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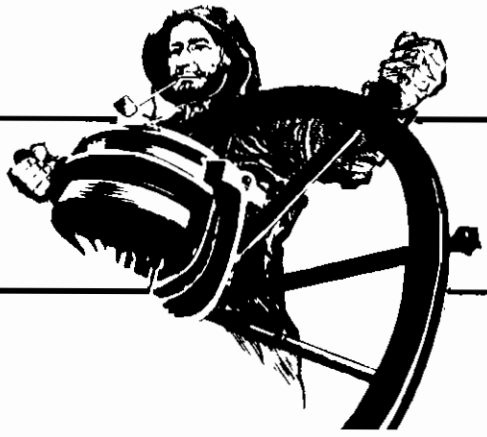
SET AND DRIFT



SUCCESS AND THE SECRETARY OF DEFENSE: ANOTHER VIEW

by

Lewis Sorley

Recently in these pages Francis J. West, Jr. presented thumbnail sketches of the service of 14 Secretaries of Defense, suggested that most had failed, and offered the view that those failures were owed ro a confusion of priorities among the several roles each Secretary must play and a consequenr expenditure of too much rime and energy on the wrong issues. Forging on from those conclusions, Mr. West argued that most of the Secreraries who in his view had failed had devoted too much attention to administration of the Department of Defense.

It seems to me that there is room for another view, including discussion of what constitutes "failure" in the circumstances faced by each of the successive incumbents. Given the several constituencies served by a Secretary of Defense (subsidiary to his overriding obligation to serve the public interest) and the often incompatible interests and equities of those various constituencies, it would appear thar only under the most felicitous circumstances could any given Secretary be viewed as having succeeded by all parties. Thus what most Secretaries are faced with doing is establishing priorities not only among their various roles, but among the multitudinous political and national security concerns facing the administration in office. These priorities are reflected, of course, in rhe emphasis given to one or another role and the effort expended in serving one or another constituency.

Success as viewed rerrospectively might then be defined in two parts: how wisely the priorities were chosen and adhered to, and how ably they were manifested in the conduct of the office. This seems to me to constitute a markedly different set of criteria than those implied by West, who emphasized being removed from office as an indication of failure.

Key ro those removals from office (being fired outright or being replaced by another appointee following a President's reelection) was, West suggested, loss of confidence in the incumbent on the part of the President. While that certainly constitutes failure of a kind, ir is important to consider the context within which the loss of confidence occurred in each case in determining whether at the higher level of his stewardship of public trust a

Secretary ousted from office can be considered to have failed. Recent history provides an excellent case in point. James Schlesinger, whose substantial achievements included (as West acknowledges) beneficial modification of strategic nuclear doctrine, improvement of general-purpose forces, and reversal of a long-term trend in declining resources devoted to defense, was then fired by President Ford, a firing attributed by West to "personalities and the impending Presidential elections." Given these contrasting grounds, I suggest that there are few who have been closely involved with defense issues over the years who would not rate Schlesinger as one of the most effective Secretaries of Defense.

A more recent Secretary, Harold Brown, is also an interesting study in terms of success or failure in the role. Having served the full 4 years of the Administration in which he was originally appointed, he is one of only three Secretaries who were neither fired nor replaced upon reelection of a serving President, according to West's tabulation. Yet, if it is not at all clear that his service can be considered a success in terms of achievement as opposed to extended tenure, there are contextual factors that may lead one to conclude that Dr. Brown did the very best that could be expected in a difficult circumstance. That circumstance, as described by West, was being "caught in an impossible dilemma: remaining steadfastly loyal to a President who did not believe force should be a major component of international relations, while trying to strengthen U.S. forces." Many fair-minded people might conclude that under such conditions Secretary Brown did all that was humanly possible, and served more successfully than most would have been able to do.

There is another aspect of the success or failure of any given Secretary of Defense, one that keys on the tenures in office reported by West, that deserves comment. Of the 14 Secretaries of Defense who preceded the incumbent, only four served for longer than 2½ years (see Table 1). The median term of office was 1½ years; six Secretaries (nearly half of those who have held the position) served less than a year and a half. The average tenure (in this case less instructive in terms of describing reality because it is skewed by much longer tenures of four incumbents) was some 28.2 months.

TABLE 1—TENURES OF SECRETARIES OF DEFENSE

Incumbent	Months In Office	
McNamara	82	
Wilson	57	
Laird	47	
Brown	47	
Schlesinger	29	
McElroy	26	
Forrestal	18	
Johnson	18	Median
Lovett	15	
Gates	14	
Clifford	13	
Rumsfeld	13	
Marshall	12	
Richardson	4	
Mean	28.2	

It should be clear that stability and continuity are important in dealing with matters of the complexity and diversity that confront the Secretary of Defense, and that stability and continuity are things we have rarely had, either among the appointed civilian leadership of the Department of Defense or in assignments of uniformed leaders of the military services. In assessing success or failure, then, it seems reasonable to take into account whether a given Secretary has been afforded a tenure giving him reasonable opportunity to have any significant effect. On the evidence, most have not. This also seems to call into

question Mr. West's suggestion that Secretaries of Defense need not give top priority to managing their department, inasmuch as one of the deputies could take that on as a full-time task. Given the historical experience, such an approach would seem likely to result in even more transitory leadership than that provided by the Secretaries themselves.

Meanwhile there are persistent problems with the acquisition process, the roles and missions of the services, the training and readiness of the forces, and their essential manning that have persisted through a number of Administrations. Many of these seem to constitute problems primarily of internal management. What is fascinating to speculate on, and would be a useful topic for further research, is whether more rather than less attention to internal affairs of the Department of Defense by successive Secretaries, especially the more able among those who have held the position, might not have resulted in institutionalizing some sea-change alterations in strategic doctrine (a notable success of the Schlesinger era, as suggested earlier); restructuring the approach to the research, development, testing and acquisitions process in ways having long-term influence on reductions in the costs and time involved in fielding major systems; and influencing the allocations of roles and missions among the services so as to obtain a greater return on the investment in the force as a whole when applied to the evolving tasks of national defense.

In reaching the conclusion that "history shows that no Secretary has failed for poor management, while many have failed because they neglected other roles," therefore, Mr. West may be applying too narrow a definition of success and failure. It is not, I have sought to demonstrate, unarguably an indication of failure to have been fired. Neither is it necessarily evidence of failure to have suffered the departmental effects of broader trends in the affairs of the nation. Meanwhile the prospective benefits of a well-managed Department of Defense would, I believe, be sufficient to vindicate any Secretary who made his personal first priority managing the affairs of his department.

GIBRALTAR: A STUMBLING BLOCK OR A STEPPING STONE

by

Commander N.H. Kerr, Royal Navy

After almost 30 years of faltering nonprogress, the 1980s provide NATO with the opportunity to cement their gains, as opposed to paper over the cracks; to achieve a real increase in defense expenditures and preparedness, and to exploit, if only in physiological terms, the trauma in the Warsaw Pact caused by the Polish problem and the Afghanistan situation.

One of the most fundamental expressions of NATO's superiority in solidarity and strength of purpose over the Warsaw Pact would be the warm and universal acceptance of another willing member into the alliance; Spain. Spain with its important straregic geographical position, its raw materials, industry and its population, not to mention armed forces, has been isolated from Europe for over 40 years and rejected from NATO for political reasons that since the death of Franco are no longer valid. Spain now stands as a great prize

to be won for the common defense of the North Atlantic or lost to a neopacification stance, similar to Sweden; a stance of little use to either side in the ideological struggle between democracy and communism.

There is a problem—Gibraltar; geographically a part of Spain, historically a bastion of British power abroad, one can readily understand Spain's demands to have Gibraltar returned to her. Great Britain, however, is unhappy to give up Gibraltar because of its strategic importance. If Spain was in NATO, would this matter? But, and the big but, is that the Gibraltarians don't want (and have said so many times) to give up their special status. Squabbles over Gibraltar could be the stumbling block of Spanish entry into NATO. British Foreign Office officials within the ex-colonial or liberal mold will not be prepared to hand over Gibraltar, without some grandiose, impartial reciprocal gesture from Spain; a similar deal to that of Zimbabwe, where decolonization was only allowed to proceed to the tune of the media's cry of great diplomacy and good behavior from the Zimbabweans who wanted independence anyway. No such accolade could accompany the handover of Gibraltar, particularly as the Gibraltarians are fervently against becoming part of Spain.

The answer lies in NATO. The handing over by Britain of Gibraltar to NATO as a strategic linchpin and Maritime Headquarters for NATO would satisfy all aspects of the problem. Spain would no longer have a disputed border with Britain, and could not dispute the possession of Gibraltar if it were in NATO of which she was a member. Great Britain would pull off a great diplomatic coup, particularly in NATO circles, and the Gibraltarians special status, duty-free concessions, etc., could be maintained under a NATO flag.

Could NATO use Gibraltar, apart from holding it as a strategic fortress between the Mediterranean and the Atlantic? The present NATO Supreme Allied Command Atlantic Headquarters is in Norfolk, Virginia. As an American officer, SACLANT is not only double-hatted as USCINCLANT, but at 200 miles down the Chesapeake from Washington, D.C., is too conveniently at the beck and call of U.S. politicians, only too eager to interfere or influence U.S./NATO relationships through their resident NATO/U.S. Commander. The colocation of the USCINCLANT/SACLANT headquarters is a mythical advantage. An outsider, particularly in Europe, presumes a harmony that does not exist, and tends to regard SACLANT decisions as binding on USCINCLANT and vice versa, which they are not. Norfolk is also remote from the supposed battlegrounds of the Atlantic Fleet, i.e., the Norwegian Sea, Iceland, Faroes Gap, etc., and command exercise only too frequently has to be passed to the NATO secondary commander, CINCEASTLANT, in Northwood, U.K., much to the disgust of the U.S. officers in SACLANT. Norfolk is also 3,000+ miles from Brussels and in day-to-day affairs tends to be much less well represented than the geographically much closer Army/Air Force dominated headquarters of SACEUR (40 miles from Brussels). Could preoccupation with the Central Front at the expense of the far more complex Warsaw Pact threat at sea be a result of this geographical disparity?

The location of SACLANT's headquarters at Gibraltar would give the fortress the privileged position its inhabitants require. Four stars are pretty big medicine in anyone's language. Being at the Mediterranean/Atlantic crossroads, the whole of NATO's seapower could be controlled from a central position, while its location at the foot of the Iberian peninsula give it a measure of invulnerability and protection in depth. Location at Gibraltar would remove SACLANT from the U.S.

environment and allow his staff to concentrate on NATO matters as opposed to keeping one eye on U.S.-only interests. Being only 1,000 miles from and on the same continent as Brussels would go a long way to counteract the prevalent idea that SACEUR is the only NATO supremo.

Legal minds seeing only the minutae of law and status quo, and petty officials, including many uniformed equivalents, will see only the snags and transitory problems of this solution to the future of Gibraltar. Those who can see beyond petty boundaries of jurisdiction and who see the true worth of Spain in NATO, the advantages of a European-based maritime Supreme Headquarters for NATO, and who are prepared to make concessions to the Gibraltarians themselves will see the far-reaching advantages of making Gibraltar a NATO headquarters.

Gibraltar could be a stepping stone to NATO solidarity, and Spanish membership of the alliance, in the face of the relentless, but internally divided, Warsaw Pact would be assured.

The invitation must come from Great Britain and come soon before the problems of Gibraltar not only impede Spain's entry into NATO, but build an inpenetrable barrier on her entry, such as the Northern Ireland and Eire situation (countries cannot become members of NATO if they dispute a border with another NATO country). Both situations create avenues for Warsaw Pact mischief-making and intervention.

AN OUTLINE OF WARGAMING

by

Captain Abe Greenberg, U.S. Navy

In recent years, wargaming has enjoyed a general regeneration, particularly at the Naval War College. It will be useful to review its basic nature, origin, strong points and limitations. Although the Naval War College deals primarily with naval wargaming, a broader view of this field is necessary. Thus, the following survey will be slanted towards, but not limited to naval wargaming.

Opinions vary on the origin of war games but most authorities agree that it was invented about 5,000 years ago in China by Sun Tzu. The game was called *Wei-Hai* and was probably very similar to a later Japanese game, *Go*. It was played on special map boards using colored stones to signify opposing forces. The winner was the player who first outflanked his opponent. *Chaturanga*, a Hindu game of that period, used a map and military pieces to depict warring forces. That game was probably the forerunner of chess.

The next major development in wargaming didn't occur until 1664. Thereafter, further developments came rapidly. A brief chronology follows:

1644—The King's Game, a war chess game developed by Christopher Weikhmann at Ulm. It had 14 fixed moves and there were 30 pieces on each side.

1780—Helwig Game, a modified chess-like board of many squares, tinted in various colors to represent terrain.

1798—*Neues Kriegspiel*, a Helwig-like game developed by George Vinturinus and played on a chessboard map of 3,600 squares representing the Franco-Belgium border. The game rules were much more detailed and complex than Helwig's game.

1811—Von Reissivitz's Game. The war game was transferred from chessboards and chessboard maps to a sand box. The terrain was modeled in sand to scale. A notable advance was that troop movement was no longer restricted to chessboard squares.

1824—Von Reissivitz's Son's Game. Adapted to realistic maplike charts with a scale of about 8 inches to the mile. Considered the first of the land warfare games.

1876—Von Verdy's Game. Developed what is termed free-form or free-play games. It "required the umpire to judge the effects of fire and to administer the progress of the game entirely on the basis of his own experience."[1] This was a significant departure from the previous rigid fixed rules to the umpire's judgment. We shall later see, in World War II, where arbitrary umpire judgment was as dangerous an assumption as inflexible rules.

1878—Colomb's Game. Captain Colomb of the British Navy introduced the first naval war game.

1879—*American Kriegsspiel.* A book by Major Livermore, U.S. Army, that introduced the war game into America.

1880—*Strategos.* A book and a series of games produced by Lieutenant Totten of the U.S. Cavalry. A more flexible game and somewhat easier to play than Livermore's game.

1887—William McCarty Little Lecture. As a member of the U.S. Naval War College staff, Little delivered six lectures on war gaming. These lectures, according to McHugh,[2] aroused the interest of the staff and students and led to the almost unbroken history of naval wargaming at the Naval War College since that time.

F.J. McHugh, in his "Game at the Naval War College,"[3] identifies five major periods of wargaming at that institution. The first extended from 1887 to 1893 in which the staff conducted occasional games. In 1892 there was a limited student participation on a voluntary basis. The second period, according to McHugh, began in 1894, with war games first scheduled into the curriculum, and ran through 1921. The games were used as analytical tools, frequently oriented toward formulation of tactical plans and evaluation of the worth of superior speed.[4] The strategic significance of the Cape Cod Canal and suggestion for ship fuel experiments were significant.[5]

During the third period, 1922 to 1951, the emphasis was on educational gaming conducted primarily to provide the player with decisionmaking experience. This period was also characterized by the use of detailed rules, especially in regard to damage assessment. The late Fleet Admiral Chester W. Nimitz, lecturing at the Naval War College on 10 October 1960, perhaps paid the greatest tribute to this era's gaming. In an oft-quoted statement, Nimitz declared that:

> The war with Japan had been reenacted in the game rooms here by so many people and in so many different ways that nothing that happened during the war was a surprise—absolutely nothing except the kamikaze tactics towards the end of the war; we had not visualized those.[6]

We are fortunate that in this case the high praise bestowed on wargaming by Fleet Admiral Nimitz can be compared with what the Japanese were doing during the same period. This rare comparison in history sheds much light on the influences of wargaming on the major participants in the conflict.

In his *Fundamentals of War Gaming*, McHugh cites the opposite side:

> [Japanese] Naval planners then turned their thoughts to the east

and prepared ambitious plans for the capture of Midway and the western Aleutians in early June, the seizure of strategic points in Caledonia and the Fiji Islands in July, air strikes on southeastern Australia, and operations against Johnston Island and Hawaii in August. These proposed operations were tested in a series of war games in the spring of 1942. During the play the Nagumo Force was attacked by land-based air while its own planes were attacking Midway. Following the rules of the game, an umpire determined that the carriers received nine hits and that two of them, the Akagi and Kage, were sunk. Rear Admiral Ugaki, the director of the game, arbitrarily reduced the number of hits to three, and the number of sinkings to one, and then permitted the sunken carrier to participate in the next part of the play dealing with New Caledonia and Fiji Island invasions. These and other arbitrary rules [were] always in favor of the Japanese.[7]

That the Japanese knew the role of wargaming is well documented. They had previously exploited its value by their extensive gaming of the Pearl Harbor attack. But, as pointed out by Fuchida and Okumija:

> No more vivid example of thoughtless and stupid arrogance can be conceived than the attitude which pervaded the war games preparation for the Midway operation.[8]

The fourth period described by McHugh is 1952-1957. This period used faster and freer gaming techniques, emphasized games at task group and higher levels, and placed increased emphasis on political and economic factors. It was during this period that the first national level strategic game was initiated.[9]

McHugh's fifth period is the post-1957 era. This period is primarily dominated by technology as the ever-increasing complexities of naval warfare drove wargaming development to seek assistance. In 1958, analog computers were introduced into Naval War College gaming, later to be augmented and eventually replaced by digital computers as the sophistication of modern naval warfare required a level of detail beyond that of any individual umpire.[10]

Martin Shubik gives this key criterion for wargaming:

> Gaming, in contrast to simulation, necessarily employs human beings in some role, actual or simulated, in its operation. A gaming exercise employs human beings acting as themselves or playing simulated roles in the environment which is either actual or simulated. The players may participate as experimental subjects being observed for teaching, training, or operational purposes.[11]

Although all games are simulations, not all simulations should be regarded as games. This applies in particular to many all-machine simulations of physical processes in which human decisionmaking is neither postulated nor relevant.[12]

Gaming can be used for testing, teaching or operational evaluation. Above all else, gaming is an excellent educational device. Unlike other educational processes, in gaming the player must actively participate. But like education in general, the value of gaming is difficult to quantify. By first gaming a naval exercise or operation plan, not only are shortcomings discovered, but the participants become intimately familiar with that exercise. Thus, when that operation is taken to sea, lost time normally encountered with new exercises is reduced. Gaming cannot be a substitute for at-sea performance of naval units. It can, however, make that performance far more effective with respect to time lost because of lack of

familiarity or undiscovered errors in the plan. In this respect gaming is cost effective. Hausrath states of gaming that:

> . . . it is asserted that war games can be used for (1) training, (2) assessing plans, (3) a basis for analysis of military problems, i.e., serving to establish common understanding between the military man and the analyst; (4) simulation of command and decision processes; (5) formulation of insights and intuition; (6) detection of flaws in assumptions; (7) an environment for innovation; and (8) as an aid in dispute settlement.[13]

Although all these aspects may be useful, any given application tends to stress only one or two. Specht feels that the principal value of a war game is the teaching of players to consider carefully all of their resources,[14] while Shubik points out the value of using a specific situation repeatedly, emphasizing investigation of different factors each time.[15]

Gaming does have limitations, however. Hausrath summarizes seven salient points why war is an inexact science and therefore why gaming will have the same limitations. They are: (1) the inability of man to predict how he or anyone else will react in warfare, (2) the vast numbers of variables, interrelations, and combinations that exist in combat, (3) these variables do not recur in fixed amounts, degrees, or weights of relative importance, (4) man's understanding of the process of warfare is incomplete and inadequate, (5) a unit's or man's "break" point cannot be predicted, (6) the influence of major factors in warfare like stress, courage, fear, morale, and leadership remains intangible, (7) even measurable physical forces, such as firepower, rate and accuracy of fire, amounts of fire, and the effects of these factors on surviving troops in battle are largely unknown.[16] Wilson sums it up by stating that "No amount of gaming, however well conducted , can uncover the future."[17]

Gaming should not be construed as a substitute for experience. Gaming can, however, disclose or indicate trends. These trends should be investigated and analyzed for their value or pitfalls. A major fallacy or unrealism in gaming, which must be guarded against, is again well pointed out by Wilson when he notes that "To play Red with fidelity requires . . . knowing how the real Red sees Blue, which may be very different from the way Blue sees himself."[18]

Thus, not only must the players playing Red understand Red's tactics, his technology, his balance of political forces in his country, but he must also understand his system of values. It is, however, very difficult, if not impossible, for an American admiral to think as his Russian counterpart. The differences are far too great.

Who are the users of wargaming? Initially only the military, still the largest user. However, in 1956 a team of operations analysts sponsored by the American Management Association visited the Naval War College to confer with the wargaming staff. Their mission was to adopt wargaming techniques in rhe development of a business/management game. The game that developed, called the AMA Top Management Decision Simulation, was completed and first played in May of 1957. It marked the first major nonmilitary use of wargaming and this aspect of gaming has been growing ever since. An example of its early growth was revealed by Dale and Klasson. Their 1962 survey revealed that the number of American Collegiate Schools of Business that used business games in the regular curriculum increased from zero to at least 64 in only 5 years.[19] Nor is gaming limited to only the business colleges. The Department of State, the White House, and many universities have adapted the techniques of wargaming and produced various versions of Political, Crisis, and Strategic games. Even political and social

scientists and economists have adapted gaming as a tool in their fields.

In its general rejuvenation, wargaming and its techniques now range from the sophisticated games conducted by the military, government, and business to the local hobby shop where one can pick up a game on almost any subject for entertainment purposes. There the amateur strategist, surrounded by fellow amateur admirals and generals, can purchase a variety of games on the major campaigns of World War II and play an Admiral Nimitz, Field Marshal Rommel, General MacArthur or their opposition and, while enjoying himself, ingest a fair amount of history as well.

NOTES

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13. Alfred K. Hausrath, *Venture Simulation in War, Business and Politics* (New York: McGraw-Hill, 1971), p. 292.
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17. Andrew Wilson, *The Bomb and the Computer* (New York: Delacorte Press, 1968), p. 80.
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19. Alfred G. Dale and Charles R. Klasson, "*Business Gaming*," *Survey of American Collegiate Schools of Business* (Austin: University of Texas, Bureau of Business Research, 1964), pp. 2, 4, 6.

ATLANTIC PASSAGE—A VITAL GUARANTEE FOR DETERRENCE AND SURVIVAL

by

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The proposal put forth here is neither new nor does it put more "rubber-on-the-ramp" or "bottoms-in-the-sea." However, it is deemed timely and relevant to national security. It suggests using what we have more intelligently and, thereby, improving the "team's" chances for success and victory if the need to fight in Europe should ever arise.

Simply stated, the proposal advocates Air Force augmentation of naval forces for the specific purpose of guaranteeing the relative safety of the Atlantic water route to and from the European continent in case of major and prolonged conflict. Obviously, if we believe a short war to be almost certain, then the following discussion is probably irrelevant and the current solutions of prepositioning materials and relying on aerial resupply and reinforcement are appropriate. Unfortunately, history provides little support for the short-war argument; and our time may not be as different from the past as some would like to believe it is.

Prolonged Conflict. Too many largely simplistic scenarios insist on a short-war concept as if any other alternative were quite unthinkable. The reasons for such thinking are certainly manifold, but prime among them are such assumptions as:

- Any European military conflict involving the two superpowers will rapidly escalate to a nuclear confrontation—the conflict will be violent but short.
- Soviet conventional ground power is so massive that NATO would not be able to sustain a successful conventional defense much longer than 30 days.
- All relevant allied conventional combat power will be either in place or must be rapidly transportable to the continent at the onset of war, negating the need for sustained support operations.

A subset of these assumptions puts the burden of resupply on airlift and assumes a high degree of security in the air and on the ground for our limited in number, high value transport aircraft. It seems less than prudent, however, to base the critical sustenance of our European combat power on questionable assumptions and on a clearly vulnerable supply and support link. Prepositioning of equipment and aerial augmentation are certainly meaningful during the early days of conflict, but offer little in terms of sustaining effective combat power thereafter.

For instance, aside from the vulnerability of large transport aircraft, much current Army equipment fits only into the C-5A (of which we have 74 operational)—giving rise to the current C-X cargo aircraft requirement.[1] Additionally, moving the 100,000 tons of unit equipment and supplies of just one mechanized division, not including ammunition and fuel for sustained combat operations, requires a lifr capacity generally beyond the reasonable employment of air transport.

Equipment prepositioning has been one option to get a jump on the problem of rapid "mass" transport. But such supply and equipment dumps make excellent targets and detract from the potential flexibility of Army operations. As comfortable as a short war concept may be from the standpoint of planners, it downplays the nation's ability to

*National War College.

generate sustaining combat capability and, therefore, the need to transport that capability across the perilous Atlantic Ocean. Few seem to remember the importance of rhe Atlantic umbilical during the dark days of World War II, and what it took to secure it against enemies less powerful than those we face today.

The short war concept, as a general assumption underlying force projection, is fundamentally flawed and not sustainable from a historical perspective. Short wars have been notably rare in history.[2] Although most wars started with the belligerents firmly intending to achieve their goals quickly, they seldom turned out that way. One of the most harrowing conflicts of recent times was to be, in the words of Von Bethmann-Holweg, the Imperial German Chancellor, "a violent but short storm."[3] But fortune was disposed otherwise: World War I lasted 4 long and bloody years and assumed its own course, nowhere near that envisioned by its planners.

The major recent short war example is the 1967 "6-day war" that owed its brevity to preventive attack and some unfortunate force dispositions on the part of the defenders. Because preventive war is *not* a NATO option, but readiness is, one can surely make an argument for war lasting well in excess of 60 days, and for a period longer than now supportable by prepositioned inventories.

Therefore, the concept of joint sealane protection espoused in this paper is at least worth examining. Unless safe passage across the Atlantic can be guaranteed, we are risking having to abandon continental Europe, including our own committed forces, to superior and more sustainable Soviet capability. The question is not one of the relative merits of fighting a long war, but one of insuring rhat the conditions for defeat in such a conflict are not allowed to develop. Therein lies our strength, and the credibility deterrence.

Deterrence and Mobility. The ability to move forces, equipment and supplies over long distances is a fundamental aspect of U.S. defense posture and underlies the very concept of conventional deterrence. It also widely recognizes that in a conflict approaching general war, especially in the central European region, the U.S. capacity to move what is necessary for sustained combat is at best limited.[4] Consequently, existing assets would require extraordinary protection while transiting the Atlantic when the threat is highest.

With respect to vulnerability, it is worth recalling that large air transports such as the C-5A are also vulnerable to enemy counterair action, both in the air and on the ground. Such vulnerability was amply demonstrated by the Luftwaffe in 1943 when it attempted to reinforce and resupply the trapped Afrika Corps with (for the time) rather large aircraft such as the six-engine ME-323, with its 10-ton carrying capacity. Even with fighter escort these large aircraft made easy targets for Allied fighters. Their burned out hulks dotted the Tunisian landscape or they fell without rrace into the Mediterranean. The German effort was costly in men and materiel and clearly demonstrated the limits of aerial resupply under conditions of less than air superiority.

This obviously is not an argumenr against aerial resupply, but it is an appeal to view it in perspective, especially for that period when air superiority has not yet been achieved. An example of what air transport can do when superiority has been achieved is the 1943-44 Allied air operation to supply forces in Burma. Flying the "Hump" was a superb achievement, but did not really disprove the inherent vulnerability and limits of air transportation.

The ability to project prompt combat power by air is one thing—sustaining lengthy combat operations in this manner without air superiority is quite

another. Security considerations and cost effectiveness, therefore, dictate another approach. The burden for the other approach falls unequivocally upon maritime assets. This certainly is not a new responsibility for the U.S. Navy. It has an impressive record to rest on, especially in World War II. In that conflict, however, the nation had sufficient time to get ready for the job at hand. Even then we came perilously close to seeing the Atlantic lifeline snap. For example, not until 1943 did Allied construction exceed shipping tonnage lost. In any future European conflict, the United States would likely be involved promptly and we should have at least well-considered plans and procedures, if not the hardware ready to cope with the emergency.

The Soviet Threat. In setting up and securing a transatlantic supply line with the limited assets at hand, it is critical that the threat to it be recognized and counters prepared. The threat posed by the Soviets today is indeed significant and composed of ait and naval surface, and subsurface elements.

Soviet surface combatants currently receive a significant amount of public attention. The reasons are quite understandable because the surface navy represents a highly visible element of Soviet naval power entering operational areas new to it and challenging to us—such as carrier operations. However, in applying their surface capability to extended operations at sea the Soviets may have no better luck rhan Hitler did with his flashy surface fleet in 1939-40.[5]

The Soviet naval air component, designed to operate with surface components, is something Hitler's forces never managed to evolve and, therefore, is a new dimension in conflict. Although many of the naval bombers are of older vintage—*Bears, Badgers* and *Blinders*—the new *Backfire* bomber with its air-to-surface missiles could pose a significant threat, especially against Allied surface task forces.[6]

The rhrear posed by Soviet naval air forces should nor be downplayed, but they, like surface forces, suffer from long approach routes and a lack of fighter escort with adequate range. In addition, these forces lack adequate air refueling support and face an improving Allied counrerair capability. For instance, the intetceptor threat posed by U.S. ground and ship-based aircraft, the soon to be introduced British interceptor version of the *Tornado*, and the command and control capacity provided by the U.S. AWACS (Airborne Warning and Control System) and the U.K. *Nimrod* aircraft, pose formidable obstacles to the sustained successful application of Soviet naval aviation over the Atlantic.

The greatest effect on the Atlantic lifeline, however, can be expected not from Soviet surface and air operations, but from the attack submarine. It may be worth recalling the devastating effect of German U-boats on Atlantic shipping. On 1 September 1939 Hitler commenced combat operations with a force of about 56 submarines, 39 of which were at sea. In 4 months of operations this small force sank 114 Allied merchantmen and a number of warships including the British battleship *Royal Oak* and the aircraft carrier *Courageous*.

The Soviet attack fleet, including nuclear and conventionally powered submarines, torpedo types as well as cruise missile firing boats, numbers about 270. Allowing for those in port for maintenance, those deployed in the Pacific region and other areas of the world, the Soviets could still put to sea a submarine force quantitatively superior to Hitler's 1939 fleet, and orders of magnitude better in capability.

It appears quite simply that the potential Soviet submarine threat exceeds current U.S. Navy capabilities to handle it alone. This is a fact of life forced by three-ocean commitments of a

navy of only 490 general-purpose ships of all types.[7]

Air Force Augmented Sealane Control. How were the sealanes protected in the past, as it certainly is not a new problem? In World War II it was done with massive Allied naval and air forces. At the height of the German U-boat deployment 1,500 shore-based aircraft, 30-plus aircraft carriers (primarily smaller "jeep" types) and 2,500 escorts of all types were deployed against 240 operational German submarines.[8] In addition, ULTRA[9] and the new radar technology helped in no small part to defeat the U-boat campaign which until 1943 appeared to be headed for success.

Obviously, we cannot take for granted intelligence coups such as ULTRA and revolutionary technology such as radar. Additionally, surface resources of the magnitude committed to ASW operations in World War II are neither available, readily producible nor affordable. But one resource that is available, though insufficiently considered in current planning is Air Force capability so widely used in World War II.

Although Air Force Manual 1-1, *Functions and Basic Doctrine of the United States Air Force*, identifies sea surveillance, antisubmarine warfare, mine delivery and neutralization and destruction of enemy naval forces as "collateral" Air Force missions, these really are paper missions rather than real capabilities. Collateral functions by definition intrude into primary mission areas of the other services and, therefore, cannot be used for justifying additional force requirements—thus no money is put against such functions. Additionally, they have the potential for some really "fun" roles-and-missions brouhahas relished by no one.[10]

But the fact remains that if defense of the Atlantic lifeline is fundamental to our conventional deterrent strategy, and if our naval forces may not be adequate for the entire task, then a cooperative Air Force-Navy arrangement would be in the national interest. Such a proposal is not made to expand Air Force interests at the expense of a sister service, but solely for the purpose of optimizing the use of limited combat assets and manpower to give our European strategy the best chance for success if conflict should occur. The roles-and-missions argument is in this instance specious and irrelevant. The issue is *not* one of roles-and-missions but one of mutual support and how best to provide that support.

Air Force long-range over-water operations are "old hat" and have long been a staple of SAC (Strategic Air Command) operations. Obviously it is quite another matter to fly in direct support of naval operations but even this area has sufficient precedent, and not only World War II experience, to justify a go-ahead. For instance, during the October 1962 Cuban Missile Crisis RB-47 aircraft of the 55th Strategic Reconnaissance Wing flew substantial numbers of Atlantic search and surveillance missions. These resulted in locating the Soviet missile-carrying ship which, when turned back, prompted then-Secretary of State Rusk to make his famous comment about the other guy having just blinked his eye.

Since that time SAC has frequently demonstrated its ability to fly sea surveillance missions with B-52 aircraft and additionally extended its role to minelaying support operations. But good will and occasional demonstrations of capability are not enough. To translate tentative support arrangements into a substantial capability to support a primary Navy mission requires:

- detailed planning;
- integrated strategy, tactics and procedures;
- intensive joint training;
- adequate and appropriate weapons;
- aircraft modifications to accommodate naval weapons; and

• the commitment of a minimum but effective number of aircraft by the Air Force.

Obviously, to build a supportive Air Force element requires money, money neither the Air Force nor the Navy feels it can take "out of its hide." If Air Force support is in fact worthwhile in this particular mission area, then it should be funded to a level that would make the Air Force contribution meaningful in the overall maritime strategy for the Atlantic region. Funding obviously is the crux of the matter and is the only true measure of serious intent by either service partner.

Should the proposal be pursued seriously then questions have to be asked where, when and how Air Force support could make the most significant contribution to maritime operations without negatively affecting its own strategic and general-purpose primary missions. Undoubtedly, such an Air Force commitment involves certain opportunity costs and must, therefore, reflect objective cost-benefit considerations.

What could Air Force aircraft do best in helping to secure the Atlantic? Minelaying to keep Soviet surface and subsurface combatants bottled up seems a natural choice. The internal and external carrying capacity of the B-52 would fill a real void in this area and would likely free some submarines, surface ships and smaller naval aircraft from similar duty. Surveillance combined with antisurface ship operations may be another area offering substantial dividends. Antisubmarine operations, in contrast, may be significantly more complex in terms of aircraft modifications (sensing, detecting and interpretation equipment) and crew training required, so much so that this area may be less amenable to joint operations. Nevertheless, whatever the logical support role is, once identified and agreed upon it should be pursued and implemented promptly.

From the standpoint of command the problems should be few. Joint command is fundamental to our operations concepts and the structure for joint operations need not be invented; it already exists. However, control aspects of forces committed by the Air Force to the maritime support mission must be spelled out clearly and unambiguously. Potentially thorny questions are buried in the simple word "control." Again, the solution is a matter of clearly identifying requirements and then taking appropriate steps.

Finally, there remain those subjective, "gut-feel" questions to be dealt with. These rarely or never surface in day-to-day discussions but are an important determinant in the disposition of a proposal such as this. Some of the questions deal with skill, professional competence, procedures, and tactics, and these can be dealt with. Joint operations have a way of building mutual respect. And while the Navy has never been defeated at sea, that rare distinction also holds true for the Air Force in its own element. The record speaks for itself and, therefore, the issues of skill and competence can surely be resolved with relative ease.

On the other hand, there is that rich and potent realm of sea lore and maritime tradition that extends to views about different types of traditional missions and who can properly perform them. Although the Navy has made room for the airplane—its own—it looks askance at Air Force operations in its own "back yard." But because both Navy and Air Force are interested in final results, there may just be a small niche for the Air Force in the vast lore of the sea and in support of the U.S. Navy; at least I hope so.

Conclusions. Certainly there are other solutions to the problem of guaranteeing relative freedom of movement across the Atlantic—the great logistical handicap confronting NATO

in major prolonged conflict. One solution would be to persist in the short war approach and by doing so to assume away the issue. This ostrich-like approach is potentially catastrophic.

Another, and possibly the ultimate, alternative is to increase U.S. and Allied naval capability to a level where the job can be done exclusively with naval resources. In fact, much is being done in this area but as appealing as the solution of naval self-sufficiency may be, hardware and manpower needs are of such a magnitude that this optimal state of affairs must at best remain a futuristic option.

Improving of aerial resupply and reinforcement assets is another option. As much as this particular option needs to be pursued, the capabilities it will provide are primarily in areas complementary to the bulk carriage capability of ships. Transportation of personnel and high-value, low-bulk combat equipment, for example, is best accomplished through aerial transport. Even outsize and bulk cargo may at times be more appropriately transported by air, and the distribution of what comes into the theater on ships is often best accomplished with transport aircraft. Nevertheless, the transport of such bulk items as fuel, ammunition, general-purpose combat and support vehicles, etc., across long distances and in great quantities must of necessity fall on ocean shipping. Air transport is not a convenient substitute for safe ocean passage but rather complementary, and therefore provides no simple solution to a complex problem.

Transportation of combat power is obviously a joint effort by land, air and sea and, therefore, single solutions are lacking to such a complex problem. All transportation components make a vital contribution at different stages of conflict and national commitment, and must be maintained in a deliberate balance. Only rarely can one element substitute for another and then frequently only at great economic and other costs.

If effective aerial supply depends on a high degree of air superiority, so does sea supply depend on an equivalent degree of maritime superiority. The preferred solution to the twin problems of timely transatlantic bulk carriage and sealane security may be the continued pursuit to upgrade Navy capabilities over the longer term; maritime augmentation by the Air Force over the shorter and medium term.

Air Force augmentation, specifically with B-52s and AWACS aircraft, has the major advantage of forces in-being suitable for the general type of mission here contemplated. Their contribution to securing our sea lines of communication against surface and subsurface threats could be truly significant. It may just be worth putting some money against.

Finally, joint operations intrinsically have something going for them. They provide the best capabilities of different "worlds" and frequently produce results out of proportion to the individual assets committed. The simple but crucial matter of Atlantic passage may just be possible if we face it as a team.

NOTES

1. Lt. Gen. Kelly H. Burke, USAF, expressed the requirement for a follow-on transport aircraft and deficiencies of the current fleet before U.S. Congress, Senate, Committee on Armed Services, *Hearings on Military Posture and H.R. 6495* (Washington: U.S. Govt. Print. Off., 1980), pp. 393-394.

> The X-C is the centerpiece of our airlift proposal . . . the U.S. Army simply cannot fight against a sophisticated army without a large amount of outsized cargoes, tanks, APC's, artillery, et cetera. It is not possible to preposition that equipment in all the areas where trouble might break out because, first, we don't know where that trouble might break out and second, even in regard to Europe we cannot put as much there as we want. So the Army, to be successful, must envision that that force is

going to be airlifted. We cannot assume that there will always be a giant international airport available in the areas we are talking about. Frequently there is only one such airport in the vicinity, and if it is closed the C-5 and the 747-type airplanes are not much good. Although our first priority, and what we view as the most urgent goal, is to be able to lift that outsized cargo from the United States to other continents, a second and more important priority is to deal with landing in those austere fields, of which there are many and one would expect much closer to the battle area than the international airfield.

2. Classic but rare examples of short wars are the wars of German unification against Denmark (1864), Austria (1866), and France (1870). They were conducted under the political genius of Chancellor Otto von Bismarck and the military genius of Von Moltke the elder. Although everything turned out as planned, the Franco-Prussian War owed its speedy conclusion more to luck than superior generalship.

3. Fritz Fischer, *Germany's Aims in the First World War* (London: Chatto and Windus, 1967), p. 92.

4. Vice Adm. Kent J. Carroll addressed our current deficiency to provide adequate transport support for sustained combat operations in a written statement to the Armed Services Committee, *Hearings on Military Posture and H.R. 6495*, p. 167.

> Our strategic mobility forces consist of military and civilian air and sealift assets and hundreds of tons of military hardware pre-positioned in Europe and the western Pacific. I would emphasize civilian assets particularly in sealift. None of the strategic mobility triad of sealift, airlift, and pre-positioning can be considered in isolation. Balance between the three is essential. Our airlift capability is significant, but it will probably be 5 to 8 years before additional airlift—particularly the outsize-capability the outsairlift to carry tanks and helicopters—is available. In any case, airlift by itself can provide only a small part of the lift capability needed . . . . In my view we have seriously neglected the development of strategic sealift in years gone by. NATO has been the most demanding scenario so we have focused largely on it. And we have done so with what I might call the "short war" approach, that is, defending successfully against a massive Warsaw Pact surge in a few weeks. We have found ourselves concentrating on the buildup of combat power in the early time frame of reinforcement . . . . Today, in nonmobilization situations, we have a very limited early sealift surge capability, and no real certainty that the first ships will be on-berth, ready to load, in less than 10 days.

5. Germany entered the war with 7 battleships and battle cruisers, 6 light cruisers, 2 heavy cruisers and 22 destroyers. At the conclusion of the Norwegian campaign, June 1940, she had lost 10 destroyers, 1 battleship (*Graf Spee*), 2 light and 1 heavy cruiser. The remaining heavy cruiser and four of the remaining six battleships and battle cruisers were damaged. The invasion of Norway had a crippling effect on the German surface navy. Additionally, its senior command suffered from a singular inability to employ what was left effectively.

6. According to *The Military Balance 1979-1980* (London: International Institute for Strategic Studies, 1980), p. 10, the Soviet Naval Air Force consists of approximately 870 combat aircraft the majority of which are (295) *Badger* C/D medium bombers with air-to-surface missiles. Thirty Tu-22M *Backfire* 3 strike bombers with air-to-surface missiles are credited to naval air.

7. The effect of simultaneous and geographically diverse demands upon the Navy is succinctly addressed in a written statement of Admiral Thomas B. Hayward, USN, submitted to the Armed Services Committee, House of Representatives at the 96th Congress, February-March 1980, part 3, p. 357. States Admiral Hayward,

> As a consequence of these multiple and growing requirements, your Navy is stretched thinner today than at any time since the late 1940s. We are being asked to meet increasing demands with a fleet which, as you know, is roughly half the size it was a decade ago. Individual unit capabilities have increased, as well as they must; but geography demands numbers as well as capability, and the simple fact is that today we are trying to meet a three ocean requirement with a one-and-a-half ocean Navy.

8. "Foreword to Jane's" as reprinted in *Sea Power*, September 1980, p. 46.

9. ULTRA was the code name given to the British Intelligence operation that exploited traffic from the theoretically unbreakable German ENIGMA cryptographic code machine. States Marshal of the RAF, Sir John Slessor, in his preface to F.W. Winterbotham, *The Ultra Secret* (New York: Harper & Row, 1974), ". . . I have the best reason to know that in the Battle of the Atlantic ULTRA, in conjunction with HF/DF, was a real war winner."

10. The primary functions, powers, duties and missions of the Department of Defense are set forth in the National Security Act of 1947, as amended, and in DOD implementing directives.