A Brave New Curriculum for a Brave New World?

by

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## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>American Intervention</td>
<td>5</td>
</tr>
<tr>
<td>Analysis and Conclusion</td>
<td>11</td>
</tr>
<tr>
<td>Notes</td>
<td>13</td>
</tr>
</tbody>
</table>
INTRODUCTION

The Naval War College, like all other defense institutions, is reeling from the rapid changes in the security outlook. From the crumbling of the Soviet empire to the crumbling domestic support for military outlays, the U.S. defense establishment faces challenges to many of the basic defense planning assumptions of the past decade. As Capt. John H. Heidt of the Naval War College commented, "The threat is no longer the Russians. The threat is uncertainty." Adjusting to the rapidly changing environment is a challenge that has to be met if the safe future for the nation is to be secured -- adapting the education and training of the nation's future military leaders to the changing environment is one means to ensure appropriate defense policies in the future. One is forced to wonder whether the nation's war colleges require brave new curricula for the "brave new world" of the coming decades.

While, following a year of machine-gun paced changes to the world security and political picture, it is difficult to prognosticate specific events or even alliances in the current environment, certain trends seem likely to continue. The 1990s are likely to be a decade of lowered superpower tensions, with the Cold War receding into the past as the dismantlement of the Soviet empire continues. Arms reduction, rather than arms limitation, will be a dominant element in U.S.-Soviet and NATO-Warsaw Pact relations -- that is if these two treaty organizations remain in existence in the coming years. Domestically, declining U.S. defense budgets can be expected through 1995 and the most optimistic defense planner should not expect any growth in budgets following that period. At the same time, the world has not and will not become the placid and peaceful society so often hoped for by strong U.N. supporters or expected by proponents of the recently tendered concept of the end of history. Third World and regional tensions are likely to continue, and the need for U.S. military forces to respond to crises in support of national policy is not likely to change significantly from that experienced over the past 45 years.2


2 For a documentation of the Navy's role in these missions, see: CNA Research Memorandum 89-315, U.S. Navy Crisis Response Activity, 1946-1989: Preliminary Report, by Adam B. Siegel, November 1989. For discussions of the use of armed forces in such activities see, for example, James Cable, Gunboat Diplomacy, 1919-1979 (Second Edition), New York, St. Martin's Press, 1981; and Barry M. Blechman and
This is the world that the nation's military educational institutions should be preparing their students for — but are they? These institutions, like most of the military establishment, find themselves struggling to keep up with the changing security environment and are educating the nation's future military leadership based on the Reagan revolution of the 80s rather than the Gorbachev surprise of the 90s. This paper examines the curriculum of the Naval War College, focusing on adapting the current three-course program to provide a more appropriate education for the officers looking to meet the nation's needs through the tumultuous decade ahead.

At the Naval War College, the students are put through a rigorous program based on three core seminar courses: Strategy and Policy (S&P); Joint Maritime Operations (JMOps); and, National Security Decision-Making (NSDM). There is a simple shorthand that can be used to describe the courses: S&P deals with grand strategy and policy, it helps make strategic thinkers; JMOps deals with naval operations and helps make fleet commanders (and staffers); NSDM deals with fiscal planning and policy, defense money matters, and the implementation of decisions in the national security environment — it helps prepare officers for Pentagon tours.

Strategy and Policy consists of a series of case studies --- from the Peloponnesian Wars through nuclear deterrence doctrine --- that look at the relationship of strategy and policy (focusing, essentially, on the Clausewitzian doctrine that war is a continuation of politics by other means). The second course, JMOps, examines the nature and problems of managing naval warfare in today's world, and exposes its students to such intricacies as the deliberative planning process and the joint operational planning and execution system (JOPES). The third, NSDM, introduces its students to the defense decision-making process, and key portions of the course include force planning and defense analysis exercises. With each passing day these courses,


3 The Naval War College educates not only U.S. Navy and U.S. Marine Corps officers, but also has students from the other services (U.S. Army, U.S. Air Force, and U.S. Coast Guard), from other government organizations (such as the State Department and the Central Intelligence Agency), and from foreign governments. The author has assumed in this essay that the basic mission of the Naval War College is to educate naval officers and thus, at times, might slight the other elements of the student body in this discussion due to emphasis on the role the Naval War College has in the preparation of naval officers for future tours in their careers.

4 The recent updating of the joint operational planning system (JOPS).
as now structured, seem less relevant to the world the enrolled officers will face in the years to come.

The remainder of the paper will examine each course, outlining both the current focus of the course and suggesting specific modifications to the program to make it more relevant for the brave new security world of the 1990s. The courses will be discussed in this order: Strategy and Policy; Joint Maritime Operations; and, finally, National Security Decision-Making. This order has a purpose — the first course needs a minor shift in focus to prepare officers for the 1990s; the second needs a somewhat greater reworking; and the third, National Security Decision-Making, needs major revisions to make it relevant for the officer corps of the coming decade.

STRATEGY AND POLICY

The Strategy and Policy course focuses on the interrelationship between political leaderships and military commanders, and the problems that the often conflicting perspectives between the two can cause. The course emphasizes the subordination of the military to the political, with Clausewitz the oracle a central element: war is a continuation of politics by other means.

The dominant theme in the course is the millennia long struggle between continental and maritime powers, from the Peloponnesian Wars (Athens vs. Sparta) to the Napoleonic Wars (the United Kingdom vs France) to World War I (the United Kingdom, France and the other allies vs. Germany and the other Central Powers) to World War II (the Allies vs. the Germans and other Axis powers) to the Cold War (the U.S. vs. the Soviet Union). The course focuses on the advantages and disadvantages that accrue to each power according to its respective weaknesses and strengths. Thus, the students learn through the historical examples that a maritime power must maintain dominance at sea to survive. They also learn that this dominance at sea does not itself guarantee victory (though it will prevent defeat). On the other hand, a continental power cannot be victorious unless it can challenge its opponents control of the sea.

For example, in the Napoleonic Era, the United Kingdom was able to maintain a naval superiority through all the wars such that British sovereignty was never seriously threatened.5 The United Kingdom was not,

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5 This paper is not the place for a full discussion of this matter. This author would contend that neither the Continental system nor the various invasion scares ever constituted a fundamental threat to the survival of the United Kingdom. It might have been possible for the continental system to pose such a threat, but
however, able to defeat Napoleon's France without assembling a large alliance system that was able to field armies capable of defeating Napoleon on the field of battle. France, the continental power, was unable to win due to its inability to seize control of the seas from the maritime power (the United Kingdom) -- Britain remained safe behind its moat, the English channel. The United Kingdom maintained this superiority at sea through the twenty-plus years of wars -- the British concentrated their resources on seapower so that this superiority would remain without serious challenge. France could not defeat the British but the reverse was true as well. It was not until after the decimation of Napoleon's best forces on the steppes of Russia that the British were able to mount a coalition able to drive Napoleon to defeat.

In the Peloponnesian Wars the outcome was not so sanguine for the maritime power, Athens. The Athenians held off the land power, Sparta, successfully for decades until they overextended themselves and lost a significant portion of the nation's armed forces in an expeditionary campaign in Sicily. Though the Athenians were able to rebuild their fleet, the Spartans and their allies were able to build a fleet that successfully challenged weakened-Athen's domination of the seas. The lesson from the Peloponnesian Wars is that maritime powers must, above all, protect their sea power before considering any other form of military operation.

Each of these cases provides an historical surrogate for discussing the U.S. (maritime) - Soviet (continental) conflict. The clear implication of all of these cases, and the driving theme of the course, is that the U.S. must maintain preeminent power at sea to assure, at a minimum, the capability to fight a war with the Soviet Union. Analysis of the S&P case studies leads students to the conclusion that coalition warfare is a fruitful route for the United States to pursue -- the U.S. should guarantee superior naval forces and an expeditionary force on land while our allies should provide the bulk of the land forces. Essentially this has been the NATO framework of the past 40 years. The lesson from S&P was that, while preeminence at sea does not guarantee victory, inferiority at sea will guarantee defeat.

Thus, this is the message that the S&P course sends to future naval leaders. While this truth seems unchanged by the events in Eastern Europe, one must question whether any of the War Colleges should be emphasizing examination of surrogates for a global war when the likelihood of a U.S.-Soviet conflict seems to be receding with each passing day. The recent

the corrupt management of it prevented this from occurring. On this subject see, for example, Paul M. Kennedy, The Rise and Fall of British Naval Mastery, New York, Charles Scribner's Sons, 1976.

-4-
changes in the world lead one to the consideration of other strategic and political issues that are worthy of study by the nation's future naval leaders.

In this course, there is a limited review of low-intensity conflict⁶ (including, primarily, a case study on Vietnam) and there is a limited examination of cases of the use of naval forces for political purposes.⁷ Both of these subjects are of growing importance with each passing day. With this in mind, there are a number of changes that should be considered in the Strategy and Policy course to increase its relevance for the world naval officers will face in the coming decade:

- The dilemmas of a great power in conflict with a minor power should receive greater focus within the course. This already occurs within the Vietnam case study, but this is too limited. In current case studies there are a number of useful subjects through which this could be examined. For example, in the study of the Peloponnesian Wars, greater attention could be given to the Athenian decision to invade Sicily and the problems for the Athenians of conducting an expeditionary campaign at the end of a long sea line of communication (SLOC).

- There should be a greater examination of low-intensity conflict (LIC) and the role of naval forces in such operations. A case study should be added on the national command authorities (NCA) use of naval forces in the post-war era. This material would fit in closely with the Clausewitzian doctrine that war is a continuation of politics by other means -- the NCA use of naval forces has most frequently been primarily political in nature. This political use of force has meant that the military frequently finds itself greatly restricted in its range of actions due to political restraints. Operations such as those in Lebanon (1958 and 1982-84), Dominican Republic (1965), Grenada (1983), Persian Gulf (1987-88), and Panama (1989) all would lend themselves to this sort of study.

⁶ The author is well aware of the controversial nature of the term "low-intensity conflict" (LIC) and, in fact, has many problems with the draft JCS definition (as documented JCS draft Pub. 3-07, Doctrine for Joint Operations in Low Intensity Conflict, Final Draft, January 1990). However, there are similar problems with alternative terms such as CALOW (Contingency and Limited Objective Warfare). Thus, LIC will be used in this paper.

⁷ It is interesting to note that one of the best works on this subject (James Cables Gunboat Diplomacy, 1919-1979) has been dropped from the 1990-1991 reading list.
• As a corollary to the above, the course should examine the question: "Why does the President call on naval forces so frequently?" And, "Do these forces achieve anything by steaming over the horizon?"

• More examination should be given to the effects of declining investment in military power (in other words, more time on the "fall" rather than the "rise" of "Great Military Powers"). For example: What were the effects of the U.K. withdrawal East of Suez? The obvious consideration from this is to increase understanding of what might happen in the world if the U.S. is forced to lower its worldwide presence.

The suggested changes above are, on reflection, rather minor shifts to the S&P curriculum. Strategy and Policy seeks to educate about military grand strategy, to encourage a deeper reflection about the interaction of the military and political worlds in its student body. To do this, time must be spent reading the works of great military historians and military theorists such as Thucydides, Clausewitz, and Mahan. As the strategic picture shifts, however, so too should the study in this course -- the focus should turn from questions of "continental vs. maritime powers" to examination of the issues of "major vs. minor power" warfare. Today's Naval War College students are unlikely to see a U.S.-Soviet conflict but quite possibly will be sent to serve the nation off the coast of hostile Third World nations. These are the wars that S&P should be helping its students to understand.

JOINT MARITIME OPERATIONS

The Joint Maritime Operations course seeks, in brief, to educate naval officers about how to fight the Navy. While there is consideration of the national military strategy and students read not only the Maritime Strategy but are exposed to Air-land Battle and the Air Force's Aerospace Doctrine as well, the real focus of the course is on the operational and tactical levels of war at sea.

The course covers a wide-range of topics from the application of the principles of war within the maritime environment to command and control\(^8\) to legal issues.\(^9\) Following these preparatory modules, the course turns to an examination of the U.S. Navy and the application of naval power. In JMOps, the elements of the Navy -- from carrier aviation to submarines to

\(^8\) Including classes on the Unified Command Plan (UCP) and Joint Military Planning.
logistic shipping to electronic warfare equipment -- are examined, joint aspects of maritime warfare (how can the Army and Air Force contribute to the war at sea, and how can naval forces contribute to the war on land) are explored, and case studies are worked through in light of the knowledge gained about U.S. and Soviet capabilities and doctrines.

The current course has a heavy emphasis on anti-Soviet operations, much in line with the Maritime Strategy's mapping of "taking the fight to the enemy" by sending naval aviation in strikes against the Eurasian heartland. Through most of the course there is a focus on naval operations in a global war environment. In addition to studying the Soviet view of war and "Nuclear War at Sea," most of the course's planning exercises focus on anti-Soviet operations.10

In JMOps, therefore, the current student body is confronted with a syllabus that remains too heavily mired in an emphasis on global warfighting and the ideas disseminated in the maritime strategy. The ideas of the maritime strategy were developed in the military "heyday" of the early Reagan years -- a period of astronomically increasing defense budget outlays and significant U.S.-Soviet tensions. A study based primarily on the intellectual heritage of the 1980s is simply inappropriate for the world today's Naval War College student will face in his (or her) career.

A greater portion of the course should be devoted to those operations that seem likely in the coming years. As the prospect of a U.S.-Soviet conflict dims, the potential for a conflict with another nation (most probably in the Third World) seemingly remains relatively constant. Thus, the course should examine the issues and concerns that emerge in Third World conflicts. Viable and useful changes include:

- A closer examination of ROE issues and battle management in a typical LIC situation. Some of the problems that should be covered in more detail include the issue that in most contingency operations there are no clearly defined "enemies" (at least not until shooting begins -- if it does), unclear or uncommitted allies, and the probability that the mission will be poorly defined by the national command authorities (NCA) and hard to explain, at best. This is to name just a few of the issues involved in LIC that differ from the global war scenario.

10 For example, the unclassified amphibious warfare exercise was based on an invasion of the Soviet Kurile islands in the North-Western Pacific with a multi-carrier task force escorting the Amphibious Task Force (ATF).
• Doing case studies on crisis response LICs. Questions that would be worth examining include: How does one put together the right force mix? (When does an Army light division make sense? Which forces are appropriate for which mission?) How does one determine the proper augmentation for forces sent to conflict regions? (Such as, in the Persian Gulf and off Lebanon, surface ships were hurriedly equipped with small-calibre weaponry and other augmentation to cope with the threats. Should, instead, such equipment be standard on all ships or is it more appropriate to only augment units when necessary (and, thus risk having ill-equipped ships if time does not permit such augmentation)? JMOps would be an appropriate Naval War College forum for students to discuss the cost/benefit tradeoffs of such augmentations.)

• What are optimal force mixes in LIC situations? What are suitable options for different types of forces? For example, if aircraft carriers are significantly cut by Congress, would ATFs with AV-8Bs aboard an LHA or LPH be appropriate for forward operations in the absence of a carrier? A related issue would be options for conducting presence missions in the absence of a carrier -- the President has so frequently called on carriers when a crisis erupts, can a surface action group (SAG) or ATF provide the same level of signaling that carrier battle groups (CVBGs) have provided over the years?

• Including an examination of brown water and small-boat operations (perhaps including readings on the Market Time operations off Vietnam and about anti-drug interdiction efforts), and more readings on special warfare forces.

• Using Third World/LIC examples for planning exercises. For example, rather than using an invasion of the Kurile Islands for the amphibious exercise, perhaps using a scenario involving an amphibious operation into Lebanon against PLO guerilla opposition under the threat of Syrian intervention with a Soviet naval presence in the area. Such a case would introduce enough complexity and realism for students to consider the full range of issues involved in amphibious warfare.

It is time to switch the education in JMOps from the Navy's old LIC planning standard to the LIC of the 1990s -- from Lesser Included Contingencies to Low-Intensity Conflict. The needs for planning and operating in a blue-water, anti-Soviet conflict are far different than those
found in Third World contingency operations and JMOps should seek to prepare officers for both. As it seems that the potential for the first occurring is rapidly diminishing, while the second remains likely, the JMOps class should be more clearly focused on how the Navy and Marine Corps operate in Third World conflict situations. Though the course should still cover maritime operations in the event of a U.S.-Soviet conflict, this should be de-emphasized with a greater focus on the much more common Third World contingencies that the Navy and Marine Corps face virtually every year.

NATIONAL SECURITY DECISION MAKING

The National Security Decision Making course aims to improve students' abilities to effectively implement decisions in the national security environment. The stated objectives are two-fold, to:

• "Increase understanding of issues and concepts" in "the choosing and programming of military forces;" and,

• "Increase ability to perform and communicate effectively .. in the national security decision making structure."\(^{11}\)

To achieve these objectives, the students are exposed to an extensive topic list and set of literature -- both theoretical and substantive in nature. Areas covered include: the foundations of national strategy (students examine U.S. security interests, objectives and strategies, and then relate these to force planning); economics and the allocation of resources for defense (including studying the budget process and the Defense Department's Planning, Programming and Budgeting System (PPBS)); a framework for rational decision making; force planning (most major forces are covered with a "Total Force Planning Exercise" at the conclusion of this (approximately) third of the course); and bureaucratic power and techniques (including an examination of typical bureaucratic tactics for achieving one's own or frustrating someone else's goals).

While the course covers a wide-range of topics and much of the theoretical foundations would be useful no matter the strategic environment, the course better prepares officers for the cold-war fat budgets of the early 1980s rather than the lean defense outlays likely for the 1990s. The coursework emphasis is on (and many of the readings are derived from) the early 1980s -- a period of military growth, Soviet-oriented threat perception, and an arms control, not an arms reduction, mentality (and arms was viewed

\(^{11}\) Naval War College, National Security Decision Making Syllabus, pp. III-IV.
with skepticism, at best, by many in the first Reagan administration). The defense picture of the 1990s seems likely to be ruled by exact opposites (see table 1): defense budgets will likely fall significantly; the "Soviet threat" seems to be receding with each passing day; and, arms reduction treaties seem probable with effects likely to fall across much of the military establishment.

Table 1. Contrasting the Defense Outlook: 1980s vs 1990s

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<th>EARLY 1980s</th>
<th>EARLY 1990s</th>
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<tr>
<td>Substantial investments in defense; rapid modernization and growth in force size</td>
<td>Substantial defense cutbacks likely; slowed (or stalled) modernization programs and rapid reduction in force structure</td>
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<tr>
<td>Increased U.S.-Soviet tension following period of Soviet Third World adventurism (most notably, Afghanistan invasion)</td>
<td>Many are proclaiming the &quot;End of the Cold War&quot; -- lower U.S.-Soviet tension due to reforms in Soviet Union and breaking-up of Warsaw Pact</td>
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<tr>
<td>Arms Control virtually stagnant -- low priority in Reagan administration (though a higher priority in second Reagan administration)</td>
<td>Arms Control thriving, with Arms Reduction rapidly replacing Arms Control as goal -- seemingly a high priority in Bush administration</td>
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Thus, the NSDM course is too heavily dependent on the world of the 1980s and therefore handicapped in its capacity to prepare students for the world of the 1990s. The NSDM syllabus should be restructured such that the course is divided into three sections, each distinct but with each building on the previous ones. The three basic areas should be:

1. Basic theoretical and organizational framework for rational defense decision-making;

2. Historical case studies to provide insight into the strategic culture of the 1990s; and,
3. Force planning, from CINC and service perspective with a total force planning exercise at the conclusion of the section. Each of these will be discussed in turn.

Theoretical and Organizational Framework for Decision Making

The first would expose students to the theory and processes of defense analysis and policy making and implementation. In essence, this section already exists in the NSDM course (primarily in the first third of the course). Subjects covered in this section would include defense planning concepts, PPBS, bureaucratic power and influence, and, probably most importantly, a model for rational decision-making (covering the five phases: formulation; search; evaluation; interpretation; and, implementation and verification\textsuperscript{12}).

Historical Case Studies

The second section, the series of historical case studies, would be the area of NSDM that would be most radically different from the course now being taught. The question to ask is how best to prepare officers to deal with the strategic culture of the 1990s. It seems clear that the answer does not lie with material developed in the milieu of the early 1980s. Instead, paradigms for the world of the coming decade should be sought in the past that might provide useful lessons for the future. In essence, today's defense outlook is similar to that encountered in post-war periods. It could be argued that the early 1990s will be exactly that, a post-war era: the post-Cold War era.

Thus, this section of the course should examine past U.S. experiences with post-war eras (post-WWI, -WWII, -Korea, and -Vietnam) for lessons that are applicable to today's world. There are a number of questions and issues that could be fruitfully explored through such case studies. The most important questions would be: What are the problems typically associated with such eras? And, how were these problems managed and with what success (what succeeded and what failed)? Such examinations would go a long way to preparing officers for operating in the defense environment of the coming decade. The following are just some of the problems that might be studied in these case studies that will likely be faced by the War College's students in future tours:

\textsuperscript{12} This list is from: LtCol. D.G. Horton, USMC, Capt. B.L. Patterson, USN, and Col. L.A. Wood, "Figure 5: The Decision Process" in Defense Analysis: The Naval War College Resource Decision Process, Naval War College, Newport, RI, March 1989, p. 1-12
• Falling retention rates (such as in the late 1970s due to lengthened Navy deployments) -- insights to be gained include such concepts as how best to retain critical personnel;

• Increased interservice rivalry (the B-36/United States debate of the late 1940s is a notable example);

• Lower operations and maintenance (O&M) budgeting which is likely to lead to lower readiness and higher accident rates;

• Difficulty in achieving modernization and innovation of any sort (whether intellectual or in hardware);

• Difficulties in making strategic choices between different mission goals (the debate about sending troops back to Europe following World War II and the exclusion of Korea from areas of stated U.S. strategic interest, for example); and,

• Deciding which forces to prioritize: what to keep active; what to send to the reserves; and what to cut.

• In addition to the above listed problems, in a case study on the post-WWI era (or, more appropriately, the inter-war era), students would examine the series of naval arms control treaties that were the only major U.S. experience with international treaties mandating force reductions and limitations until the intermediate-range nuclear forces (INF) agreement in the late 1980s. The focus of this study would not be, necessarily, on

13 The major inter-war naval treaties were:
1922 Washington Treaty: Numerical and qualitative limitations on warships of five major sea powers (U.S., U.K., France, Italy, Japan)
1930 First London Treaty: Essentially refined Washington treaty, included sublimits and lower tonnage limitations on aircraft carriers
1935 Anglo-German Naval Agreement: German Navy limited to 35% of Royal Navy in major ship categories
1936 Second London Treaty: 1922 and 1930 limits on naval forces rescinded (but retained for individual units); an escalation clause added to counter violations by any of the parties

naval arms control. Instead, these treaties would be examined to
discern lessons applicable to the arms reduction treaties that will
likely be negotiated in the near future (such as START and CFE).

Rather than briefly discuss all of the above, the following pages will examine
two of these issues in somewhat greater detail -- the dilemma of
modernization and innovation, and the issue of interservice rivalry.

During times of fiscal austerity in the defense arena, the dilemma of
whether to emphasize readiness or modernization becomes even more acute
because it becomes more truly a choice between the options rather than a
choice in degree of emphasis. A good example of this is the difficulties
encountered in modernizing the naval air fleet in the 1930s in the midst of
rapid technological advance: because of the short first-line service life of
aircraft (under two years) the Navy was confronted with the dilemma of
either constantly buying small numbers of new aircraft (and thus having
many types of aircraft in the inventory) or making large-scale buys and facing
block obsolescence of the entire air fleet. Through the early 1930s, the Navy
chose the option of pursuing many types of aircraft with small purchases. In
1935, with just four carriers in the fleet, the Navy deployed 12 different carrier
aircraft with over 60 percent of the aircraft either obsolete or within a year of
being declared obsolete. Between 1935 and 1940, however, the Navy
invested substantial sums of money in carrier aviation as part of the post-
naval treaties era and standardized the structure of the carrier air groups.

This is a fascinating dilemma: How does one foster technological
advancement in military programs when the military cannot afford to make
large purchases? Does one just fund research and development (R&D)
programs (in the hope that there will be a long warning time allowing

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Equilibrium: The United States and the London Naval Conference of 1930, New York, Greenwood Press,
1969; Disarmament in Perspective: An Analysis of Selected Arms Control and Disarmament Agreements
Between the World Wars, 1919-1939: Volume III: Limitation of Sea Power, prepared by the the California
State College at Los Angeles Foundation for the U.S. Arms Control and Disarmament Agency
(ACDA/RS-55), July 1968; and, Robert G. Kaufman, Arms Control During the Pre-Nuclear Era: The
United States and Naval Limitation Between the Two World Wars, New York, Columbia University Press,
1990.

14 For discussions of this see, for example: Curtis A. Utz, "Carrier Aviation Policy and Procurement in
the U.S. Navy, 1936-1940," Master's Thesis, College Park, MD, University of Maryland, 1989; Clark G.
Charles J. McCarthy, "Naval Aircraft Design in the Mid-1930s," Technology and Culture IV, Spring 1963,
pp. 165-174.

15 Curtis A. Utz, "Carrier Aviation Policy and Procurement in the U.S. Navy, 1936-1940," Master's
purchases of weapons when necessary) or does one choose to make major purchases when money is available, and thus emphasize standardization and current readiness (but perhaps not achieve the greatest technological sophistication). In the early 1930s, the U.S. Navy chose the first route for carrier aviation and turned to the second in the late 1930s as the possibility of war seemed to be growing. Sadly, the technically sophisticated aircraft of the 1990s cannot be as rapidly tooled as the Navy's World War II carrier aircraft thus the dilemma is greater now than it was then. In essence, though, it would seem that if the threat analysis points to a decade-plus period without a major conflict it is time to emphasize R&D and not current force modernization. A discussion of these issues and concepts would be a sensible element of the NSDM course and should be part of the Naval War College program.

The current Naval War College curriculum (along with probably every other defense school) greatly emphasizes jointness. "Jointness" is one of the key buzzwords in the defense establishment nowadays, especially following the recent Goldwater-Nichols DoD reorganization bill. In emphasizing jointness, however, the curriculum essentially ignores the reality that, at a minimum, a certain amount of tension exists between the various branches of the U.S. armed forces. This is a simple fact of the U.S. strategic culture -- after every conflict, the U.S. military leadership fragments to one extent or another. In times of fiscal austerity this tension heightens and sometimes reaches the point of virtual warfare between services.

Such interservice rivalry can have effects virtually across the board, whether one looks to bar fights between soldiers and Marines or one examines the military input to the budget process. One possible impact is that due to interservice conflict, the rationale for the nation's national security posture might be inadequately stated leading to inadequate appropriations or inappropriate apportionment of resources. It is possible that, if the service's had been more unified in the late 1940s, President Truman would have rethought the extremely low budgets of the late 1940s. This is just one potential insight from a greater understanding of the role of interservice tension in U.S. national security decision making.

In this century, inter-service fighting and rivalry have often focused on land/air vs. sea power issues, with an important sub-component of land-based air vs. sea-based air power. While the Army and Marine Corps have not been unaffected by this conflict (one need only remember the dire straits of the Marine Corps prior to the Korean War as Army proponents argued that
the day of the opposed amphibious assault was dead), the most vitriolic of these battles have been Air Force and Navy conflicts. There are several famous incidents that highlight this tension.

Following World War I, Brigadier General William "Billy" Mitchell led his aircraft in a demonstration bombing against the former German battleship Ostfriesland. The sinking of the ship by Army Air Corps' aircraft graphically showed that modern capital ships were vulnerable to heavy bombing attacks and provided grist for proponents of aviation who argued that seapower was obsolete in the age of airpower. Viewers of the film of the Ostfriesland sinking not only are unlikely to have realized that the conditions under which the test occurred were unrealistic but did not realize that the Army pilots violated the rules of the test on Mitchell's orders -- the exercise was supposed to allow Navy observers to inspect the damage caused by different bomb hits. Mitchell unilaterally changed the exercise from damage appraisal to a test to prove that aviation could be effective against warships.

Following World War II, there was a much bloodier battle between the services. There were many issues including conflict over the creation of the Defense Department and the down-grading of the role of the service secretaries. In essence, the battle centered on the issue of nuclear weapons and the role of the strategic bomber. The newly formed Air Force argued that it could successfully protect America from the United States with strategic bombers carrying nuclear weapons. In contrast to this "fortress America" approach, the Navy leadership looked toward a forward defense posture, with Navy forces operating in European waters to lend support to the defense of Western Europe.


19 See: Michael A. Palmer, Origins of the Maritime Strategy: American Naval Strategy in the First Postwar Decade, Washington, D.C., Naval Historical Center, 1988. And the Army policy was to concentrate on ground defenses within the framework of the developing NATO alliance. This "triplication" of defense views remained remarkably constant over the next forty years.
In an era of great fiscal austerity, the Air Force’s concept of defending America "on the cheap" held great appeal. Shortly after its construction had been started, the new Secretary of Defense, Louis Johnson, suddenly announced the cancellation of the Navy's first post-war aircraft carrier, the United States. Later in the summer, he proposed cutting the numbers of attack carriers from eight to four while at the same time providing funds for the purchase of 100 more B-36 bombers (in addition to 75 already on order). Thus, the scene for the "Revolt of the Admirals." In a series of Congressional hearings in October 1949, virtually the entire Navy leadership denounced Secretary Johnson's actions and attacked the new unified defense structure. In essence, this public rejection of Johnson's leadership gained the Navy little in the near term -- the Air Force concept of defending America through strategic bombing had won the day. The Navy's carriers were, one can say, saved by the outbreak of the Korean War which showed that conventional forces still had a role to play in the nuclear era.

Sadly, this experience with Navy-Air Force conflict has all too much relevance for the present day. In the current strategic and fiscal environment, the Air Force is seeking for a means of justifying forces. As part of its presentation, Air Force proponents are making direct attacks on Navy forces and capabilities. These individuals are arguing that the Air Force can serve the nation more effectively in the crisis response role than naval aviation. They argue that the main reason that the Navy is used so frequently is that the political leadership is caught in the past and has not adapted to the flexibility that the modern Air Force can provide.

Secretary of the Air Force Rice has asserted that B-2s can, operating from just three bases, deliver munitions to any spot in the world and that "8 B-2s can match the daily ordnance capability of a carrier." Just as with the Air Force arguments of the late 1940s, this statement is only a partial truth. This comment ignores the fact that, with the exception of the Korean and Vietnam Wars, amount of ordnance on target has been an issue in just one Third World crisis response since World War II to my knowledge -- the strikes in Libya in 1986 (and, in this case, eight bombers would not have been

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20 The Congressional Research Service will soon be publishing a paper examining conflicting arguments about air intervention (Air Force vs. Navy) and ground intervention (Army and Marine Corps) capabilities.
21 For example in the Remarks by the Honorable Donald B. Rice, Secretary of the Air Force, to the Washington Chapter, National Security Industrial Association, Arlington, Virginia, 1 March 1990.
22 Guam, Diego Garcia, and Barksdale.
able to achieve the mission's requirements for simultaneous strikes against a large number of targets). It is in less than 10 percent of all Navy crisis response cases that any ordnance of any sort is expended,\textsuperscript{24} and, according to Rice's speech, the equivalent USAF figure is two percent. In addition, as an amusing aside, one must question how B-2s could provide the same presence that USN and USMC forces have -- especially if the aircraft take advantage of the stealthiness that the U.S. is paying so much for.

The Air Force is doing neither itself or the nation a service by promoting interservice tension with such an approach to force justification. It seems quite likely that the Air Force rather than the Navy might sink this time around if such a confrontational approach is continued. In the late-1940s, the concept of defending America cheaply through the threat of massive retaliation had a great appeal: the U.S. had a monopoly on nuclear weapons and the threat was clearly identified (invasion of Western Europe) with a clear source to retaliate against (Stalin's Soviet Union). Today, neither can be so definitively identified. As well, it seems likely that most of the use of America's armed forces in the coming years won't even involve the use of force. Just as in the hundreds of Navy and Marine Corps crisis response actions, the main goal will be demonstrative deterrence -- hopefully to prevent or contain hostilities through the presence of U.S. forces. As has been the case for the past forty-five years, Navy and Marine Corps forces are much more likely to be used for this mission than Air Force bombers. If, in 1949, the carrier \textit{United States} was sunk by the strategic concepts of the day, in the 1990s, the B-2 might be shot down by strategic reality.

Rather than gloss over or ignore the reality of America's strategic culture -- that interservice tension has, does, and will exist -- it is vital that the War College educate officers to operate in such an environment and to understand the implications of such conflict between services. This study should focus on highlighting the costs of such tension and on identifying means of reducing interservice friction. To ignore the interservice rivalry means that the Naval War College's students will not emerge from their year in Newport any better able to cope with it.

These are just a few examples of the benefits that studying historical paradigms for the 1990s will provide for NSDM students. As the philosopher Santayana stated, those who ignore history are doomed to repeat it. Without

this historical background, the War College's students risk flying blind into the perilous decade ahead.

**Force Planning**

The third section of the NSDM course, force planning, would be based primarily on material currently covered by the course. In this third of the course, students would conduct a series of force planning exercises slightly different from those currently required. Students would prepare CINC (due to the changes in the Goldwater-Nichols Defense Reorganization Act, the CINC now play a much more important role in the force planning process and a special focus on CINCs interests in the POM process would be worthwhile) and then service inputs in the POM. The class would then use these inputs to conduct a total force planning exercise -- mapping out their best estimate as to what the future posture of the U.S. armed forces should be.

**NSDM Conclusion**

After completing this three-part approach to the study of national security decision making in the United States, the students would have a greatly "increase[d] understanding of the issues and concepts [involved] in the choosing and programming of military forces." After the study of basic theory and methods, students would use these methods to derive lessons from historical case studies relevant for the force planning exercises. In the force planning exercises, the students would apply both the decision making framework studied in the first section of the course and the insights gained from historical paradigms for the defense environment of the 1990s. The students would then have three solid pillars of knowledge -- theory, an understanding of the historical record, and exercise in applying theory and historical insight in problem solving exercises. Through this approach to NSDM, the course would truly "increase [the] ability" of students "to perform ... effectively in the national security decision making structure."
CONCLUSION

With each day, it seems, there are changes in the U.S. security picture. Whether one looks to the seeming disintegration of the Soviet empire in Eastern Europe and growing dissatisfaction within the Soviet military, to the probability that arms reduction treaties are a reality with potentially no forces exempt from negotiation, to the dwindling domestic support for military outlays, many of the basic U.S. defense planning assumptions of the past decade are rapidly changing.

The Naval War College faces a difficult challenge: to prepare officers for the tumultuous decade ahead. Adjusting to the rapidly changing environment is a difficult task. It is, however, a challenge that must be met if the future leaders of the Navy and Marine Corps will be properly prepared to cope with the rapidly changing security picture. This paper presents one alternative approach to this challenge that keeps intact the Naval War College's core curriculum of three seminar courses.

The first course, Strategy & Policy, needs a minor reworking. More attention should be paid to low-intensity conflict issues. Some of the course emphasis should shift from questions of "continental vs. maritime powers" to exploration of the problems that major powers face in conflict with minor powers.

The second course, Joint Maritime Operations, also does not need a major restructuring. Again, low-intensity conflict is not adequately studied in the course. There is currently too much study on global, anti-Soviet conflict. Instead, more time should be spent studying the use of naval forces in contingency and other Third World operations. Most importantly, the case studies should be based on contingency rather than global war scenarios.

The last course, National Security Decision Making, needs a much more extensive reworking. As the world seems to be putting behind the early 1980s, so too should the Naval War College. Historical paradigms for the 1990s should be sought and studied for insights into the national security decision making world the War College's students will be operating in. The focus of the revamped NSDM course should change from teaching officers how to operate in an era of defense growth to an emphasis on how to manage reduction as sensibly as possible. Achieving sensible reductions will be an extremely difficult task, at best. The NSDM course should be restructured so that it can improve its students capability to reach this goal.
The Naval War College should move beyond the education of the 1980s so that it can prepare its students for the world of the 1990s. It is time for a brave new curriculum for the brave new world!
CNA PROFESSIONAL PAPER INDEX

PP 407

PP 415
Mizrahi, Maurice M., *Can Authoritative Studies Be Trusted?*, 2 pp., Jun 1984

PP 416

PP 418

PP 420

PP 422

PP 423

PP 424

PP 425

PP 427

PP 428

PP 429
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PP 430

PP 431

PP 432

PP 433

PP 435
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PP 471

PP 472

PP 477

PP 481
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PP 488

PP 492

PP 496

PP 499

PP 502
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