U.S.-Japan relations in the future, as well as its effect on the Japanese perspective of their evolving military role in Asia. One other piece, although extremely brief, is interesting for the simple reason that a paper like it is so

rarely found in a Western publication. It is the nine-page chapter written by Yao Wenbin, a defense analyst for the People's Liberation Army of the People's Republic of China. He presents the Soviet threat as viewed from the Chinese side of the border. It is most enlightening and, in some ways, reassuring.

There are a few gems in this hodgepodge collection of papers, but they are too few to merit more than a cursory glance. Perhaps we could all be spared books like this if another means of providing vacations for academics and government analysts could be developed so they would not feel compelled to justify "conferences" by publishing their "tickets" for attending.

A.R. FINLAYSON
Lieutenant Colonel, U.S. Marine Corps

McIntosh, Malcolm. *Japan Re-armed.* New York: St. Martin's Press, 1986. 169pp. $27.50

This is a very pedestrian book on the growth of Japan's postwar defense capabilities. Using mainly secondary sources, it rehashes well-known geopolitical terrain in a manner that is highly sympathetic to advocates of Japan's minimalist defense posture. It is, according to the dust jacket, written by a British journalist working on a doctorate in peace studies. Its prime value (for some) is its clear exposition of antinuclear, antimilitarist, and pro-peace movement sentiments that are supported by a steady undercurrent of suspicion of the U.S. strategic role in the Pacific and the accompanying U.S. pressures on Japan to share some corollary role. It does so, however, with too much ardor, citing militarism where it scarcely exists and visualizing re-armed Japan as desiring "to be able to face up to the Soviet Union and to be independent of the United States." Such profound misreadings of Japan, plus more than its share of textual errors, cause one to question the depth of the author's familiarity with Japan. In that sense—while reasonably well-written—the book reads like a research project taken on by someone new to the field and anxious to make it fit a separate agenda brought to bear on it.

EDWARD A. OLSEN
Monterey, California

Lider, Julian. *Origins and Development of West German Military Thought: Vol. I, 1949-1966.* Brookfield, Vt.: Gower, 1986. 384pp. $95.50

Julian Lider is best known for his works on *Military Force* (1981) and *Military Theory* (1983). With this new book, he enters the virgin field of West German military thought. In contrast to most recent writers on the topic, who have stressed either the political aspects of the decision to rearm West Germany or the nature and composition of the *Bundeswehr* under the rubric of *Innere Führung*, Lider seeks to answer the question as to whether there exists a distinct

West German military thought. His response is equivocal at best.

The book is divided into three major parts. In the first, the author seeks to provide a historical analysis of German military thought on the basis of Clausewitz' precepts. According to Lider, today, all that remains valid from Clausewitz is an emphasis on the political nature of war. Put simply, the complex postwar world with its great social and national movements, its revolutionary nuclear missile technology, and its very bipolar nature, have rendered much of Clausewitz archaic.

The second part of the book concentrates on conceptual issues of strategic studies. Here, the limitations of West Germany's geopolitical situation become abundantly clear: while its theoretical planners toyed with strategic concepts involving anticolonial wars, civil wars, and even "covert" wars, hard reality—lack of access to nuclear technology and subordination of national military doctrine to Allied doctrine—dictated the uncritical adoption of NATO doctrinal strategy.

The third theme, and core of the work, is that of military policy as security policy. From the start, there was an inherent incompatibility among Konrad Adenauer's three established goals: security through NATO, integration within Western Europe, and German reunification. Military policy was subordinated to these lofty aims. Yet, ironically, Lider concludes that rearmament, more than anything else, returned West Germany to the ranks of the European powers. Flexible response to Soviet aggression as well as forward defense, however defined, and limited operations became the principles of NATO doctrine applied to West Germany, which under its Basic Law is prohibited from conducting "offensive" operations. Finally, Lider argues that West Germany cannot yet be judged to possess a specific sociopolitical democratic philosophy; having been created on premises and principles borrowed from the American and British Armies, the *Bundeswehr* could not help but reflect the "far from democratic ideals" of these forces!

Overall, this is a difficult book to digest. Its sociologese jargon—punctuated with abstract constructions such as "spiritual potentialities" and "inter-systemic total war" concepts, to name but two—makes the work rough going. For a German military specialist, Lider is insufficiently aware of recent research on the West German military being conducted by the *Bundeswehr*'s Military History Research Center. Quite apart from the author's inability to identify correctly that Center, he seems unaware of two of its major publications in his area: *Militärgeschichte seit 1945: Aspekte der deutschen Wiederbewaffnung bis 1955* (1975), and the projected three-volume semiofficial *Anfänge westdeutscher Sicherheitspolitik 1945-1956* (1982 ff.). Any comment on the price of the book would constitute overkill.

HOLGER H. HERWIG
Vanderbilt University

Sarkesian, Sam C. *The New Battlefield: The United States and Unconventional Conflicts*. Westport, Conn.: Greenwood Press, 1986. 344pp. $37.95

No one reflecting upon the uneven record of the United States in Third World conflicts can doubt either the significance of Sarkesian's topic or the importance of discerning how to do better in the future. The author sets out "to study and analyze the U.S. political-military posture and effectiveness in responding to unconventional conflicts"; his target audience includes "those in policy-making circles, military professionals, and the faculty and staff at senior service schools." Regrettably, the author's execution of his design is seriously flawed in this instance, and those he wishes to inform are unlikely to be satisfied with his offering. Indeed, the all too apparent absence of a rigorous editorial pen has done both the author and the subject matter a marked disservice.

The basic theme and organization of the book are promising at first glance. Intending his book to be much more than a sequel to his earlier work on *America's Forgotten Wars*, Sarkesian properly notes that international affairs remain "complex and dangerous," with no clear replacement for "the earlier European world order" in sight. Insofar as the United States is concerned, the critical reference points are "[the] expansion of communism and the Vietnam War." The author accurately focuses on the inadequacy and ineffectiveness of the U.S. capacity to respond to conflicts in the Third World. His three-part analysis addresses sequentially: the character and challenges posed to the United States by unconventional conflicts; U.S. responses to those conflicts, past and future; and the philosophical, moral and political interplay between democracy and the capacity to deal effectively with Third World wars.

In the process of developing this analysis, Sarkesian makes a number of useful points that collectively suggest the promise the manuscript must have had. Most forceful are his arguments on the dilemma presented to democracies and their armed forces by unconventional conflicts whose attributes "do not easily fit into American perceptions of war or into the American mind-set and world-view." The notion that democracies which adhere "to abstract moral and ethical principles . . . may quickly destroy themselves" awakens bitter memories of events in the United States during the Vietnam war. That this is known to our adversaries and exploited by them, cannot be reassuring to American planners and strategists. Sarkesian also suggests that any direct involvement of U.S. ground combat forces should be seen as a "last-resort strategy" to be adopted only if abstention or withdrawal is incompatible with the support of vital U.S. interests, something largely consistent with the so-called "Weinberger Doctrine." He correctly identifies the importance of high-quality leadership to both the revolution and the counterrevolution; the inconsistency and lack of "staying power" in U.S. policy; our undue

preoccupation with the Soviet Union in our strategic planning to the detriment of our capability to deal with challenges to our security arising in the Third World; the existence of "ample evidence of incomplete and slanted reporting in the media"; and the pervasive influence of the Vietnam experience on the "American psyche"—something utterly detrimental to the effective conduct of U.S. policy in the Third World. Most pointed of all, at least from the perspective of the professional military, is Sarkesian's all too apt judgment that "most conventional criteria . . . may not be true indicators of who is winning and losing," a chilling reminder of certain enduring attributes of the Vietnam experience.

All of these points are well-taken, and the relentless prospector of these gems can ferret them out. Overall, however, this book is a potpourri of inadequately developed and discursively treated topics, some important and others peripheral. The material is awkwardly organized and repetitious, with poor transition from section to section, reading almost as if it were a collection of discrete vignettes. A critical factor noted by Sarkesian is the role of "third powers" in unconventional conflicts, yet barely two pages are devoted to this subject while numerous repetitive and largely redundant intra-chapter and chapter summaries encumber the text. There is no need to restate the relationship between foreign policy and national security policy, or to discuss U.S. interests in both chapter 1 and chapter 7. Chapter 4, "The Conflict Spectrum," is important thematically, but it should have come at the beginning of the book—if only to give the reader the *author's* definition of low-intensity conflict, which is so central to the preceding three chapters. Sarkesian's admirable commentary on the relative merits and utility of the works of Clausewitz and Sun Tzu for the United States was unfortunately "buried" in chapter 6, whereas an earlier representation of those philosophies would have been most valuable.

A solid treatment of the topic raised in *The New Battlefield* is certainly necessary. Unfortunately, insofar as this book is concerned, such a treatment remains to be done. Banalities such as: "The Third World has become the new battlefield. . . . The causes of revolution are complex. . . ."—this after the last four decades?—and "there is no sure strategy for counterrevolution except better government" do not help much. Perhaps Sarkesian, with an editor more appropriate to his considerable talents, will do better in his next book.

ALAN NED SABROSKY
U.S. Army War College

Mallison, W. Thomas and Mallison, Sally V. *The Palestinian Problem in International Law and World Order.* Burnt Mill, Harlow Essex, England: Longman House, 1986. 564pp. $39.95

The Mallisons provide the first comprehensive and balanced view of the Palestine-Israel dilemma to appear in years. In this detailed and thoroughly researched analysis, the authors suggest that international law can provide a solution via sufficient and consistent application. They point out that the unprincipled politics played in the Middle East by the major powers have papered over the fundamental causes and have dealt, at best, with the violent symptoms of the underlying violations of law. The authors further suggest that U.S. interests have not been served because our national officials are specialists in dealing with the overall context of great power relations but are distinct nonspecialists in addressing Middle East concerns. The Mallisons hammer consistently on the theme that a legal solution to the Palestinian dilemma could provide Palestinians and Israelis alike with their first real peace in more than 50 years.

The intial two chapters analyze the political-legal objectives of first the Zionist and then the Israeli leadership, while the next several chapters concentrate on the partition of Palestine, Palestinian national and individual rights, and the legal status of Jerusalem. Further discussion provides a legal analysis of the Israeli settlements in the territories occupied after 1967 and then sets forth the humanitarian law applicable to the Israeli invasion of Palestinian-held areas of southern Lebanon in 1982.

The final chapter is the most important because it proposes to resolve the Palestinian problem and finally concludes that a partition plan providing territorial autonomy for the Palestinian people must be seriously considered and supported by the major nations.

Dr. Mallison, a former Stockton Chair holder at the Naval War College, and Sally V. Mallison have undertaken a comprehensive study which dispels myths popularly advocated by the U.S. media. This is a book that argues positions that will be sharply criticized by certain interest groups within the United States and abroad. Nevertheless, it provides invaluable and, this reviewer believes, accurate insights in its consideration of the most involved and complex conflict setting in the world today.

JAMES P. TERRY
Lieutenant Colonel, U.S. Marine Corps

Brackman, Arnold C. *The Other Nuremberg: The Untold Story of the Tokyo War Crimes Trials*. New York: Morrow, 1987. 432pp. $19.95

In 1950 Solis Horowitz wrote in the introduction to his *The Tokyo Trial* (International Conciliation, No. 465): "Despite its importance, little is generally known about this trial." Almost four decades later the author of *The Other Nuremberg* states in his forword: "Written material on the Japanese war crimes trial is thin, especially in comparison with that available on the Nuremberg trial." Unfortunately, both authors were entirely correct. In a preface to the Horowitz monograph, Telford

Taylor, Chief of Counsel at the "Subsequent Proceedings" at Nuremberg, said: "Unhappily, public indifference to the Tokyo trial has been matched by an apparent lack of interest on the part of the sponsoring governments themselves."

Few persons, other than students of World War II history will ever have the time or the inclination to read the entire transcript of the Tokyo war crimes trial. For this reason, a book such as Arnold Brackman has produced is invaluable to the individual who is interested in acquiring a general knowledge of some of the major events of World War II without making a lifetime study of the subject. After presenting considerable historical background for the trial, he takes the reader through each of the major areas of the indictment, consolidating and analyzing the evidence on each such subject. Two statements by the author with respect to the impact of the Tokyo trial on the Japanese public and on the public outside of Japan appear to be worthy of quotation:

> . . . the prosecutor's [opening] statement, lengthy excerpts of which appeared in the Japanese press, encouraged soul-searching among many people, and herein lay a true value of the trial. The IMTFE provided the Japanese with a daily dose of information about prewar and wartime Japan that was foreign to them. . . .
>
> During this period the tribunal acquired a new look. The appearance of so many Japanese ministers, generals, and admirals as witnesses for the prosecution to the secret struggle within Japan between the forces of good and evil had a salutary [effect?] on Allied public opinion. The wartime myth that *all* Japanese were monsters began to fade. The testimony at the IMTFE put the Japanese in a new light. Like all other people, the Japanese were a mix of good, bad, and indifferent. The trial of the major war criminals thus acquired a new dimension—humanizing the enemy.

Of particular interest is the great amount of background which Brackman has added to the story of the trial itself. Thus, he discusses the facts behind: the decision not to include Emperor Hirohito as a defendant and the manner in which the defendants were selected; Judge Pal's arrival in Tokyo, prepared to acquit every defendant because of the history of European colonization of the Orient; the resignation (and nonreplacement) of the Chief of Defense Counsel, Captain Beverly Coleman, U.S. Navy, and several of his assistants; the attempt by members of the prosecution to have the Chief of Counsel, Joseph Kennan, replaced; the dispute over the resignation of the original American member of the Tribunal, Judge John Higgins of Massachusetts, and the appointment of a substitute; the attempt by the New Zealand judge to have the Tribunal refuse to hear any evidence concerning the atrocities committed by Japanese troops in the Philippines; the method by which the lengthy judgment of the Tribunal was drafted and the problems that this created.

Brackman has contributed a major addition to the literature with respect to the 1946-1948 trial in Tokyo conducted by the International Military Tribunal for the Far East. He

deals with 28 of the major Japanese war criminals who were primarily responsible for the aggressive wars waged by a militaristic Japan from 1928-1945 and for the innumerable atrocities which were committed by the Japanese military against civilian noncombatants and prisoners of war.

HOWARD S. LEVIE
Newport, Rhode Island

Isaacson, Walter and Evans, Thomas. *The Wise Men: Six Friends and the World They Made*. New York: Simon & Schuster, 1986. 853pp. $22.95

Autumn of 1944 found World War II drawing to a close and the alliance between the United States, Great Britain, and the Soviet Union undergoing severe stress. Uppermost was the issue of who would be installed as the new Polish Government—the exile government in London or the Soviet-backed, Communist-dominated Lublin government. Underlying this issue were the differing objectives held by alliance members, the West holding to the Atlantic Charter, while Moscow, in Stalin's words, wished to ensure "friendly governments" on Soviet borders.

During this period the American Embassy in Moscow worked tirelessly to find a solution, or at least a compromise. Ambassador Averell Harriman, long involved in many business dealings with the Soviets, favored a tough approach, one effectively denying the Soviets the right to build a defensive perimeter at the expense of bordering countries. His assistant, George F. Kennan, a foreign service officer sometimes given to intellectual arrogance, advocated a pragmatic approach: tolerate a Soviet sphere of influence; do not sacrifice diplomatic influence by advocating free elections in Poland, which would not happen anyway; establish a clear line in "friendly but firm" terms, beyond which the Soviets must not pass without a U.S.-U.K. response. Kennan's views were rejected by Ambassador Harriman in the fall of 1944, but several years later they were accepted as the Western strategy in the name of "containment."

The six "Wise Men"—Dean Acheson, Charles Bohlen, Averell Harriman, George Kennan, Robert Lovett, and John McCloy—were the inheritors of a tradition established by Elihu Root and Henry Stimson in the early years of this century: specifically that of the wealthy, well-bred, well-educated public servant. They were truly a bipartisan group who shared the political center and served a variety of administrations, both officially and unofficially, for 60 years.

In time, some of their views and decisions proved to be less than faultless, and some contemporary critics disparage this old "Establishment" as having on occasion led the United States down the wrong road. Indeed, a couple of the figures, Kennan in particluar, have made revisionist interpretations of their earlier work. Yet, a more understandable assessment is that these

men were without heirs to carry on the tradition. In his later years, Lovett in particular had no use for the new professional foreign policy elites, the so-called "best and brightest," or the incredible partisanship of the Congress on foreign affairs issues.

Lovett's view that part of the United States' foreign affairs travails result from policy being made by servants of selfish ambition is not without some foundation. Isaacson and Thomas point out the pathetic examples of leaks and infighting surrounding the preparations for the 1985 Reagan-Gorbachev summit, while Paul Nitze continued to work tirelessly in the background to establish a meaningful and pragmatic agenda. In the end, Nitze, an old protégé of Dean Acheson, is identified as the only relic of a bygone age, an anachronism among the ambitious.

The U.S. involvement in Vietnam, the arms race, and the cold war have all been attributed to these men, the "Establishment"; but they accomplished a great deal in the post-World War II era. As Henry Kissinger correctly pointed out, "There was a foreign policy consensus back then, and its disintegration during Vietnam is one of the great disasters of our history. You need an Establishment. Society needs it. You can't have all these constant assaults on national policy so that every time you change Presidents you end up changing direction."

In the final analysis, *The Wise Men* is a reexamination of the legacy of six selfless gentlemen whose fortunes were not made in Washington, and whose personal security was not dependent upon their positions in Foggy Bottom, an observation that lends insight into U.S. foreign policy leadership during the critical years after World War II. In the age of Irangate and recent political scandals, it is refreshing to read of a different breed of policymaker in our government, a breed hopefully not yet extinct.

WILLIAM BAKER
Lieutenant, U.S. Navy

Eisenhower, David. *Eisenhower: At War, 1943-1945*. New York: Random House, 1986. 977pp. $29.95

David Eisenhower's book about his distinguished grandfather is the first in a series of three projected to cover the General from his appointment as supreme commander in Europe through his years in the White House. *Eisenhower: At War* covers the year and a half period from the planning and execution of the Normandy invasion through the German surrender. The book's dominant theme stresses the trials and tribulations of coalition warfare. Eisenhower, as the Supreme Allied Commander, could offer experience neither in combat nor as an operational commander comparable with Montgomery or Alexander; undoubtedly an American was chosen because the preponderance of men and materials would come from America. Europeans favored General Marshall, but he could not be spared from

Washington. Only Eisenhower had the genius, the tact, and diplomatic skills to massage the rivalries, cross-purposes, and massive egos of President Roosevelt and Prime Minister Churchill, of Alan Brooke and Montgomery, of the Combined Chiefs, the strategic air power barons, and Stalin. For the NATO planner today, *Eisenhower: At War* offers a superb how-to on coalition warfare.

How does planning then compare with planning by the 16 members of NATO today? Can the impossible problems of command—the headaches of an "agreed" strategy built on differing national aims, of insistence on flawed doctrines of the past at the cost of vital support for a modern combined-arms strategy, of insistence on both a dominant maritime as well as a continental strategy, of acute problems of weapons standardization, and of working with unequal and competitive partners—can these headaches be resolved to the point of creating a highly efficient national force today for the security of Western Europe?

David Eisenhower stresses that the General's actions were far more political than previously believed. Where General Eisenhower has often been criticized for political innocence that allowed him to "cede Berlin and Prague to the Russians," David Eisenhower makes the opposite case, that it was his political sensitivity guiding him to do so. This clouds the real issue.

Eisenhower as a strategist was no Clausewitzian. Typical of American military leaders, he separated political goals from military strategy. When policy failed, the military went to war, seeking victory as quickly, as thoroughly, and as cheaply as possible in terms of spending human lives, in a strictly military approach, free of political complications. Wars were fought as crusades of good against evil. Eisenhower sympathized with Churchill's preoccupation with the political role of the military, "but as a soldier I was particularly careful to exclude such considerations from my recommendations."

When Churchill suggested in early 1945 that the Allied armies go as far east as possible in Europe and stay there until the Soviet Union had complied with its part of the Yalta agreement, the correspondence between Marshall, Eisenhower, and Bradley demonstrated the political vacuum within which the American military strategy developed. Bradley concluded that "as soldiers we looked at the British desire to capture Berlin as complicating the war with political foresight."

Churchill shrewdly observed in his *Memoirs of the Second World War*, "We can now see the deadly hiatus which existed between the fading of President Roosevelt's strength and the growth of President Truman's grip. In this melancholy void, one President could not act and the other could not know. The military chiefs . . . confined themselves to their professional sphere. The State Department had not been close enough to the heart of things to comprehend the issues involved. Indispensable political direc-

tion was lacking at the moment when it was most needed."

The political sensitivity which David Eisenhower stresses is something quite different. The intense and exceptional burdens carried by his grandfather aided considerably in establishing his political and diplomatic skills, but these were only casually interrelated with grand strategy, the political ends for which a war is fought.

British strategic goals included preservation of her overseas trade and the imperial lifeline through the Mediterranean to the Middle East, restoration of the balance of power in Europe, denial of Russian access to warm-water ports, and participation in a land campaign in Europe—after the Germans and Russians had bled each other sufficiently—so as to gain a voice in the settlement and restore the prestige lost at Dunkirk. American goals were hardly incompatible. To these ends Churchill favored an attrition strategy in a "peripheral" war in Sicily, Italy, Greece, and Yugoslavia as the quickest route to Vienna, Prague, and Berlin. Churchill knew the approach from the south to be a sham which could lead only to stalemate in the Alps or Balkans, but it bought him time and delay of the U.S. drive for a frontal assault across the channel.

The lack of both a coalition strategy and clear postwar aims, aggravated by the absence of joint doctrine, greatly complicated the battle of war. Young Eisenhower develops well the difficulties in gaining temporary control of the strategic air forces for battlefield support during and after Normandy; he offers much less about the role of the Pacific-minded Navy. Key to much of the above is the Berlin issue. His grandfather's decision not to send American troops racing ahead of the Red Army to capture Berlin is vigorously defended. His argument merits close study alongside the more generally accepted view that Berlin carried far greater military and political significance than accorded by Eisenhower, but to the reviewer the argument is unconvincing.

David Eisenhower originally planned a book on the second Eisenhower administration but found his research would have to delve into his grandfather's "war background" and its "formative significance" for his later career. *Eisenhower: At War* therefore offers an excellent source of information about the Eisenhower Presidency and, of prime interest to the military reader, his actions as President in reorganizing the Defense Department.

Readers may recall his message to Congress in presenting the 1958 Amendments to the National Security Act. "Complete unity in our strategic planning and operational direction is vital. It is therefore mandatory that the initiative for this planning and direction rest not with the services but directly with the Secretary of Defense and his operational advisors, the JCS. . . .

"No military task is of greater importance than the development of strategic plans. . . . Genuine unity is indispensable at this starting point.

No amount of subsequent coordination can eliminate duplication or doctrinal conflicts which are intruded into the first shaping of military plans."

Although the 1958 Act established strategic planning as the responsibility of the JCS, the "first shaping" of plans and doctrinal development is not now accomplished by the Chiefs. It is delegated to the services. The services never seemed to accept the fact that the law specifies development of *joint* doctrine. Air Force spokesmen in recent years have lost much of the zealotry behind the quick, easy victory through air power alone, and have come a long way in support for combined arms concepts on the modern battlefield. But Army and Navy planners, engrossed in refurbished concepts of continental or maritime warfare, produce not joint or national strategies but tactical uses of the sea and land services operating under certain assumed political conditions. Overlooked is the fact that a nation cannot be both a "sea power" and a "land power," nor can one power be disregarded in a national strategy developed by the other.

Eisenhower: At War offers an outstanding primer on the problems confronted by the unified commander and his staff and is worthy of careful study by those who will eventually serve in such assignments.

PAUL R. SCHRATZ
Arnold, Maryland

Newman, Aubrey S. *What Are Generals Made Of?* Novato, Calif.: Presidio Press, 1987. 314pp. $18.95

Twenty-seven years have passed since General Newman retired. That's a long time. The Army looks different than it did on his last day of active service. Why, then, one may ask, would he presume to write about what leadership—particularly senior leadership—requires in today's Army?

The author, with no surprise to those familiar with him, anticipated such a question. The book, he writes, is "no more than one man's solution to special leadership problems told in day-to-day incidents and actions." That is the key to the book's value. This is not another tome on organizational theory or a shallow approach to self-improvement. This is an experienced and distinguished soldier talking to today's leaders about things that still matter. His recollections and anecdotes bring the wisdom gleaned from 35 years of active service into clear focus.

All of the book's chapters, except three, were selected from General Newman's column, "The Forward Edge," a regular feature of *Army* magazine. Here, they have been organized to focus on two themes: First, the qualities and factors leading to star rank; and second, "how to function in that state."

Before you decide whether to read the book, consider several excerpts that typify the insights General Newman provides:

- "You can't fool soldiers—there are too many of them."

- " . . . how a commander recognizes and gives credit for work well done is like an x-ray into a corner of his heart that reveals a facet of what kind of leader he is."
- "Next time around, I would not waste more than ten years' service as 'a good soldier and nothing more,' but start in my first year broadening into a professional in attitude and endeavors."
- " . . . when reaching up and touching my first stars I remember thinking: 'These are just little pieces of metal cold and hard to the touch. Not at all the kinds of things worth the heartbreak and needless bitterness that failure to wear them so often brings.' "

JOHN VAN ALSTYNE
Colonel, U.S. Army

Petit, Michael. *Peacekeepers at War: A Marine's Account of the Beirut Catastrophe*. Winchester, Mass.: Faber and Faber, 1986. 229pp. $17.95

Petit begins his book with the explosion that killed 241 Americans billeted in the four-story Battalion Landing Team headquarters building at Beirut International Airport in October 1983. Although he was not in the building at that time, he arrived on the scene very quickly. The narrative then "flashes back" to thoughts Petit once had of enlisting in the Foreign Legion and his choice of the Marine Corps instead. We go through boot camp with him, to his first assignment as a clerk at Parris Island, his subsequent transfers to Camp LeJeune and finally the 24th Marine Amphibious Unit (MAU) headquarters in Beirut, where he served as an operations clerk.

A good deal of this book is not very different from the many war novels that have been written since World War II: an author's view of recruit training, competent and incompetent NCOs, too many regulations, the food, the spit and polish, good friends, other acquaintances. But this book is different; not because it is fact rather than fiction, but because it vividly and emotionally portrays the day-to-day existence of a young American in a very hostile environment. Granted, the author makes too many observations about daily Marine life. Nevertheless, his observations, from a corporal's level, of national policy, employment of military forces, and the ambiguities of "peacekeeping," are forcefully presented. I do not know whether or not these observations are accurate, but the point is, he tells us how a "grunt" views these things when grunt logic is the sole source of information. All the arguments about "sending signals," "political response," and rules of engagement make little sense when the response to a rocket attack (on you) is to return fire with illumination rounds.

Interspersed with the discussion of the political realities in Beirut are many vignettes about Marine Corps life in the field. They awaken fond and not so fond memories: problems with rules of engagement in Vietnam, the quality of the local military

forces, good times at the slopchute, hours of boredom, and moments of terror.

I am not sure that I would recommend this book to the kinsmen of the 241 men who died. I am certain, though, that all levels of military leadership would benefit if they would study lessons learned. There are no new ones in this book, but many old ones are reconfirmed.

WENDELL P.C. MORGENTHALER, JR.
Naval War College

Van der Vat, Dan. *The Ship that Changed the World: The Escape of the Goeben to the Dardenelles in 1914.* Bethesda, Md.: Adler & Adler, 1986. 252pp. $17.95

Van der Vat tells the story of how a small German Mediterranean division evaded detection by the British and French Mediterranean fleets in August 1914, and how it was then used to draw Turkey into the war on the side of the Central powers. In consequence, Russia's main trade route (90 percent of her foreign trade) was severed, her war effort crippled, and the tsarist regime fatally weakened. The ultimate legacy, Soviet Russia, has shaped much of world history since.

The book is divided into four parts and, unfortunately, the weakest—Prelude—is the first. The maze of interests in the eastern Mediterranean before 1914 is enough to break the will of even the most intrepid reader, and van der Vat has little luck making sense of it. Once through the tangle of intrigue and out to sea, the going is easier. The evasion story is dealt with in the French, British and German versions, thus it is a thrice-told tale. It would have been better to integrate the three into a single account, but the organization works well enough. The inquests also come in three parts—the French, the British board of inquiry, and the court-martial of Vice Admiral Troubridge. The book finishes with a recounting of German-Turkish naval actions, including the German-led bombardment of Russian ports in October 1914 that thrust Turkey into war.

Although the book is a popular account, without the encumbrances of full documentation and notes, the author has drawn on a wide range of material. It offers the first serious observation of the French role, an important feature since they had the best chance to catch the *Goeben* in the early going and were responsible for Allied Mediterranean naval operations. German sources, as well, add to the overall comprehension.

There is much in this story for both the professional and the casual reader. Both the French and the British Commander in Chief, Admiral Milne, had opportunities to engage the *Goeben* with superior forces, bnt the focus of attention came to rest on Vice Admiral Troubridge. Troubridge, with four old armoured cruisers, lay to the east of the *Goeben* on 6 August 1914. He planned to engage her in poor visibility to offset both her 6-knot margin of speed and her much heavier and longer ranged main armament. When the hour for interception came, it was

morning, bright and clear: Troubridge withdrew—the *Goeben* raced on. Just what he might have accomplished is one of the great "ifs" of history. A few weeks later and thousands of miles to the southwestward, Admiral Craddock, aware of Troubridge's "failure," stood to his guns off Coronel, Chile against a modern force and paid dearly for it. (So too did Commodore Harwood's force off the River Plate, 25 years later. But unlike Craddock, Harwood won.)

What could Troubridge have achieved? Could the fate of Russia—stripped of her major export route by Turkish belligerency—have been said to rest with the *Goeben*? Van der Vat calls upon such formidable witnesses as Barbara Tuchman and W.S. Churchill to support the case, and his case is strong. Would Turkey have gone to war without being propelled into it by "German" naval action against Russia? If not, then perhaps major events in world history do occasionally hinge on small things. That is the appeal of the *Goeben* story and of van der Vat's engaging book.

MARC MILNER
University of New Brunswick, Canada

Bradford, James C., ed. *Captains of the Old Steam Navy: Makers of the American Naval Tradition, 1840-1880.* Annapolis, Md.: Naval Institute Press, 1986. 356pp. $24.95

Writing history by telling lives can be a risky business. In focusing on individuals rather than themes, events, and trends, history can become episodic, anecdotal and fragmented, devoid of any particular meaning, and lacking in intellectual vitality. All too often, inept biographers gather up the fragments of their subject's life, pile them together in a dreary chronology (birth, childhood, education, work, death) and then present the finished product to the reader as a "revealing portrait of. . . ."

As perilous as full biographies may be, collections of biographical sketches can be even worse. Here, all the sins are compressed into a disjointed mishmash held together by pagination.

That this book avoids this Scylla and Charybdis stands as a testament to the skill of the editor. How many times, in subtle and perhaps not too subtle ways, did Bradford have to remind his authors of their duty to tell a life and, more importantly, to explain what that life meant. How often was it necessary to nudge the authors into placing their subjects within the broader context of 19th century American naval history? However he did it, Bradford did it well. To a degree far greater than is usual in collections of this sort, we have an evenness of treatment and threads of continuity that carry the reader forward.

Following a format set out in his previous collection of officer biographies (*Command Under Sail, 1775-1850*), Bradford presents us with 13 sketches written by appropriate experts. The perennials are all here—Matthew Calbraith Perry, John A. Dahlgren, Matthew Fontaine Maury, Charles Wilkes, Andrew Foote,

Samuel Francis DuPont, David Glasgow Farragut, David Dixon Porter, John Rodgers, Robert W. Shufeldt and Benjamin Franklin Isherwood. In addition to the old standbys, Bradford also includes a couple of surprises—two Confederate officers, Franklin Buchanan and Raphael Semmes. Fortunately, none of the authors lapse into hagiography, and while some may be more critical of their subject than others, for the most part we are presented with sound scholarship and judicious appraisals.

At least three themes emerge: the importance of family, the importance of technology, and the unimportance of the Navy.

No one who is acquainted with the history of the American Navy in the 19th century will be at all surprised at the number of inter-family connections amongst these officers. Since the service was so small, in matters of personal relationships it often more closely resembled a gossipy village than a professional seagoing force. Advancement, thanks to family and friends, was common.

Nearly all of these officers were affected by technology, and none resisted it. To be sure, some were more open and prescient than others, but contrary to conventional wisdom, these aged, whiskered officers were not obstacles to technological advancement.

Just how important was the Navy to 19th century America? Not very. Charting the seas and avenging piratical attacks make for good reading, but they hardly changed the destiny of the Nation. This is not to say these events ought not to be recorded and celebrated. Indeed, they demonstrate the personal virtue of courage and help us to better understand what good leadership is really about. Nevertheless, in the broad realm of antebellum American history, our Navy did not play a key role.

In the case of the Civil War, of course, the Navy did emerge as an important player, but even here caution is advised. Despite the great claims made for the blockade, recent scholarship suggests that it was hardly decisive. It was on the rivers that the Navy played out its part. It may well turn out that the brown-water navy was more important to the Union victory than its blue-water counterpart.

A third volume in this series is apparently in the works—*Admirals of the Steel Navy, 1880-1930.* Once completed, this naval triptych will provide a ready and welcome addition to the literature of American naval history.

WILLIAM M. FOWLER, JR.
Boston, Massachusetts

Guttridge, Leonard F. *Icebound: The Jeanette Expedition's Quest for the North Pole.* Annapolis, Md.: Naval Institute Press, 1986. 357pp. $23.95

Icebound is a long overdue and thoroughly competent presentation of the events surrounding the destruction of the U.S.S. *Jeanette* on 12 June 1881 in the Arctic Ocean north of

Siberia, while under the command of Lieutenant George W. De Long, U.S. Navy.

Guttridge's research is first class as he examines both the public record and the available private files of the crew members who either perished or survived this disaster which attracted such great public interest. He has located and used just the right photographs and illustrations as he narrates the chronology of events in this, the first U.S. Government authorized, but privately sponsored, attempt to reach the North Pole by ship via the Bering Strait. However, the reader will need a magnifying glass for the chartlets.

Discrepancies between the private utterances and public testimony of the survivors, and the written records of those who perished, form the basis of a naval mystery heretofore largely unresolved. It is generally accepted that then Navy Secretary William E. Chandler and the expedition's sponsor, publisher James Gordon Bennett of the *New York Herald*, allied themselves with Lieutenant De Long's widow Emma to prevent a full public disclosure of the tragedy, each for his or her own reasons—all of which the author discloses. Even the subsequent Congressional investigation by the Naval Affairs Committee seemed to be limited to a predetermined finding. In 1882, apparently, politics in the Navy were considerably less subtle than now!

The concealed physical affliction of the expedition's navigator, Master John W. Danenhower, U.S. Navy, is dealt with in a frank manner, and the author is not maudlin in his treatment of the navigator's suicide after his rescue. Those who know of Rear Admiral George W. Melville's appointment, over some 40 senior officers, to the post of Chief of the Bureau of Steam Engineering (later BuShips) and of his leadership during the Navy's transition from sail (then preferred) to steam (then detested), and before Dewey's Great White Fleet, will find revealed facets of Melville's character not readily apparent in environments less harsh than the Arctic.

Guttridge's use of a dramatic style of narration, almost as though he were actually aboard the *Jeanette* or present at the hearings, is skillfull and does not lessen the appeal of his tale. Today's officers will gain an insight into aspects of basic leadership in situations of stress that are still valid but less evident in today's technocratic Navy.

Icebound is an enthralling "detective" story. How odd that the author, an Englishman and a civilian, is able to "solve" the mystery when so many Americans, both naval and civilian, have fallen short in their efforts to bring together all the complex elements of the *Jeanette* expedition. In August 1883, George Melville wrote to Emma De Long that, "There is a great deal we both might say that has not been said. . . . I know the true history of the Expedition will never be written." Leonard Guttridge's efforts come close!

CLARENCE O. FISKE
Captain, U.S. Navy (Ret.)

McKenna, Richard. *The Left-Handed Monkey Wrench*. Annapolis, Md.: Naval Institute Press, 1986. 355pp. $16.95

This collection of 10 stories, essays, and excerpts, from a prospective book published 22 years after author Richard McKenna's death, provides something few *Naval War College Review* readers have ever personally experienced: how a mess deck seaman lived, loved, worked, played, ate, slept, fought, and sometimes died on the Asiatic station between the two great wars. For 10 years Dick McKenna was *there*—an introspective observer dissecting his characters, pitting men against each other, unraveling the elaborate enlisted pecking order, revealing nuances of expression and performance, making *The Left-Handed Monkey Wrench* a thoroughly interesting and educational collection. Unlike McKenna's *tour de force*, *The Sand Pebbles*, where the action is a rather fanciful departure from reality, *The Left-Handed Monkey Wrench* is strictly like it was.

McKenna's introduction into the 1931 Navy was aboard the old cargo ship U.S.S. *Goldstar*, a strictly non-reg Hog Island 12-knotter that plodded between Japan, Manila, and its home port, Guam. It transported native products out and essential island needs in, carrying dependents along for the ride and release from boredom on the tiny island of Guam.

From the *Goldstar*, McKenna progressed to the coastal gunboat *Asheville*, destroyer *Edsall*, and lastly, the Yangtze gunboat *Luzon*. As a machinist mate throughout those 10 years, McKenna watched and participated in the intrigues, plots, joys, and tragedies of life on the mess deck and in the engine room that only a man who was there could know. The "black gang" life was only peripherally intruded upon by the "deck apes" and the officers, the latter sometimes not too kindly treated in the text.

"Life aboard the *Goldstar*" is complete in its description of functions, routine, religion, cultural focus, and love life while in Japan. "The Fiction of History" backgrounds McKenna's difficult search for truth about China and its various myths—the revolutionary myth, the missionary myth, and the history that never was. "Cleaning Firesides" is black gang conflict, challenge, triumph. As in all McKenna's tales, there is the constant emotional turmoil of man against man against machine. "The Girl in Tatsubei" puts one in intimate touch with the fantasies and delights of the Japanese female—the softness, mutual respect, unhurried consideration, charm, and beauty so totally unlike the "romance" of the American bordello. McKenna clearly is charmed and captured by the gentle girls during a week of tranquility at Yokohama.

In the mid-twenties, we midshipmen knew very well who Josephus Daniels was. As President Woodrow Wilson's Navy Secretary for 8 years, ". . . he had shivered the timbers of the United States Navy so thoroughly that twenty years later they were still twitching with remembered

outrage." McKenna, in his essay, "The Wreck of Uncle Josephus," gives this righteous old gentleman a powerful leg-up in the latter's great influence, ". . . to remove the stigma of personal unworth traditionally attaching to the enlisted naval uniforms." Those who read McKenna's assessment of the many reforms instituted by Daniels will come away with a much higher regard for the man who abolished liquor in wardrooms as one of his less popular moves.

In certain respects, one can favorably compare *The Left-Handed Monkey Wrench* to a like epic of another century, *Two Years before the Mast*. And there actually was a left-handed monkey wrench, whereof the reader will discover the rather bizarre source.

KEMP TOLLEY
Rear Admiral, U.S. Navy (Ret.)

Crane, Elaine Forman. *A Dependent People*. New York: Fordham University Press, 1985. 196pp. $25

Elaine Forman Crane's economically written book begins in about 1760 and documents Newport's mercantile character. Once one of the five chief cities of the Colonies, Newport, lacking a hinterland to produce goods for sale to the other Colonies and abroad, survived on a one-product economy—rum—which quickly led the city's merchants and seamen deeply into the slave trade.

Crane looks at tax rolls, lists of slave owners, census figures, and shipping data, and out of this material produces an interesting history. Church membership figures prove, as usual, one way to quantify the rise of the bourgeoisie. Conversion to Anglicanism and attendance at Trinity Church was then, as now, notification of *haut bourgeois* arrival, counterpointed by Ezra Stiles' endlessly documented fumings.

Though she does not specify it, Crane's data allows the conclusion that Newport's wealthy merchants never became an upper class, probably because they remained so close to the source of their wealth and were not allowed time to become "old money." This interesting sociological fact has persisted until today because the development of an indigenous upper class was stifled at the renaissance by the superimposition of an upper class from elsewhere.

Wealthy colonists, nonetheless, did function partly as an upper class, making improvements to the city's physical amenities while doing justice to their own domestic ones. Their cultural enjoyments were ephemeral, but they at least left for posterity the Redwood Library, Trinity Church, the Brick Market, the Colony House, and numerous paintings and domestic works of art they had commissioned.

Crane also points out that white servants and black slaves were kept off the poor rolls by inclusion in the households of the wealthy. In 1755, 18 percent of the population were black, nearly all of them slaves. She surmises that the drop in this percentage to 13.5 percent in 1774 was due not so much to a decrease in the number of the enslaved but to the

necessity to hide assets from the mother country's new efforts to collect taxes.

The most interesting part of the book is the conclusion in which Dr. Crane makes real the attitudes and interactions of Newporters going into and during the Revolution. Britain allowed the development of Newport as a trading center by generations of benign neglect. Her efforts, beginning in the 1760s, to enforce and collect excises led the merchants to respond through subterfuges to avoid the levies. When enforcement proved too effective, Newport mobs, wrapped in a new patriotism, ran the customs officers out of town. Though the merchants certainly did not discourage the mobs, they discovered that the mobs eroded the law and order necessary for the orderly running of commerce. Some of the merchants were Patriots, others were Tories. The latter felt that any government, even an oppressive one, was preferable to anarchy. Had the Revolution been put down, the Tories would have been the patriots. Instead, they were run out of town.

The war was hard on the city. After it was over, those Tories who filtered back from exile were not treated as badly as they were in most other places. Newport's economy, and its physical condition were a shambles; the Patriot was too demoralized to discriminate against the Tory; he shared his misery without open rancor.

Dr. Crane, probably more than any scholar, has made the most of Newport's largely unexploited archives. Her book covers an important segment of Newport's history in scholarly, rather than anecdotal, fashion. It is she to whom we are indebted for the published qualification to Newport's boast that all sorts were tolerated in this most open colony. Most people here lived and practiced dissenting religion, but Jews were treated as "foreigners" and neither they nor Catholics nor Quakers were allowed to vote.

Although this book reads easily, it is fleshless; it is not a narrative made from statistics, but statistics pieced into a narrative. Of 197 pages, 67 are footnotes or bibliography and 10 are index.

The book's designer deserves a complaint. The book is set in 8-point type, difficult for its intended audience, i.e., anyone more than 18 years of age, to read.

HOWARD S. BROWNE
Newport, Rhode Island

RECENT BOOKS

Addington, Larry H. *The Patterns of War since the Eighteenth Century*. Bloomington: Indiana University Press, 1985. 318pp. $29.50 paper $10.95

Addington's volume is a narrative description of the major European and American wars that have occurred since 1775. The author vividly describes the general aspects of strategy, tactics, and weapons employed. The title misleadingly suggests that this might be a weighty and abstract comparative analysis. It is something quite different; an objective summary of events that makes a very useful introductory textbook for undergraduate students of war history.

Best, Richard A., Jr. *Co-operation with Like-Minded Peoples: British Influences on American Security Policy, 1945-1949*. Westport, Conn.: Greenwood Press, 1986. 226pp. $32.95

Using both British and American archives, Richard Best offers a new insight into the immediate postwar years by focusing on Anglo-American cooperation rather than the competition between the Soviet Union and the United States. Best demonstrates how Britain took the initiative in persuading the United States to share her concerns about the future of continental Europe. Using established wartime channels of cooperation, British officials played a major role in altering American policy by ensuring the continued presence of U.S. military and naval forces in Europe. Best's work is a stimulating and valuable study of the history of that "special relationship" as well as the history of American defense policy.

Evans, David, ed. and trans. *The Japanese Navy in World War II: In the Words of Former Japanese Naval Officers*. Annapolis, Md.: Naval Institute Press, 1986. 568pp. $24.95

This collection of essays provides personal perspectives on the war in the Pacific. First published in 1969, the collection contains some of the few available classics relating the Japanese experience in World War II. This second edition (revised) provides five additional articles—three from the U.S. Naval Institute *Proceedings* and two translations prepared especially for this edition by the editor. The new essays discuss operations in the Indian Ocean, the Battle of the Philippine Sea, the protection of merchant shipping, submarine warfare, and Japan's general naval strategy.

Gabriel, Richard A., ed. *Military Psychiatry: A Comparative Perspective*. Westport, Conn.: Greenwood Press, 1986. 214pp. $32.50

This book starts with the estimate that modern armies are likely to suffer 40 to 50 percent losses of total strength from psychiatric collapse. To deal with the subject, the author steps into the field of comparative military psychiatry as he assembles a cross-cultural analysis of the discipline as practiced by the armies of the United States, Germany, Israel, and the Soviet Union. The collection begins with the human dimension of combat and then proceeds into a detailed examination of the historical development and effectiveness of military psychiatry. Strategies dealing with battle stress are discussed, as are future directions of military psychiatry.

Gordon, John W. *The Other Desert War: British Special Forces in North Africa, 1940-1943.* Westport, Conn.: Greenwood Press, 1987. 241pp. $39.95

Written in a setting that reaches back to Lawrence of Arabia in World War I, continuing with interwar experiments with motorized desert travel by both British and Italian Armies, and culminating in the Long Range Desert Groups of the target period, this little book is a nice addition to the literature of the war. It is an interesting story for anyone whose imagination has been captured by the images in popular books and movies, such as *The Desert Rat* and *The Key to Rebecca*, that have their origin in this remarkable thearer. *The Other Desert War* is, however, a scholarly history, not an adventure novel, although at times it reads as such.

Higham, Robin D.S. *Diary of a Disaster: British Aid to Greece, 1940-1941.* Lexington: The University Press of Kentucky, 1986. 269pp. $27

By reconstructing in exquisite detail the disastrous British expedition to Greece on the eve of the German invasion in 1940, Robin Higham has done a valuable service for both military historians and strategists. For the historian, he has pulled together the story of this little known but important part of the early actions of the Second World War. For the strategist, he gently but firmly illustrates that military actions without clear political purpose and commitment often do not work out very well. The book is, literally, a daily diary. The implications are to be drawn by the reader.

Kennedy, Moorhead. *The Ayatollah in the Cathedral: Reflections of a Hostage.* New York: Hill & Wang, 1986. 241pp. $17.95

A career Foreign Service officer, Moorhead "Mike" Kennedy, while serving in the American Embassy in Iran during the revolution, became one of the hostages held by the Ayatollah's minions for 444 days. After his release, Kennedy retired from the Foreign Service and became chairman of the Cathedral Peace Institute at the New York Episcopal Cathedral. This began as an optimistic endeavor, for Kennedy is a deeply religious man who wanted to put his long experience with the realities of the world to the service of peace. Ultimately this became a very disturbing experience for him as he found that the religious certainty and absolutism that drove the Ayatollah also drove the leadership of much of the American peace movement. While deeply devoted to peace in both the political and religious sense, Kennedy found that there was no place in the movement for a rational, thoughtful man committed to open dialogue. Although Kennedy was forced out of the Cathedral Peace Institute by the dean, in a classic display of earthly power politics, he has continued to write and speak to the thinking audience.

Kinnell, Susan K., ed. *Military History of the United States: An Annotated Bibliography.* Santa Barbara, Calif.: ABC-Clio, 1986. 333pp. $85

With approximately 3,300 entries organized into chapters dealing with major periods in American history, this bibliography covers wars on land, at sea, and in the air; great wars, small wars, and skirmishes; incidents and police actions spanning the earliest colonial actions through such events as recently as mid-1985. Providing a ready and quick retrieval of significant scholarship in the field, *Military History of the United States* will be useful to librarians, students, and researchers of U.S. military affairs. (Subject and author index provided.)

Leach, Douglas Edward. *Now Hear This: The Memoir of a Junior Officer in the Great Pacific War.* Kent, Ohio: Kent State University Press, 1987. 184pp. $22

Fresh out of Providence and Brown University in 1942, Douglas Leach was one of thousands of young Americans who became "90-day wonders" in the service of the Navy. This memoir of his time in the Pacific as the ASW officer for the U.S.S. *Elden* (DE-264) will be of interest to his many peers who shared the same experiences and found their lives forever changed. His story is historically useful for its descriptions of the early practice of surface ASW. In many respects, Leach's work is a good companion piece to John Monsarrat's recent *Angel on the Yardarm* (1985).

Morgan, William James, ed. *Naval Documents of the American Revolution*; Vol. 9, *American Theatre: June 1, 1777-July 31, 1777; European Theatre: June 1, 1777-September 30, 1777; American Theatre: August 1, 1777-September 30, 1777.* Washington: Naval Historical Center, Department of the Navy, 1986. 1147pp. $44

This 1147-page volume fully documents the 4 months of naval operations in the summer of 1777, both in American and European waters. Here one can see the British Fleet landing an army at the head of the Chesapeake as part of the operations to capture Philadelphia, as well as the individual actions of the continental frigates *Boston*, *Hancock*, and *Randolph* in the Atlantic. One finds here the sources for examining the famous raids against British merchant shipping made by Captain Lambert Wickes and Gustavus Conyngham in Europe. This volume, like its predecessors, shows the immeasurable value of establishing a record of our country's naval history in a way that is both readily available to all, undeniably accurate, and without bias.

Owen, J.I.H., ed. *Current Military Literature: Comments, Abstracts, Citations of Important Articles from International Strategic and Defense Periodicals.* Oxford, England: Military Press, Ltd., 1985. v. 3, nos. 1-6. $120

Current Military Literature provides subject-classified abstracts and citations of articles from international journals in the areas of ground warfare, strategic studies, and conflict research. Within broad subject areas, each citation is classified into detailed subject groups which limit the amount of time needed to search for items. Citations are cross-referenced into all the alternative subject groups where one might look. Each issue contains author, geographical, and source journal indexes for all citations and provides a full directory of journals scanned, with publishers' addresses. Each citation supplies full bibliographic data to assist users in retrieving original texts through library services or from original publishers. *Current Military Literature* is very useful to libraries, research activities, and professionals dealing with strategic studies and conflict research.

Parton, James. *Air Force Spoken Here: General Ira Eaker and the Command of the Air.* Bethesda, Md.: Adler & Adler, 1986. 557pp. $24.95

Parton, Eaker's aide during World War II, serves as a primary source in this anecdotal full-length biography. Starting with his formative years as the son of a Texas tenant farmer, the book follows Eaker through his enlistment in 1917, a rich career between the wars, and command of the Eighth U.S. Air Force and the Mediterraneau Allied Air Forces during World War II. A literate man whose prose is a pleasure to read, the author has fashioned a carefully researched and balanced biography of a pioneer aviator, Congressional Gold Medal winner, and hero of World War II.

Price, Alfred. *Air Battle Central Europe*. New York: The Free Press, 1986. 192pp. $17.95
Drawing on his experience in the RAF and a number of books he has written on air warfare, including the popular *Air War South Atlantic*, Alfred Price gives us a comprehensive look at the aircraft and weapons that NATO has on the front line. He has a chapter on each, including the Toronados, FB-111E/F, EF-111, Wild Weasels, RF-4C, A-10, Harrier, and the tank-swatting helicopter gunships. Each chapter is built around interviews with squadron commanders who offer insights into their probable tactics.

Schaffer, Mark E., ed. *Technology Transfer and East-West Relations*. New York: St. Martin's Press, 1985. 273pp. $39.95
A comprehensive survey of technology transfer from West to East, this volume cuts across the traditional boundaries of a number of academic disciplines and examines the economic, political, strategic, and legal aspects of the West-East technology transfer. Starting with the nature of innovation in centrally planned economies and the gap in the technological level between East and West, this book examines the major features of innovation under both central planning and market socialism, the role of technology transfer in economic growth, and the relationship between capitalism, socialism, and technological change. Further discussion deals with the economics of technology transfer and the controversial role of Western technology in Soviet military power.

Segal, David R. and Sinaiko, Wallace H., eds. *Life in the Rank and File: Enlisted Men and Women in the Armed Forces of the United States, Australia and Canada, and the United Kingdom*. Washington, D.C.: Pergamon-Brassey's International Defense Publishers, 1986. 283pp. $24 paper $14.95
Since 85 percent of the Americans who serve in the military do so in the enlisted ranks, this should be an important book for planners and scholars. While it does touch the current significant issues of retention, the growing role of women, and race relations, it does so through a series of disjointed essays by writers of varying talent. Among the best and most insightful is the essay on the Marines by Michael and Renee Patrow (both lieutenant colonels in the Marine Corps) and the interviews with previous chief master sergeants of the Air Force by Neufeld and Hasdorff. Naval matters are included in Down's history of the changing role of petty officers and in Thomas' essay on the role of women in the Navy. By way of contrast with the American experience, essays are included on the enlisted forces of Australia, Canada, and the United Kingdom. Regrettably, the book is marred by some truly dreadful sociological jargon.

Stubbing, Richard A. and Mendel, Richard A. *The Defense Game: An Insider Explores the Astonishing Realities of America's Defense Establishment*. New York: Harper & Row, 1986. 445pp. $18.95
This book examines the way that primary defense players—the armed services, industry, Congress, and the Administration—run the Nation's biggest business. Drawing on his experiences dealing with the defense budget from 1962 to 1981, the author looks at the realities of policy-making for the Pentagon by analyzing the decisionmaking process in the complex and secretive world of defense planning and budgeting. In his judgment, the negative trends faced by the U.S. rivalry with the Soviets are not the result of limiting funds but, instead, the problem of efficiently

transforming dollar resources into military capabilities. The author goes on to examine the roles of five Secretaries of Defense and concludes with the attributes of the next Secretary and how he or she must operate to achieve real change in the Pentagon to make us winners in the defense game.

Tuck, Jay. *High-Tech Espionage: How the KGB Smuggles NATO's Strategic Secrets to Moscow*. New York: St. Martin's Press, 1986. 211pp. $14.95

The capitalists, said Vladimir Ilyich Lenin, will sell us the rope we need to hang them. While Lenin knew little of computers, lasers, microchips, and other high-tech, his successors do. Jay Tuck paints an alarming and well-documented picture of how the West is selling and loosing this technology to the Soviet Union where it is being used in the weapons pointed back at us. As Soviet technology has continued to lag the West, Soviet espionage has conducted a massive program devoted to the acquisition of both high-tech components and the tools to manufacture them. Through vivid accounts of high-tech espionage, Tuck tells the story of just how successful and devastating this collection has been.

Warren, Mark D. *Lusitania*. New York: Sterling Publishing, 1986. 62pp. $35

The sinking of the *Lusitania* and the subsequent loss of 1,200 lives in 1915 was a factor that contributed to U.S. entry into World War I. This is a facsimile reprint, including 25 added heretofore unpublished photographs of a limited 1907 edition, only nine copies of which are known to exist. It covers in great detail the construction of the ship, with particular emphasis on passenger accommodations, the propelling machinery, and the cargo and navigation equipment.

Watson, Milton. *Disasters at Sea*. New York: Stripling Publishers, 1987. 192pp. $24.95

In 1907 the S.S. *Dakota* was wrecked and lost near Yokohama. "The captain spent the rest of his life as a night watchman in a San Francisco shipyard." On that career-enhancing note, Milton Watson begins his chronology of every ocean-going passenger ship catastrophe since 1900. All the big ones are here: the *Titanic*, the *Lusitania*, the *Morro Castle*, the *Andrea Doria*, the *Wahine*, the *Prinsendam*, and the *Lermontov*. Meticulously researched and well-illustrated, Milton's book reminds us that rocks, fire, and poor seamanship still claim ships such as *The Herald of Free Enterprise* in 1987, too late for this book.

Wragg, David. *Airlift: A History of Military Air Transport*. Novato, Calif.: Presido Press, 1986. 159pp. $25

Major military powers have regarded air transport as an important element in their operations—assault, deployment and redeployment of troops, and critical resupply. *Airlift* traces the history of the development and operations of "military airlines" from the 1920s to the Falklands, including fixed wing aircraft, gliders, and helicopters. International in scope, covering overt and covert military activity, *Airlift* concludes its examination of the subject with some insights into its future.

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AWARD-WINNING ARTICLES CHOSEN FROM THE NAVAL WAR COLLEGE REVIEW

Three prize awards, one for $500 and two for $250, honoring authors whose works appeared in the *Review* during 1986, were announced at the College's recent graduation exercises. These awards for exceptional articles, based on content, clarity, and professionalism, are given in memory of the late Captain Hugh G. Nott, U.S. Navy (Ret.) who, over a period of 10 years, made major contributions to the academic and research vitality of the Naval War College.

First prize award, for "Wargaming, an Enforcer of Strategic Realism: 1919-1942," went to Dr. Michael Vlahos of the Johns Hopkins School of Advanced International Studies.

Second prize awards went to Lieutenant Colonel James P. Terry, U.S. Marine Corps, currently assigned to the Headquarters, Marine Corps, for "An Appraisal of Lawful Military Response to State-Sponsored Terrorism," and to Dr. Mackubin T. Owens who serves as Special Assistant for Defense Programs in the office of the Assistant Secretary of Energy for Congressional Affairs, for "American Strategic Culture and Civil-Military Relations: The Case of JCS Reform."