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Building a New Defense Consensus
Service Identities and Joint Culture
Civilian Control of the Military
Information-Based Warfare
Joint Operations in the Civil War
We have got to be of one family, and it is more important today than it ever has been.

— General Dwight D. Eisenhower
National War College
October 20, 1950
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NOTICE: This issue is designated number 6 (Autumn/Winter 1994-95) and the next will be number 7 (Spring 1995). Resequencing the seasonal designation compensates for the lag in production that resulted in past issues arriving toward the end rather than the start of each quarter. Accordingly, number 7 will appear approximately three months after this issue with subsequent ones published at a similar interval. This does not mean the loss of an issue; regular readers and subscribers will receive four issues over the coming year.
Revolutions fall into two categories. Some are abrupt, raucous, chaotic. They wreak great havoc and cannot be ignored. Political revolutions are frequently of this sort. Others are steady, subtle, hard to discern. Often the damage of these silent revolutions is only felt afterward and causes grief for those who failed to see them coming. When the American auto industry was caught off guard by the Japanese revolution in production techniques, the penalty was two decades of marketshare losses and declining profits before Detroit recovered. When the French underestimated the revolution in military affairs set in motion by the advent of the airplane, radio, and tank—a revolution that the Germans fully grasped—the result was swift, humiliating defeat.

Today, those of us who serve in the Armed Forces are caught up in the coincidence of three revolutions. One is noisy and obvious while two are silent and far more subtle. The first began with Mikhail Gorba- chev and accelerated when Boris Yeltsin stood on a tank in front of the Soviet White House. The ramifications of the end of the Cold War and collapse of the Soviet Union still reverberate through the international system. They are sparking conflicts in regions formerly at peace, even as peace breaks out in areas long at war. Among the direct influences on this Nation are the changing role of long-standing alliances and a range of situations in which we are called on to use military force.
The impact on our planning processes is equally profound. In the past, we took planning and programming cues from our projections of Soviet military capabilities, projections the Soviets made easier and more calculable by their methodical and incremental approach. Now perceptions of military threats are far less certain. From a planner’s perspective, what we gained in losing a threat of the magnitude of the Soviet Union has been offset by the ambiguity and proliferation of threats around the world. We have traded frightening certainty for dangerous uncertainty.

The second revolution is a byproduct of this change in world affairs. Because of our new strategic situation, defense budgets are declining along with military resources. This has instigated a silent revolution, albeit a revolution nonetheless. Before this century ends, defense budgets will shrink to less than half of their 1988 Cold War apogee. A drop of this magnitude will inevitably change how we think about, plan, and build our defenses.

The Armed Forces traditionally responded to dramatic resource reductions by falling back on their core competencies—components of land, sea, and air forces that make each service dominant in its domain. After all, by law and custom, all the services are charged with training, organizing, manning, and equipping forces to perform the missions and functions assigned to them. However, our challenge is to do it differently, to drive our logic to a higher plane of thinking.

The third revolution is what some have dubbed the revolution in military affairs and others call the military technical revolution. Like previous revolutions that were technologically driven, whether a revolution is occurring at all is debatable. But as the debate rages, advances like broad area surveillance, effective communications, and precision guided weaponry have transformed the battlefield to such an extent that American forces using them four years ago were able to achieve the most lopsided victory in modern history. We prevailed against an Iraqi force that would have been far more evenly matched with our own only a decade before. In the pace of this revolution it does not take long for a force to go from state-of-the-art to obsolescence.
Unfortunately, this revolution runs counter to the strains of the second, namely, the steady decline in defense budgets. Thus far we have taken the lead in this technology-driven revolution. It was American invention, after all, that was validated in the sands of Kuwait. But revolutions are fickle. Once begun, they have a tendency to drift into the hands of those who are willing to stoke the fires of change. We must now either stay ahead of this revolution or watch our position erode.

Combined, these revolutions pose a daunting challenge. Our Armed Forces are the best in the world. We must ensure that they remain the best, but on a much more modest diet. The heart of the challenge is this: as we move into an uncertain future we must get better as we get smaller.

**EJROC and the Chairman’s Program Assessment**

It is to tackle this formidable challenge that the Joint Chiefs and I directed—and strongly encouraged—developing a new approach to planning and programming. Much of this approach is embodied in the activity of the Expanded Joint Requirements Oversight Committee (EJROC) which is chaired by the Vice Chairman, Joint Chiefs of Staff, and comprised of the vice chiefs of staff of the services. EJROC and the analytic efforts supporting it have been described previously in *JFQ*, and I do not want to rehearse that discussion here. But I would like to say a bit about the effort.

Two outcomes result from this new approach. First, the corporate wisdom and expertise of the Nation’s senior military leaders is tapping productive ways to recommend how we can best meet the challenges posed by the revolutions outlined above. Second, a clearly articulated consensus emerges about where we should go from here.

The first significant product of this effort has already been completed. Based largely on the first six months of work by EJROC, extensive discussions between its members and the unified commanders in chief (CINCs), and between myself, the CINCs, and Joint Chiefs, I submitted my recommendations on the FY96–FY01 Defense Program in September. They were forwarded to the Secretary of Defense as part of the Chairman’s Program Assessment (CPA), an innovation of the Goldwater-Nichols Act.

There are specific recommendations in this CPA, some programmatic in nature, regarding future military capabilities. What is perhaps most important and gives the CPA special merit is that these recommendations are based on a consensus of our four-star leaders. Those familiar with the history of joint intervention in the realm of programming can appreciate the significance of this stride. It is the outcome of a new process—one that will be continued and strengthened in the years ahead.

The fate of my specific recommendations is still being mulled by the Secretary of Defense et al. as the defense portion of the President’s budget proposal is completed. Without infringing on either the President’s or the Secretary’s prerogatives, I can sketch the major thrust of this year’s CPA and summarize the programmatic directions which emerged from the superb work of EJROC.

**Hedge Against the Future, Not the Past**

We must take prudent risks by investing in resources for the future. Accordingly, I have recommended four steps: retire some old systems earlier than originally planned, slip introduction of selected weapons until their potential is enhanced by advanced systems and munitions, reduce the bloated infrastructure to levels commensurate with force structure and basing requirements, and screen out some older R&D projects. The resources made available by these actions should then be applied to bolstering military strength. There are three areas in which the Armed Forces lead the militaries of other nations:
readiness, joint operational capabilities, and technology. Certainly our advantages can be debated, and all of these measures of military excellence have remarkably short half lives; but we do lead in all three areas today.

When it comes to readiness, however, comparisons are dangerous. The readiness of our Armed Forces to respond quickly and effectively to a range of contingencies—from peacekeeping to major conflicts—is unmatched; but the challenges to readiness are unmatched as well. No other nation is on a hair trigger to deploy forces across the world to a threatened South Korea or a still tense Southwest Asia. Joint operational capabilities are also an area where we have no peer. Since the end of World War II we have steadily progressed along the path of jointness by a combination of pushing and pulling. Our ability to operate jointly is simply unequalled. Notwithstanding such excellence, this work has far to go. And, while some high leverage technologies are proliferating, the United States still sets the standards. My programming recommendations are therefore formed around readiness, joint operating capabilities, and high leverage technologies.

Readiness. There are two dimensions of force readiness which equate to broad categories of requirements: short-term force readiness—that is, over the next two years or so—and long-term force readiness where it is nearly impossible to predict threats. We know how to define and assess short-term readiness. By most measures the military is ready to conduct current missions as well as those it expects over the next few years, and DOD is already committed to increase spending on short-term readiness. Long-term readiness is harder to measure in any detail. But past experience has given us a general understanding of actions that exhaust or degrade long-term readiness. Many times we have seen DOD eat its seed corn to feed a current appetite. We cannot let that happen this time. To use a phrase that has gained currency in the marketplace, we must recapitalize for the future. This means investing in three components which are the brick and mortar of readiness by assuming that the quality of our men and women who serve in the Armed Forces remains superb; that equipment and weapons are well maintained, modern, and technologically unmatched; and that investments allow future forces to respond quickly to crises abroad.

Joint Operational Capabilities. The Army, Navy, Marine Corps, and Air Force are without doubt the most powerful and competent individual services in the world today. This is the result of a long-standing national commitment to superior military capability across the broad spectrum of warfare. Moreover, no other nation can match our ability to combine forces on the battlefield and fight jointly; but for all our progress, a great deal more has to be done. If one compares the way the services train and prepare forces to perform service missions with the way the joint world prepares its forces to operate, there is a gap. For example, the use of computer driven simulations in training has steadily increased over the past fifteen years. Today all services have refined models and software to test and train their forces to execute service doctrine. Yet, despite the importance we have attached to simulations, nobody has yet developed a fully tested, reliable, single joint warfighting model. Also, consider the fact that even in one of the high profile priorities of jointness—namely, C4I—there are joint operating forces...
that cannot talk directly to one another. There are two paths to improving joint operational capabilities. One is to expand and reﬁne those programs that promote joint exercises, training, and doctrine. The other is to move toward greater standardization aimed at improving systems interoperability even as it reduces overall costs.

High Leverage Technologies. While advanced military technologies steadily ﬁnd their way into the wrong hands in many regions of the world, America still leads other nations in two critical areas of technology and systems competence which shape the battlefield. We excel in advanced weapons and hardware, like precision guided munitions, high-speed digital communications, and sensors; and we also lead in the ability to tie intelligence-surveillance-reconnaissance architecture to advanced and responsive C3 architecture to give our forces staggering acuity, speed, lethality, and potency. We must extend our edge and increase our advantages. This requires introducing new intelligence and surveillance systems and more advanced programs to C4 architecture, systems that cut across service boundaries and improve our ability to ﬁght and operate jointly. Other obvious areas of improvement include adding precision guided weapons and adjusting existing organizations to fully exploit the technology and training that accompanies change.

The program assessment that I submitted to the Secretary of Defense was an important and encouraging step. It was a result of super work and cooperation among the Joint Chiefs, CINCs, and EJROC members. Now the focus has shifted to the FY97–FY02 Defense Program. EJROC will revisit the CINCs in February armed with insights on requirements that are now being reﬁned by joint warfare capabilities assessments. By March 1995 I hope to submit my recommendations for future programs to the Secretary for incorporation into next year’s Defense Planning Guidance and service Program Objective Memoranda. And the work will continue into summer 1995 as we prepare for the next CPA.

Revolutions are challenging enough when faced singly; but contending with three at once is a truly monumental task. Yet we cannot retreat, we must go forward. I am conﬁdent that we will triumph in these revolutions and that our Armed Forces will remain the most formidable in the world.

JOHN M. SHALIKASHVILI
Chairman
of the Joint Chiefs of Staff
Joint Force Quarterly

ESSAY CONTEST ON THE Revolution in Military Affairs

To encourage innovative thinking on how the Armed Forces can remain at the forefront in the conduct of war, JFQ is pleased to announce the first annual "Essay Contest on the Revolution in Military Affairs" sponsored by the National Defense University Foundation, Inc.

The contest solicits innovative concepts for operational doctrine and organizations by which the Armed Forces can exploit existing and emerging technologies. Essays that most rigorously address one or more of the following questions will be considered for a cash award:

▼ The essence of an RMA is found in the magnitude of change compared with preexisting warfighting capabilities. How might emerging technologies—and the integration of such technologies—result in a revolution in conducting warfare in the coming decades? What will be the key measures of that change?

▼ Exploiting new and emerging technologies is dependent on the development of innovative operational concepts and organizational structures. What specific doctrinal concepts and organizations will be required to fully realize the revolutionary potential of critical military technologies?

▼ How might an adversary use emerging technologies in innovative ways to gain significant military leverage against U.S. systems and doctrine?

Contest Prizes

Winners will be awarded prizes of $2,000, $1,000, and $500 for the three best essays. In addition, a special prize of $500 will be awarded for the best essay submitted by either an officer candidate or a commissioned officer in the rank of major/lieutenant commander or below (or equivalent grades). A selection of academic and scholarly books dealing with various aspects of military affairs and innovation will also be presented to each winner.

Contest Rules

1. Entrants may be military personnel or civilians (from the public or the private sector) and of any nationality. Essays written by individual authors or groups of authors are eligible.
2. Entries must be original and not previously published (nor under consideration for publication elsewhere). Essays that originate from work carried out at intermediate and senior colleges (staff and war colleges), service schools, civilian universities, and other educational institutions are eligible.
3. Entries must not exceed 5,000 words in length and must be submitted typewritten, double-spaced, and in triplicate. They should include a word count at the end. Documentation may follow any standard academic form of citation, but endnotes rather than footnotes are preferred.
4. Entries must be submitted with (1) a letter clearly indicating that the essay is a contest entry together with the author's name, social security account number (or passport number in the case of non-U.S. entrants), mailing address, telephone number, and FAX number (if available); (2) a cover sheet containing the contestant's full name and essay title; (3) a summary of the essay which is no more than 200 words; and (4) a brief biographical sketch of the author.
5. Entries must be mailed to the following address (facsimile copies will not be accepted): RMA Essay Contest, Joint Force Quarterly, ATTN: NDU–NSS–JFQ, Washington, D.C. 20319–6000.
6. Entries must be postmarked no later than August 31, 1995 to be considered in the 1994–95 contest.
7. JFQ will hold first rights to the publication of all entries. The prize-winning as well as other essays entered may be published in JFQ.
8. Winners' names will appear in JFQ and the prizes will be presented by the President of the National Defense University at an appropriate ceremony in Washington, D.C.
Five years after the Cold War lapsed, the United States is still searching for a new strategic compass. A clear understanding of global security trends, national interests, and strategic priorities is essential to sound foreign and defense policy. The following appraisal, based on Strategic Assessment 1995, a new publication of the Institute for National Strategic Studies at the National Defense University, offers a framework for developing national security policies as the century draws to a close.

A New World Order

There have been five world orders since America gained independence that are defined by the character of relations among great powers during each period: the Napoleonic, the Congress of Vienna, Germany’s drive to become a leading power (accompanied by the carving up of Africa and Asia among the colonial powers), the League of Nations, and the Cold War (along with the eclipse of colonization). At present we are entering a sixth period, one in which European concerns may not dominate the world as they have over the last several centuries.

The traditional ideological divisions among nations are being replaced by a tripartite global system of market democracies, transitional states, and troubled states. Above all, the United States must be concerned over the course of transitional states, since they will be influential in determining the world order of the future. Troubled states, however, are the likely source of local conflicts in the years ahead. This suggests four priorities in formulating national strategy that include, in order of importance, ensuring peace among the major powers, engaging selectively in regional conflicts, responding to transnational threats, and assisting failed states. One consequence of these priorities is that the Nation may be required to reconsider its nearly two-major-regional-conflicts strategy in order to maintain a balanced force structure. The implications of that decision would have significant import for strategic planning and the capability to conduct joint operations.
Transitions between these orders have typically lasted several years. The one under-
way is likely to take longer than most because there was no definitive, cataclysmic end to
the last order, and because the international system is truly global, not just European.
While its nature is becoming clearer each year, the emerging order may not fully gel
until after the end of the decade. The fluid character of the world order is a major reason
why recent administrations in Washington have had such difficulties articulating a U.S.
policy vision and deciding when to use force
to support U.S. interests.

The final shape of the emerging world
order will depend crucially upon such factors
as the degree of U.S. involvement in world af-
fairs, the progress of Eu-
ropean integration, de-
velopments inside Russia,
the extent to which
Japan assumes new inter-
national obligations, the
ability of China to hold
together and remain on a path to prosperity,
and the control of nuclear proliferation.

The emerging world order is arranged
along different lines than those of the Cold
War. In particular, ideology is no longer the
basis of division, although the ideals of
democracy and free markets that gave the
Free World victory in the Cold War remain
important. The emerging lines of division
appear to be the following:

▼ Market democracies comprise a growing
community of free and prosperous (or at least
rapidly developing) nations that is expanding
from North America, Japan, and much of Europe
to large parts of East Asia, Latin America, and
Central Europe.

▼ Transitional states are ex-authoritarian and
ex-communist lands that are working toward
democracy and free markets, as well as countries
such as India that seem to be making progress to-
ward freedom and prosperity from a low baseline.
Many states in this category run the risk of backslid-
ing into political chaos and economic decline. The
future of the transitional states will be one of the
most important determinants of the new system.

▼ Troubled states, primarily located in Africa,
the greater Middle East, and parts of Asia, are
falling behind the rest of the globe economically,
politically, and ecologically. Many are plagued
with rampant ethnic and religious extremism;
some are failed states that are slipping into anar-
chy. A few—like Cuba and North Korea—are de-
caying, die-hard communist dictatorships; others
are, or threaten to become, rogue states.

Some important countries fall into two or
three of the above categories. For in-
stance, China can be considered transitional:
economically, it is moving toward a market
democracy. On the other hand its politics re-
semble those of a troubled state which leads
many analysts to fear that instability when
Deng Xiaoping dies could push much of
China back into the troubled camp.

Despite the indefinite nature of the di-
viding lines, the overall trend suggests a
growing gap between market democracies
and troubled states. The gap reveals differ-
ences in economic growth, political stability,
and adherence to international human rights
standards.

Divisions among market democracies,
transitional states, and troubled states is not
the only way in which analysts see the world
evolving. Other lines of division are empha-
sized by national security analysts.

Economic/political blocs. Regional blocs
based on trade and political cooperation
seem to be emerging in Europe, the Ameri-
cas, East Asia, and the Commonwealth of In-
dependent States (CIS). The proportion of
foreign trade and investment in each bloc is
rising. The implications for the world order
of such blocs, if consolidated, depend on
how open or closed they are to trade and po-
litical cooperation with states outside of
their region. The danger of tension, possibly
escalating into conflict, is greatest in the
case of blocs that jealously guard themselves
from outside influence and that see world
trade and politics as zero-sum games. With
the possible exception of CIS, such closed
blocs do not seem to be emerging. Thus the
development of economic and political
blocs is not as important at present for un-
derstanding national security interests as is
the split among market democracies, transi-
tional states, and troubled states.

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University and serves as Editor-in-Chief of JFQ;
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Middle East Quarterly.
Spheres of influence around a great power. Closely related to the emergence of economic and political blocs has been the focus of military attention by the great powers in their spheres of influence. Peace operations serve as an illustration. For example, recent Security Council debates on Rwanda, Haiti, and Georgia made clear that the major powers are accepting the principle that each can take some responsibility for its respective areas of interest, with France, the United States, and Russia taking the lead. As with the economic blocs, the chief concern is with exclusivity. If a great power seeks to exclude the influence of other powers and to compel its weaker neighbors to act against their interests, then neo-empires could develop and great powers could clash over the boundaries between their domains.

America has historically rejected a notion of national security based on great power maneuvering. U.S. policy has been most successful and acceptable when it is based on both national values and interests.

Civilization. Ancient divisions among cultures, ethnic groups, and religions seem to have retained more political importance than many would have thought a few years ago. The fault line between Roman Catholicism and Eastern Orthodoxy closely resembles the line of conflict between warring parties in the former Yugoslavia and, generally, the division separating Central European states that are doing well both economically and politically and those that are floundering. In many regions where the Islamic world meets other civilizations (such as northern India, the Levant, and Caucasus) violence erupts. While culture, ethnicity, and religion must not be overestimated, they seem to exacerbate and lend emotional depth to strife caused by concrete historical grievances, political disputes, and geostrategic factors. We are therefore skeptical about using civilization division as a primary basis for arranging the emerging world order.

In this system of market democracies, transitional states, and troubled states, three types of conflict correspond loosely to those three groups, namely:

- Conflict among the major powers is the greatest concern to the United States but is least likely to occur. The great powers—the United States, Japan, China, Russia, and the major states of Western Europe—are at peace with each other. No power feels threatened by another; no power is actively preparing for conflict with another. This situation, almost unprecedented in history, is a powerful basis for U.S. security so long as it lasts, which may not be forever.

- Conflict among regional powers, mainly involving either transitional or troubled states, will occur periodically, often as the result of aggressive states seeking regional hegemony. The proliferation of weapons of mass destruction could increase the propensity of aggressive states to threaten their neighbors and world peace.

- Conflict involving troubled states, nearly always starting within a country, is likely to be the most prevalent form. At the same time, this type of conflict is the least threatening to U.S. interests. The great powers are often willing to provide economic and political support for troubled states. However, they are increasingly reluctant to intervene militarily unless a crisis threatens to escalate and engulf other states, create a humanitarian disaster, or affect other great power interests.

The Trends

The new world order is being shaped by political, economic, and military trends which are rooted in technological change as well as by a diffusion of democratic values. Proliferation is increasingly a contemporary, not a future concern. Nuclear weapons programs by rogue states are difficult to stop despite the Nuclear Non-Proliferation Treaty.
The acquisition of nuclear weapons by a rogue state could destabilize whole regions and severely complicate U.S. power projection operations. The problem is likely to get worse on the supply side. Many countries are developing the industrial base to produce nuclear weapons (by now a fifty-year-old technology), and continuing economic problems in the former Soviet Union are making criminal diversion of nuclear material and knowledge more likely. Access to chemical and biological weapons may prove even easier. The challenge is to persuade countries that acquire the technical ability to produce weapons of mass destruction not to use that capacity.

Economic interests as opposed to traditional security interests are becoming more important to governments. Thanks to the peace among the great powers, states are free to turn their attention to other issues. Successful states see security not only in terms of military preparedness but also in terms of a strong economy. Concerns about prosperity and employment are playing a greater role in shaping international and domestic policies. America is increasingly prone to placing economic concerns ahead of defense issues. It is also likely to place concerns over the budget deficit, low levels of national savings, and investment needs ahead of the long-term impact of current reductions in defense expenditures.

The domestic focus of many countries limits national security capabilities. In much of the world, public opinion is less concerned about foreign policy, largely due to the end of the Cold War and peace among the major powers. At the same time, there is a preoccupation with domestic issues such as worsening social ills and the low economic growth rates of the last twenty years. As a result of this emphasis and the realization that the great danger to world peace—the Soviet threat—is gone, public opinion now insists on lower defense spending. This translates into a reluctance to deploy forces overseas. Sustained commitments are especially unwelcome, as distinct from emergencies. Also, emergency operations are impeded by increasing public sensitivity to casualties, particularly in situations that are not considered vital to national interests.

Information technology is displacing heavy industry as the base of national power. Those industries growing most rapidly are in the computer and communications fields which continue to introduce new technology at breathtaking rates. Extending this trend to the battlefield suggests that information-based warfare will become widespread in a decade or two. Defense requirements will demand greater investment in information systems and less in tanks, ships, and aircraft.

International organizations are assuming a legitimizing role despite their limited capability and potential encroachment on national sovereignty. The weight of international organizations is felt most strongly in the desire for market democracies to seek authorization to use force. While the Cold War legitimized the Free World alliance and left the United Nations impotent, the passing of the Cold War has given life to the U.N. role in legitimizing the use of force. However, the first blush of enthusiasm for multilateral action has faded as international organizations prove to be less than effective in humanitarian disasters and civil wars. The Clinton administration underwent a sea change from an early embrace of assertive multilateralism to outright caution in Presidential Decision Directive 25 issued in May 1994. Multilateral action has proven difficult because of differing political objectives among states and organizations, delays in making timely decisions, the limited capabilities of multilateral organizations and ad hoc coalitions, public sensitivity to casualties, and the cost of operating in a multilateral fashion. Nonetheless, the United States will need to form ad hoc coalitions to respond to crisis in areas once judged peripheral when the main mission was Soviet containment. Regional organizations may lead in resolving local problems, or the United Nations may delegate its role to the powers most affected.

Globalization is creating transnational threats as well as benefits. Technological advances and open societies allow an unprecedented free movement of ideas, people, and goods. The pulse of the planet has quickened and with it the pace of change in human events. These trends are likely to continue as communication costs fall and...
the World Trade Organization facilitates dismantling of trade obstacles. Trade, finance, and communications are all becoming global. Computers, faxes, fiber optic cables, and satellites speed flows of information across frontiers, as illustrated by the explosive growth of Internet. While most flows are beneficial, some of the flood across borders is pernicious. For example, both pro-democracy activists and the proponents of ethnic cleansing can easily disseminate their respective views. Transnational threats take various forms: terrorism, the internationalization of crime centering on illegal drugs (or even the smuggling of nuclear material), international environmental problems such as global warming and ozone depletion, and disruptive migration resulting from political strife or natural disasters.

Democracy is becoming the global ideal, if not the global norm. Democracy has proven to be contagious. The world has experienced a wave of democratization since the 1970s. In Latin America and Central Europe, it is the norm, not the exception. Even in Asia and Africa, where many governments remain autocratic in practice, most feel compelled to present themselves as democratic or in transition to democracy. The overthrow of democratically-elected governments has become unacceptable in the eyes of the world community. But elections are no guarantee that freedom will prevail. In some places elections have been held before the emergence of a free press and other institutions, resulting in a fear that some nations may experience “one person, one vote, one time.”

The sovereign state is losing its unique role as the fundamental unit of organization within the world system. As economies become intertwined, it is difficult to identify what constitutes an American or German corporation. Financial markets are so interconnected that control of interest and exchange rates by central banks is increasingly attenuated. With the explosion of international communications and cultural links, news, fashions, and ideas are more global and less national. As globalization proceeds, governments lose some measure of control and are less able to address the problems of their citizens. Frustrated by the inability of governments to resolve their problems, people may turn away from the sovereign state and embrace more local politics. Thus, fragmentation pressures are often related to the decreasing ability of states to respond to the needs of their people. Fragmentation pressures take various forms, but sovereign states face no greater threat than minorities whose desire to break away is sometimes justified by their treatment at the hands of intolerant majorities. It is difficult to reconcile the principles of majority rule and national self-determination when a cohesive minority wants to opt out of a larger state. The sad results of such intra-state tensions can be seen in many places, as violent ethnic and ethno-religious conflicts are becoming more common and more bloody.

U.S. Involvement

In his 1994 National Security Strategy of Engagement and Enlargement, President Clinton stated: “Our national security strategy is based on enlarging the community of market democracies while deterring and containing a range of threats to our nation, our allies, and our interests.” Such a strategy stresses three primary objectives: enhancing security, promoting domestic prosperity, and advancing democracy. An analysis of world trends and U.S. interests tends to confirm the importance of these goals.

Unlike the Cold War, the United States no longer has to dedicate its resources to achieving a single overriding goal. With its primary interests easier to achieve, the Nation is free to pay more attention to secondary goals. But not all of those goals are worth pursuing simultaneously, given costs and competing domestic claims on resources. Hence, America must be selective about where to get involved. The United States is most likely to engage where it can simultaneously promote its national interests and values.

Whereas the Cold War priority was to contain communism, the new focus of U.S. foreign and defense policies is engagement and enlargement—and expanding the community of market democracies. Enlargement has several aspects, some more vital than others:

▼ Sustaining democracy and free markets in countries where it is well-rooted is vital. But this does not require urgent efforts, since free institutions usually face little challenge in the market democracies.
promoting a move from authoritarianism to democracy in transitional states (such as Russia, South Africa, and Central Europe) is both vital and time-consuming for policymakers. Encouraging free markets and democracy in troubled states is difficult. While it is critical from the perspective of promoting American values and serving long-term geostrategic interests by fostering a stable world order, enlargement to encompass the troubled states is not a top priority from the perspective of short-term national security interests.

U.S. Priorities

In terms of traditional security interests, and putting aside other important considerations such as economics, a series of significant priorities flows from the above analysis. The first is ensuring peace among the major powers. Though the health of alliances with Japan and Europe is primary, the United States also wants good working relations with Russia and China which will be easier if there is a transition to democracy and free markets in those countries. Besides having good bilateral relations with the major powers, the Nation also benefits from the peaceful resolution of disputes among the major powers.

Creating mechanisms for nonviolent conflict resolution will become all the more urgent if the world does divide into distinct great power spheres of influence, because history suggests that those powers tend eventually to fight over the boundaries of such zones. To date, these spheres of influence are too amorphous to identify possible conflicts. But clashes could arise, for example, in Asia, where the pattern of influence remains muddled, or in Central Europe, which lacks clear lines separating possible spheres of influence. This interest in peace among the great powers is not likely to get the same close attention devoted to troublesome regional crises, but the deterioration of relations among the major powers would be more threatening to the United States in the long term than any regional crisis.

The second priority is engaging selectively in regional conflicts. Washington will hopefully decide to exercise leadership primarily in those situations where both U.S. interests and principles are at stake, rather than where only its principles are tested. Priority should be given to traditional commitments and cases in which action is now needed to prevent a greater danger later, particularly against rogue states that refuse to adjust peacefully into the world system. The most likely areas of involvement are in traditional regions of concern: the Korean peninsula, Persian Gulf, Levant, and the Caribbean. This list is by no means exhaustive, since America could fight almost anywhere if significant interests are at risk. In defending vital interests and principles, the Nation must be prepared to use decisive force. It must also be prepared to act alone, although acting as part of a coalition is preferable as long as America exercises leadership in that coalition.

The third priority is responding to transnational threats such as drug trafficking, terrorism, and illegal refugees, problems which cross national borders. While it is not always clear which assets are best suited to respond to such hazards on the national level, some threats seem to call for military involvement rather than reliance on only the traditional tools: government regulation or police who are often outgunned and outmaneuvered by criminal syndicates. Quasi-police operations have been conducted routinely by the militaries of many nations including the United States. But there can be resistance in the Armed Forces to using scarce resources for quasi-police functions when the natural inclination is to focus on preparing for major conflicts rather than being drawn into situations where the military is less obviously needed. On the other hand, the absence of great power strife or major regional conflicts provides the luxury of using the military for other missions. One reason to give priority to such transnational threats is the risk that if left unattended these problems can escalate and affect vital interests or create massive humanitarian disasters, which would then demand U.S. intervention on a much larger scale.

The fourth priority is assisting failed states. Americans are likely to aid such states in those cases where the military can respond constructively and at relatively low cost. An example is providing relief in the wake of a humanitarian disaster. Likewise, if local violence threatens to spill over international borders, monitors and military aid can be effective. Similarly, if parties to a conflict agree upon a political solution but are suspicious of the willingness of the other side to live up to its promises, peacekeepers can make a difference.
Messy internal conflicts create problems for military intervention. Yet public pressure to prevent a humanitarian disaster or genocide can encourage intervention in cases where America has few direct and immediate interests, as in Somalia which caused difficult foreign and defense policy problems for the last two administrations. In general, the role of the Armed Forces in failed states will be to provide humanitarian aid, protect non-combatants, and prevent conflicts from spreading to other countries. The military is less likely to play a major role in nation-building, at which its record is mixed at best. The services are unlikely to avoid all nation-building responsibilities, as our intervention in Haiti demonstrates. One danger in nation-building is that restoring political institutions often leads to choosing sides in an ongoing conflict. The side not chosen may then see American forces as the enemy and attack them, leading to casualties that erode public support for the operation. Of course, humanitarian operations can also have a downside: underlying problems that were suppressed when the Armed Forces were present often re-emerge after those forces have departed, leading to questions about the efficacy of intervention.

Forming coalitions for peace operations is difficult. No nation, including the United States, wants to take responsibility for leadership in those cases where history and common sense suggest that intervention will be lengthy, costly, and complicated. When national interests are not directly at issue, America may choose to be marginally involved or to press for a clear exit strategy should intervention go badly.

Implications for the Armed Forces

By combining these trends and priorities certain implications for the Armed Forces can be drawn in order to prepare for conflicts that may be encountered in the coming years.

Balancing forces among fundamentally different missions. The military will be expected to accomplish four basic missions, flowing from the four priorities listed above. Resources may be insufficient to accomplish all of them equally well. Thus, Washington is likely to face difficult choices about how to allocate available resources. These missions are, in priority:

▼ Hedging against the emergence of a peer competitor over the next two decades. This requires developing capabilities for leading edge warfare. The Armed Forces want to be better positioned than any potential rival to exploit new, commercially developed technologies for military use. Taking advantage of the revolution in military affairs requires new doctrine and organization as well as new technology. While easy to overlook in the short run, this mission may well be the most vital in the long run.

▼ Preparing for major regional conflicts with rogue states. This calls for careful stewardship of a ready force with superior warfighting capabilities. Much current military analysis, including the Bottom-Up Review, is focused on this challenge. The nightmare scenario is two nearly simultaneous major regional conflicts, such as one in the Persian Gulf and another on the Korean peninsula. In view of likely budgetary constraints, success in such a situation may well require regional allies.

▼ Developing cost-effective responses to meet transnational threats. Operations such as interdicting illegal immigrants, intercepting narcotics shipments, and fighting forest fires will be one part of the military’s vigorous engagement in support of national interests. At the same time, such missions do not require expensive combat systems. Nor should such operations be allowed to tie up personnel with specialized combat skills for extended periods.

▼ Engaging selectively in troubled states. The Armed Forces may prefer to minimize this mission, both to husband resources for major conflicts and to avoid so-called “mission creep” (in particular, humanitarian operations that take
on aspects of nation-building for which the military is ill suited). But the hard reality is that failed states are becoming more common and the American public often insists on intervention in the face of massive humanitarian disasters.

The United States should increasingly expect to operate with ad hoc coalitions rather than alliances. There is no overpowering threat that will cement new enduring alliances the way the Soviet threat brought NATO into being. Like-minded states, including NATO members, will not always agree on which regional crisis deserves attention, so coalitions will shift from case to case. Public opinion, in the United States and abroad, will typically insist on intervention by a coalition rather than by America alone, even if coalition partners add nothing to—or even complicate—the military equation. Most important, if defense spending declines, the United States will need to increasingly rely on coalition partners to accomplish the four missions discussed above.

Military planning should be keyed to capabilities, not threats. After fifty years of a patent threat, the military may have to return to a method of planning which addresses a world full of unforeseen dangers. The best way to plan for the unknown is to identify the sorts of tasks that the military will be assigned, not to guess about the specifics. A capability of growing importance will be interaction with coalition partners. The Armed Forces must identify appropriate command structures. The trend in the military has been toward placing more power under CINCs. Information technology and communications, however, are shifting power to those with the most powerful computers and the largest number of sensors, regardless of location, which could mean empowering Washington at the expense of the regional commanders. At the same time, the punch packed by the individual soldier is increasing, eroding the role of field commanders and resulting in flatter command and control structures. The fluidity of the political scene also complicates the formation of stable command divisions, since crises may flow across the areas of responsibility fixed during the Cold War.

The military should anticipate a decline in the importance of large weapons platforms. Classical organizations—formations with tanks, ships, and aircraft—are no longer the sole pillars of military might. For major industrial countries, integrating advanced weapons and communication/sensing systems is increasingly the key to success in war. It has two effects: some platforms are becoming more vulnerable to precision-guided munitions and smaller weapons come along with smaller platforms. In less technologically advanced nations, success in limited warfare against major powers may be possible by deploying “silver-bullet” weapons systems that can accomplish one particular task well (for example, brilliant mines or portable anti-aircraft weapons). With the proliferation of weapons of mass destruction, dispersed forces are more attractive than concentrations of forces.

**The Bottom Line**

It will not be possible to meet all four missions and deal with the other challenges described above if budget cuts continue at the current rate. If they do continue, the pressures to maintain a two major-regional-conflict capability and to undertake peace operations could require Pentagon planners to neglect the top priority of the Armed Forces, hedging against a future peer competitor by taking full advantage of the revolution in military affairs.
Building a New Defense Consensus

By MICHAEL B. DONLEY

At least two certainties exist besides death and taxes: defense build-ups end and defense reductions must eventually end too. This Nation has ridden a roller coaster of increases and decreases in defense spending four times in the last five decades. History shows that such declines normally stopped in response to a foreign policy crisis or on the eve of war. The most recent reduction is in its ninth year, having begun in the 1980s and gaining momentum with the breakup of the Soviet Union. We must develop an alternate approach to this current trend in spending that does not condemn us to repeat the mistakes of the past.

Since FY87 total defense outlays have declined 23 percent in constant dollars, with overall investment in research and development, procurement, construction et al., down 30 percent. The defense share of gross domestic product (GDP) has fallen by a third to 4.3, the lowest since 1948. Active military personnel—who have been reduced on average by 80,000 each year—are projected to reach a pre-Cold War level of 1.6 million in 1994. And some 300 major and minor installations are slated for closure or realignment, a list that will grow next year.

Defense decisionmakers and analysts ask when reductions will cease. President Clinton expressed hope in a State of the Union address that Congress would not cut defense further than already proposed; but the ultimate outcome is unclear. The FY95 budget allows for continued real declines in defense budget authority and outlays through FY99, although at a lesser rate in the final two years. The end to cuts appears to be unrelated to the calendar or to a particular level of deficit reduction. It is neither connected to minimally acceptable force levels nor specific requirements of an evolving post-Cold War strategy. So how will we know when the drawdown is completed? Or whether defense cuts have gone too far?

If past experience is repeated analysts and interest groups representing various sectors will critique foreign and defense policy on all sides. From a fiscal perspective there will never be a good time to stop the de-

Summary

Defense budgets have had their ups and downs since the end of World War II. The current decline in defense is cutting deeper and lasting longer than many observers think wise. Absent a national security crisis, revitalizing defense resources will be a difficult and complex process which must factor in strategic uncertainties and fiscal constraints while avoiding partisanship. This suggests the need to review the historical record of defense budget cycles, weigh the resource decisions that lie ahead, and consider those opinions which count in any effort to build a new defense consensus. By targeting the political center, shifts in defense spending can be moderated and popular support generated in lieu of less effective crisis response and factional debates that aggravate the budget process. This process boils down to forging a stable bipartisan approach to defense policy.
crease in spending. Both defense officials and military leaders could be torn between exercising their professional judgment and cleaving to decisions made by their chains of command. The President’s budget will be defended, but a leaking game might begin. Suspicion and mistrust could divide decision-makers. A growing defense debate could take on partisan political overtones, as happened in 1960 and 1980. And it is possible that the debate might not end—Congress being truly unsure of what to do—until the Nation is faced with a national security crisis.

Unfortunately, such a scenario is familiar and undesirable. It suggests a perverse political logic that relies on foreign policy setbacks to preserve defense. But it is equally undesirable for a defense program to rely on presumptive or optimistic foreign policy outcomes.

A more prudent approach should be found that is less dependent on assumptions about international events, more fiscally stable, and more firmly grounded in a long-term perspective of U.S. interests. In sum, we should not wish for a foreign policy crisis and, more to the point, military and civilian leaders should consider the possibility that the Department of Defense (DOD) and Congress might have to depend on their own initiative to prevent a steady erosion of defense capabilities.

Decisionmakers need fresh thinking and more rigorous analyses about when to stop cutting defense. The following discussion offers a three-part assessment of this problem:

▼ an historical perspective on the cyclical nature of declines in defense spending

▼ a deeper look into the current defense management agenda, what potential decisions lie ahead, and how further analysis might provide criteria to determine military sufficiency

▼ a review of whose opinions matter so that subsequent efforts to fashion a bipartisan consensus on defense can be targeted at the right audience.

In turn, such an assessment may proffer broad principles that could become the foundation of a new bipartisan defense consensus and could encourage rational alternatives which are less prone to fiscal inefficiencies and national risks associated with crisis response.

**Historical Perspectives**

A brief look at defense build-ups and downsizing can be instructive in thinking about how to create a consensus. The peaks and valleys in defense spending over the last fifty years relate to World War II, the Korean and Vietnam conflicts, and the Reagan era. These four episodes can be seen from various perspectives, from budgetary emphasis on build-ups to the economic impact of reduced spending. Of particular interest are the relationships among foreign, defense, and fiscal policies during inter-conflict periods. These periods—the valleys through which the policies of the post-war era evolved and which preceded decisions to rebuild defense assets—can provide added insights for decision-makers as they evaluate the development of a consensus to end downsizing.

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Post-World War II. In the months and years after World War II the attention of American policymakers shifted to Soviet expansionism. This became evident in political and economic terms through the Marshall Plan and Truman Doctrine, then in collective security agreements and military assistance programs. U.S. national security policy depended on overwhelming economic strength, a nuclear monopoly, and an ability to mobilize as carried out between 1939 and 1942. Prominent issues included unification of the Armed Forces under the National Security Act of 1947, a debate over which service would be responsible for delivering nuclear weapons, and universal military training. As one historian noted, preparedness was perceived as the ability to mobilize quickly in the event of war rather than to maintain ready forces to prevent war.4

Economic policy was focused on suppressing inflation and balancing the budget. President Truman adopted a so-called remainder method for calculating the defense budget, subtracting all domestic expenditures from projected revenues before setting an appropriate level for defense. His experience as chairman of a wartime Senate committee investigating military waste, and the intense interservice rivalry of the late 1940s, led to Truman’s belief that—with proper management and organization and reliance on swift mobilization—the military could make do with fewer resources.5 The Bureau of the Budget held that the economy could not stand the deficit thought necessary to finance a larger defense establishment.6 Thus the steadily growing requirements of containment were neither fully recognized nor considered affordable in the context of prevailing fiscal policies.

It took Soviet explosion of a nuclear device in 1949, the fall of China, and a comprehensive policy review in NSC–68 to eventually press home that post-war strategy and fiscal priorities were disconnected; and the outbreak of the Korean War finally galvanized foreign and defense policy. Most notably, the use of American forces in Korea reversed three years of policy development and military planning which had previously concluded that such a commitment would be avoided.7 The first post-war defense build-up was thus underway, but not without a cost. During the first month of the Korean conflict the United States sustained a series of tactical defeats and over 6,000 casualties before stabilizing a slim 140-mile perimeter around Pusan.

Post-Korea, Pre-Vietnam. The perception that America faced an intractable and global foe with a large, nuclear capable force led to a build-up that lasted beyond the end of the Korean War. Thus, post-war downsizing did not reach pre-war levels. After hitting a peak, manpower leveled off at around 2.6 million men, compared with 1.4 million in 1950. In the Korean conflict the United States established a substantial presence in Europe and initiated steady growth in nuclear forces.

America built and deployed forces abroad to both contain Soviet expansionism and fight on short notice if deterrence and crisis management failed. By 1960 nearly 700,000 U.S. troops were stationed overseas. In addition, serious programs were undertaken for continental air defense and civil defense. Throughout the mid-1950s and early 1960s there was a series of international crises involving the use or threatened use of force, including confrontations with the Soviet Union over Berlin (twice) and Cuba. At the same time, however, strategic thinking gravitated from problems of general and nuclear war toward deterrence and limited war. Military doctrine, in simple terms, shifted from Massive Retaliation to Flexible Response, although the United States would still rely on nuclear forces to defend Europe. The rise of national independence movements and breakup of colonial empires intensified Cold
War competition in the Third World. America also maintained a considerable military assistance program and strengthened its conventional warfare capabilities.

By 1963 the Armed Forces sustained 42 casualties among the 23,000 advisors in Vietnam, foreshadowing a decade of upheaval not only in U.S. national security policy but also domestic politics and national priorities. Yet it was in the post-Korean War era that the Nation continued to focus on the Soviet threat, developed a bipartisan consensus on foreign policy, built a Cold War defense establishment commensurate with the policy of containment, and sustained significant defense expenditures without damage to America’s economy and rising standard of living.

Post-Vietnam. The 1970s were a period of multipolarity abroad and turmoil at home. America was bruised domestically by Vietnam, Watergate, and critical reviews of the intelligence community. Europe and Japan were stronger economically, rifts among communist countries were openly visible, the Middle East faced another war, and international terrorism presented a growing threat. In his Guam Doctrine President Nixon stated that the United States would provide a nuclear shield for vital allies and in cases of Third World aggression would provide military and economic assistance when requested, but would look to the nation directly threatened to furnish manpower in its own defense. Containment was now pursued through détente, which emerged as a means of controlling conflict with the Soviet Union and featured arms control as one of its centerpieces. But even with the Anti-Ballistic Missile (ABM) Treaty and the Strategic Arms Limitation Talks (SALT) agreement in place, and follow-on negotiations, there was debate through the mid-1970s over the growth and modernization of Soviet nuclear and conventional forces.

Among the important changes in policy were the end of conscription and the transition to an all volunteer force that would include more women. There were major foreign and defense policy debates over the B–1 bomber, Panama Canal treaty, Selective Service registration, and SALT II. Except for Panama, these issues reflected an underlying concern that Moscow had achieved at least nuclear parity with the United States, and that conventional defense of Europe was thus even more problematic. Uncertainty over Soviet intentions was bolstered by disputed interpretations of arms control agreements and Soviet-Cuban adventurism in Angola, the Horn of Africa, and Nicaragua.

Meanwhile, Federal spending priorities had shifted dramatically. Domestic expenditures increased by about 50 percent in real terms. Between 1973 and 1980 the defense share of outlays dropped from 34 to 23 percent, and the defense burden on GDP fell from 6.9 to 5.1 percent. The defense budget was essentially stagnant, struggling to cope with the impact of large increases in the price of oil and high inflation. By 1979 active duty manpower was nearly 25 percent lower, and defense investment accounts were 28 percent lower after inflation, than the pre-Vietnam levels of 1963. Low personnel retention and spare parts shortages caused a decline in readiness. Once again, however, international events served as the key catalysts for change. The Iranian revolution and subsequent hostage crisis, the Soviet invasion of Afghanistan, and then a failed hostage rescue mission inside Iran combined in late 1979 and early 1980 to highlight the need for greater attention to defense and produce a political climate to support it.

Applying Historical Experience in the Post-Cold War Era. The events described above are within the living memory of many foreign and defense policymakers, and those which have occurred since the early 1960s are within the span of their personal experience. Leaders today can be reminded of the American tendency toward isolationism before World War II and lack of overall preparedness prior to Korea; some have poignant first hand experience of the Vietnam quagmire, the lack of readiness in the 1970s, and most recognize the fiscal consequences of deficit spending in the 1980s. They also appreciate the benefits of the last build-up and what it took to succeed in the Gulf War.

Past experience and national attitudes are thus relevant to shaping current and future defense policy. They constitute the
backdrop of an era of strategic ambiguity, an era that began with the erosion of Moscow’s influence in Eastern Europe, German reunification, and break-up of the Soviet empire. National policies, regional alliances, and global institutions continue to adapt, but the character of the strategic landscape is unclear. The evolution of Russia and China—both critical to a myriad of U.S. interests in Europe and the Pacific—cannot be predicted.

Changes prompted by the end of the Cold War argue for force structure adjustments along the lines of those undertaken between 1990 and 1993; an ambiguous era does not demand a buildup. But at the same time it does not argue for an open-ended decline in capabilities. As DOD and Congress debate the purpose of two major regional contingencies as planning scenarios, a number of recent and continuing commitments in which the Armed Forces play a role suggest the enduring need for a highly trained, well equipped military that can be deployed in widely separated areas and be supported by a range of capabilities in strategic depth. Experience shows that substantial forces have been committed in places where prior strategic analysis concluded they would not be needed.

A second major feature on the post-Cold War landscape is the problem of fiscal constraints. As a result of the Omnibus Budget Reconciliation Act (OBRA) of 1993, projected budget deficits are down from $235 billion in FY94 to $165 billion in FY95, with moderate growth to over $180 billion in FY99. As a percent of GNP deficits will fall from 4 to 2 percent, well below the post-war high of 5.2 percent in FY83. However, the effects of previous deficits will linger in annual payments for net interest on the national debt, now projected at 14 percent of the budget each year through FY99.8

But more troubling is the large projected increase in mandatory entitlement spending, from $730 billion in FY94 to $1,051 billion in FY99. The total budget share devoted to this spending increases from 46 to 57 percent over the same period. Thus, the growth in domestic entitlement programs which began in earnest in the late 1960s and 1970s is now joined by the effects of 1980s deficit spending in an imposing fiscal trend: the FY95 budget projects that by FY99 entitlement spending and net interest will account for over 70 percent of annual outlays. The combined trends suggest an historically familiar pattern, a political preference for both budgetary growth in domestic entitlement spending and budgetary restraint in discretionary programs such as national defense.

The challenge, then, is twofold: first to reconcile strategic ambiguity and requirements for forces with a reduction in capabilities, and second to prevent planned reductions from spinning out of control as a result of budgetary pressures. This discussion proceeds from the assumption that these are the prevailing conditions and trends defining the political environment in which changes to defense policy can potentially take root, and further, that at present—a crisis—successful changes are more likely to result from incremental adjustments. We must crawl before we walk. Strategic instability, ambiguity on the international horizon, and domestic constraints are important starting points; efforts to establish a new consensus for a strong defense must recognize and work within the constraints of this environment.

The Current Agenda

In thinking about how and where to draw the line against reductions, defense officials must be clear about current priorities, the most significant problems to be avoided, and what the future holds if current trends continue. This allows for many functional, service, and joint perspectives, but defense policymakers need a common view of a core management agenda and of how to measure progress on this agenda. Recent Secretaries of Defense have faced similar challenges in this period of rapid change: how to manage a significant downsizing of the Armed Forces and where to set a lower limit while providing the Nation with the capabilities to remain engaged in a world more complex than that of the Cold War. In response, defense leaders made a straightforward decision in 1990–92 to reduce the size of the military to protect readiness and modernization. It is the high quality of personnel, training, maintenance, and logistics that yields readiness, and it is readiness and superior technology—together with global communications, intelligence, transportation, and power projection—that combine to distinguish our Armed Forces as the finest in the world.

While the details have been debated, there has been a strong consensus that this
resource allocation framework is appropriate for a new environment and significant defense reductions. No one wants a hollow force. With the Soviet Union and Warsaw Pact gone, the size of U.S. forces will give way to an emphasis on quality and technology. Many accounts, program elements, and mission areas have been reduced over the past eight years, but this allocation framework—cutting force structure to pay for readiness and modernization—has recently provided a template for major decisions and planning guidance. It is found in the President’s FY95 budget message to Congress: “We can maintain our national security with forces approved in the Bottom-Up Review (BUR), but we must hold the line against further defense cuts in order to protect fully the readiness and quality of our forces.”

That framework, however, has been steadily eroded as budget realities have set in. Forces are being reduced through FY90–FY99 as planned in the base force, and now BUR: from 28 active and Reserve divisions to 15, from 16 aircraft carriers to 12, and from 36 active and Reserve tactical fighter wing equivalents to 20. Such reductions alone have not provided savings sufficient to meet falling budget authority or tight outlay ceilings. FY94 defense procurement is down 50 percent in real terms from FY90 levels, and congressional committees note that FY94 outlay targets reduced operations and maintenance as well as research and development accounts below prudent levels. Of the $104 billion in savings from the Bush baseline forecast between FY95 and FY99, BUR estimates 23 percent will come from force structure and over 50 percent from investment.9

From a fiscal perspective no significant relief is in sight. The budget deficit and continuing growth in entitlements will substantially limit efforts to raise defense spending. As DOD looks to the mid- to late-1990s, it is becoming more clear that readiness and modernization are far from immune to cuts; and the force structure outlined in BUR is potentially unsustainable. Protecting an adequate level of readiness, a reasonably sized force structure, and minimal modernization seems now to depend more than ever on necessary but uncertain savings from infrastructure cutbacks and acquisition reform as well as forecasts of low inflation.

This situation will require defense officials to emphasize their resource allocation priorities internally and with Congress to prevent loss of focus. Developing a meaningful baseline on where defense stands today and where it should be, say, in three years is essential to restoring bipartisan support. The goal, it seems, should be to improve confi-
dence in the ability to arrive analytically at collective judgments with Congress about the status of its highest priorities.

There appear to be five major management priorities: protecting readiness, reducing force structure to BUR levels, protecting future technological superiority and continuing only essential modernization, establishing a new relationship with industry, and reducing support infrastructure. In each area DOD and Congress should build measures of merit, boundaries, goal posts, and tools to define criteria for satisfactorily attaining objectives. With regard to readiness, for example, one should be able to identify and articulate standards and components of readiness which are the most important to protect or further develop. Risks and implications of any force structure reductions beyond BUR should be thoroughly evaluated. Investment road maps should be developed in key mission areas to focus limited resources and clearly define the projected workload in key sectors of the defense industrial base.

In these and other areas defense leaders must develop a sense of where we are and are not succeeding, where we can squeeze harder and where we have squeezed too much. Internal DRB-level reviews could be organized around major priorities and perhaps scheduled on a regular basis. Alternatively, if DOD cannot articulate the benefits and limitations of its resource allocation framework, its strategic and management agenda, then there is less likelihood it can avoid a continued erosion in capabilities below those now forecast or build the support necessary to do something about it.

There are major decisions to make on packaging and articulating the management agenda, but potentially there are three areas of emphasis that, if developed thematically, could contribute to strengthening the consensus for a strong defense.

The first is readiness. Attention to readiness ensures that the President can respond quickly to crises by maximizing military capabilities. Regardless of the size of the Armed Forces, it should be argued, DOD owes America readiness and optimum effectiveness. This should be seen as not only a reflection of military necessity but as a component between the Armed Forces and the people they serve.

Readiness is a combination of many factors but primarily a union of personnel, equipment, and training. If DOD is internally responsible for setting standards and requirements for training and equipment, then it can be said the Nation as a whole is responsible for setting the wages for military personnel. Congress and the American people owe service members the respect of decent compensation. There is always room for give and take, for commitment and reform in personnel policies. But self-assessment by the military is the key indicator since it is likely to be reflected in morale, retention, experience, and combat effectiveness. Mutual agreement by service members and Congress that compensation is fair and that readiness meets high standards is essential.

Given the experience of the late 1970s it would seem that agreement on this point still has broad appeal across the political spectrum. The concept of a compact between the American people and the military which provides ready forces could be considered among the potential cornerstones of a new defense consensus.

A second agenda item that could contribute to a consensus is infrastructure reduction and, more broadly, structural reform. Budget reductions and smaller forces have in many respects been propelled by base closures, consolidations, a roles and missions review, and DOD initiatives that were long overdue. Such structural reforms deserve careful attention. As experience with base closures suggests, they may or may not produce near-term savings but should be pursued based on merit. At the same time DOD should not for the sake of budget savings pursue nor succumb to expedient management or command arrangements it will later regret. Each opportunity for reform will have its own unique programmatic characteristics.

Thus a second principle of a new defense consensus is that an end to defense cutbacks does not mean an end to structural reform. DOD has a self-interest in finding real savings and applying them productively and, by being aggressive, deterring outside meddling in internal affairs. It must thus sustain a genuine commitment to continuous self-evaluation. Congress must be confident that prudent steps are being taken to
cut infrastructure and eliminate unnecessary duplication.

Acquisition reform is a third priority that can build confidence that the military is getting the most from every dollar. Here too the concept can be broadened to include not only how we are buying but what we are buying. Concentration of priorities should be more apparent as R&D and procurement shrink. By inference, DOD should have an increasingly solid rationale supporting its investment decisions and greater certainty about what it is unable to afford but needs. In evaluating whether to relax the budgetary pressure on defense, public and political opinions will be shaped by judgments of whether DOD is putting its scarce resources where they really belong.

One should note that effectively using the defense management agenda faces uncertainties and shortcomings. Themes related to good stewardship through reductions in infrastructure, etc., may run headlong into political interests which support a strong defense by leaving local bases, units, or programs intact. But in general the current agenda has much to offer to the substantive debate over when to stop cutting defense.

With more explicit goals for each stated priority, the slippery slope can perhaps be replaced by steps suggesting limits to prudent reductions in readiness, force structure, and modernization as well as indicating that the potential savings from structural reform have limits. Conceptually, when Congress perceives that the engine of the defense management agenda is active and running on all component cylinders, and yet is unable to maintain a reasonably sized force structure and standards of preparedness and modernization, it may then conclude that the current downsizing should end.

The Right Audience

Unease over the pace and duration of the drawdown among defense experts in Congress is one sign that a wider debate may be forthcoming. Senate Republican leaders told the President in late 1993 that further cuts would seriously damage national security. Likewise, Democrats in the House arranged a quiet meeting with the President last December to outline what they believe is a disconnect between BUR strategy and forces. But Democrats on the House Budget Committee also warned the President of gridlock if his defense budget proposals departed from the agreed FY94 deficit reduction plan.10

The FY95 budget debate, then, was characterized by concerned groups on both sides of the defense spending issue who are maneuvering to influence the President and key committees amid uncertainty about the fundamental character of the strategic environment abroad and a long list of domestic priorities, including deficit reduction. The outcome of the defense budget debate for FY96 and beyond, however, will depend not on the few certain votes at each end of the spectrum, but on the plurality in the middle. Opinion leaders should not only be thinking about when, why, and how to determine when defense reductions have gone far enough, but also about how their judgments, once articulated, will be perceived by the plurality of congressional votes that make the difference. These are political moderates of both parties and members less active or opinionated on national security issues, more inclined to appreciate the range of important issues on the national agenda and to be open to both sides of an issue. Rebuilding a sustainable bipartisan consensus for a strong defense means rebuilding the political center.

Political centrists in general prefer to avoid being whipsawed by hard line views from either end of the political spectrum but
are inclined to take action when public opinion is clear. Opinion in support of increases or decreases in defense spending can and does influence government policy though research indicates perceptions of the arms race and budget deficit have been equally or more influential in generating changes in policy. Opinion research on defense spending also suggests groups supporting decreases are most likely to be effective when linked with other social forces to increase domestic spending or oppose tax increases, while groups supporting increases are most likely to be effective when public opinion can be mobilized against a particular incident damaging to American prestige. Overall, concludes another study, "the whole history of public opinion on military spending shows a remarkable susceptibility of public opinion to transient events."11

If such research is correct, a recitation of the scope of defense reductions since the peak of the mid-1980s is not itself likely to be perceived as sufficient reason to halt the current decline in defense spending. Research supports the view that crises change public opinion and government policy; but this is not the answer. A crisis can produce the support needed for effective foreign policy response or a commitment of forces. But sharp increases in defense spending that sometimes follow can disrupt budgeting and neither deter nor affect the outcome of the crisis at hand.

Absent a crisis the current defense management agenda must be used with the best possible effect. In the current environment, further contributions to debate should explicitly recognize the problem of strategic ambiguity and uncertainty, and the reality of other fiscal priorities, while making the case for the military and fiscal benefits of moderate, stable investment in defense. And as the military and civilian defense leaders in DOD and Congress have opportunities to shape the emerging debate, the moderate plurality should be the audience of choice.

History offers important insights into the lack of connectivity among foreign, domestic, and fiscal policies which has contributed to dramatic swings in defense spending. Except for the late 1950s, in the years between planned declines and sudden build-ups America squeezed defense spending between a fiscal preference for growth in domestic programs and/or deficit reduction, and optimistic foreign policies which reinforced the perception that we could safely cut defense. While the U.S. economy was large enough to shoulder even Cold War burdens without impairing a high standard of living, defense management efficiencies, mobilization policies, arms control, and allied burden-sharing have all been used as rationales for smaller budgets. With these rationales it seemed we could lessen tensions, share global leadership in a more balanced fashion, and avoid higher defense expenditures. Thus we have sometimes been reluctant to recognize important diplomatic and military trends; and when foreign policy reacts to an urgent threat defense capabilities have sometimes been insufficient to support it.

In applying such experience to the strategic environment of the mid-1990s, it appears the Nation must be prepared to live with ambiguity, uncertainty with regard to the evolution of former adversaries, and instability in its relations with allies. Such an approach would avoid over-reliance on responding to threats far in advance and mobilizing to meet them (something which we have not done very well in the past), and would downplay overly optimistic assumptions about influencing the internal politics of allies and potential adversaries alike. There is pressure for deficit reduction and more emphasis on domestic priorities. But America has the underlying economic strength to support with moderate, steady investment a defense establishment self-confident in its ability to adjust to sudden changes in foreign policy, from whatever source. Another overarching constant remains: the United States is responsible for making its way in the world. If this Nation is to be a leader in global affairs there is no substitute for tending to our own defense.
The problem for defense planners is not freefall but steady erosion: inexorable, unintended, marginal adjustments that blur priorities, shade requirements, mask real losses in capabilities, and quietly increase risk. Nevertheless, there is a defense management agenda that could contribute to an informed and productive debate over time, focused on building a political center needed to stop the decline and support stable long-term national security policies. This suggests principles around which a sustainable bipartisan consensus for a strong defense might be achieved in an atmosphere clouded by strategic uncertainties and hampered by fiscal constraints:

▼ The arrest of a continuing real decline in defense is not driven by a fabricated or inflated threat, but by a more sober, independent assessment of assets which the Nation must protect over the long haul.

▼ There is no urgent need for significant increases in defense spending that could threaten sound fiscal policy. A more sustainable approach to spending will simply avoid costly cyclical extremes. Stepping decline now rather than after a crisis makes good strategic and fiscal sense.

▼ The Nation should sustain a careful approach to committing forces. Being stronger and more independently prepared for rapid geopolitical changes and potential swings in foreign policy does not mean being more inclined to use force where the costs, benefits, and risks are uncertain.

▼ DOD over the Nation a capable force, regardless of size. In turn, the American people owe service members fair compensation. Congress must be steadfast in maintaining this compact.

▼ An end to defense cuts does not mean an end to structural reform. All prudent steps will continue to be taken to reduce infrastructure and eliminate unnecessary duplication.

▼ DOD is putting scarce resources where they belong and striving to get the most from every dollar.

The emerging defense debate is far more fundamental than deciding whether to buy another carrier, which service is responsible for deep strike missions, the future of heavy armored forces, or even the next threat. These issues are important but will be resolved in due course. The larger question is whether the political center, absent a crisis, can define the Nation’s role in the world, maintain the capabilities necessary to support it, and guard against foreign encroachment as well as domestic neglect. DOD and congressional leaders should prepare for this larger question which lies at the heart of annual budget skirmishes. Their preparations should include working through the military implications of strategic uncertainty and articulating what is needed for defense over the long haul, developing moderate and sustainable budget requirements that do not rely on major shifts in fiscal priorities, and developing broad principles that will resonate with the political center and establish a stable bipartisan approach for future defense policy.

NOTES


MISSION-PULL and Long-Range Planning

By CLARK A. MURDOCK
Throughout the Cold War, the Soviet threat drove long-range planning—indeed, it drove all planning—in the defense community. In essence, we projected the Soviet threat and matched it or developed competitive strategies to counter it. It is hardly an overstatement to claim that we did not plan for, but rather programmed against, a projected threat. Since the Soviet Union invested steadily in its military machine, the pace of U.S. military innovation was fueled by threat-based obsolescence—new weapons were introduced into the force because the old ones were deemed to be incapable of coping with new Soviet weaponry.

With that threat as the fulcrum, scenarios became the dominant form of defense planning. Geopolitical scenarios were used to test strategies for containing Soviet-led communism, and war gaming provided the means for structuring U.S. and allied forces. Given relative certainty in terms of who constituted the threat and the context in which the Armed Forces were expected to operate, geopolitical assumptions in scenarios were generally taken as reasonable expectations. This Cold War consensus, of course, underlay the utility of scenario-based planning as a credible means of examining and justifying force structure and projected defense programs.

Summary

With the demise of a monolithic threat, planners might do well to discard their scenario-based tools that are geared to identifying specific military requirements. What they need is a flexible method of long-range defense planning against generic threats. To be farsighted planners should focus on missions likely to arise 18 to 20 years from now. Given that acquisition decisions made today will result in fielding weapon systems which can endure for forty years and that the mindsets of the leaders of 2010 have already been shaped, it is time to apply the mission-pull approach developed by the Office of the Secretary of Defense. Partially used by the Joint Requirements Oversight Council and the Commission on the Roles and Missions of the Armed Forces, this new approach offers an analytic tool that is especially suited to the defense budgeting process.
In the post-Cold War world the case for scenario-based planning is far less convincing. In thinking about the future security environment, unknowns predominate:

- What role will the United States play?
- What are the threats?
- Who will have the capabilities and the will to challenge our interests?
- How much of the budget will be dedicated to defense?

Given the scope of such uncertainties, it is hardly surprising that senior decisionmakers are finding scenario-based planning a less than credible device for sizing and shaping future forces. The need for long-range planning has increased even as the uncertainties of the post-Cold War era make our ability to conduct it more difficult. As the world’s preeminent military power, we no longer have a single threat to drive innovation. Bureaucratic momentum alone will lead us to retain capabilities that won the last war. Declining budgets and reduced force structures—coupled with the increased tempo of peacetime commitments—will only reinforce the preoccupation with current problems to the exclusion of preparing for tomorrow’s conflict. Decisions which affect the future of the Armed Forces then will be based upon near-term considerations, increasing the risk that we will possess the wrong capabilities for the battlefield of the 21st century.

A New Approach

Despite uncertainty over where and when or against whom we might use force, we still can think about how it might be used. During the mid-1970s the United States could not anticipate the 1991 war with Iraq, but based on analyses of the Vietnam conflict and the Arab-Israeli war of 1973 we perceived the need to penetrate heavy, integrated air defenses. This resulted in what Secretary of Defense William Perry called “offset strategy,” which emphasized among other things stealthy aircraft and suppression of enemy air defense (SEAD). We need to institutionalize this kind of thinking about long-term needs. Instead of focusing on where or when force may be used, which is what scenarios tend to do, we should determine what capabilities are needed to cope with generic contingencies. The key is to authoritatively identify the future missions of the Armed Forces.

How far ahead should we look? Choosing an appropriate timeframe is critical. It should reach far enough into the future that if we want a new class of capabilities there is enough time to acquire it. But it also must be close enough that if we do want new capabilities, we can start to take action. This is relevant planning. If the planning process is not connected to resource decisions it is merely an academic exercise.

Without threat-based obsolescence, age and sustainability are likely to determine a weapon system’s life expectancy. Decisions made under the current Five-Year Defense Plan (FYDP) will be far-reaching, because today’s systems may remain in service over forty years. For example, the F-111 aircraft is still projected to be in service well into the 21st century, fifty years after the tactical fighter experimental (TFX) program began; many M1A2 tanks in service during the second decade of the 21st century will be thirty years old; and the average Spruance-class destroyer in 2015 will be over thirty-five years old. This trend is so pervasive in post-Cold War planning that an analysis by the Office of the Secretary of Defense (OSD) indicates that only about one-quarter of the major systems deployed in 2011 will have been programmed after the five-year plan for FY94-FY99.

Moreover, this trend will be true for people, too. In large part, the perceptions and skills of those who will lead the military of 2010 have already been set. For instance, the class of 1994 will be squadron, battalion, and ship commanders in 2014; the individual who is Chairman of the Joint Chiefs of Staff will have entered the force around 1980; and fully one-third of the officers of 2010 will have been commissioned before or during the current FYDP. Decisions made in one FYDP, if executed as planned, will largely determine capabilities for at least two additional FYDP periods. The current five-year plan, however, only projects programs, forces, and budgets out six years, to the end of this century. Clearly, greater attention
should be given to the period 18 to 20 years out, since decisions today will determine almost 75 percent of the force structure in 2010–15. Therefore the timeframe selected for the OSD analysis was 2011 since it was exactly three FYDPs (18 years) away from the starting point of our long-range planning effort in June 1993.

**Mission-Pull**

The key to effective planning at a time of declining resources and uncertainty about threats and strategies is to think long range—particularly regarding missions. What decisionmakers need, therefore, is a means to develop a common understanding of future missions and then to apply this understanding to decisions made today. The mission-pull approach began with a survey of work by futurologists and long-range planners to identify probable operating environments in which the Armed Forces could be employed in 2011. As indicated in the accompanying figure, the favorites of many futurologists—for example, a new Soviet Union or cyberwar—are more likely to emerge in the second decade of the 21st century, not by 2011. It would take time and effort to weaponize new technology and overcome current U.S. military advantages, especially in light of the fact that we are now spending more on defense than the next eight highest spending countries combined. Each operating environment was defined according to three factors:

- **Future threat environments**—specific operational contexts broadly encompassing a range of enemy capabilities—conventional and, when appropriate, weapons of mass destruction (WMD)—and conditions imposed by the physical environment
- **Future missions**—future operational objectives to be accomplished by military forces
- **Critical tasks**—key activities necessary to successfully execute a future mission

Assessing the relative difficulty of performing missions and associated critical tasks is vital to mission-pull since it is the principal means of determining the ultimate effectiveness of proposed capabilities. In an era of declining resources it is not enough simply to avoid acquiring redundant or unnecessary capabilities; we also cannot afford to buy ineffective capabilities, that is, capabilities that cannot accomplish the critical tasks needed to achieve future missions.

**The Process Counts**

The mission-pull approach provides an analytic tool for rigorously defining future military missions. In sum, it disaggregates...
the 2011 security environment into 12 operating environments, over 60 military missions, and over 200 critical tasks. Although the analytic effort in creating our mission grids is instructive—if only to clarify how future conflicts are likely to be fought—the key to making mission-pull an effective tool is to incorporate it in the policymaking process. Decisions about capabilities are made in many circles in the Pentagon, of which the Defense Review Board, Defense Acquisition Board, and Joint Requirements Oversight Council are the most authoritative. While competing proposals should be judged on their ability to accomplish the mission, neglecting to define the mission will result in proponents of a given proposal shaping the mission to fit it.

During the Cold War the ubiquitous Soviet threat provided some discipline to the process, though the form of that threat projection often masked a struggle between competing force structure or weapons system proposals. From a planning perspective, there is no consensus on the American role in the post-Cold War world, nor on that which the Armed Forces should play in support of yet undefined national security interests. Just as after World War II, this will take years to develop.

What defense planners can do, however, is to suboptimize by building a consensus around missions so that a future President can have effective options for dealing with security challenges in 2011. This is a point that bears repeating in a slightly different way—a lack of foresight today will limit the strategic alternatives of a future President. If the uncertainty of the post-Cold War era makes it difficult to predict what our 2011 national security strategy will be, our near-term task should be to preserve future military options by making decisions to acquire or retain effective capabilities to execute the missions of tomorrow, not those of today or yesterday.
Authoritatively defining future missions is not a trivial pursuit, because the stakes for both the services and defense agencies are high. In a sense DOD would be trying to build a consensus on a yardstick that measured competing proposals for requirements. A Defense Futures Working Group, chartered by the senior leadership—the Secretary and Deputy Secretary of Defense and the Chairman and Vice Chairman of the Joint Chiefs of Staff—and comprised of OSD, Joint Staff, and service planners, would develop and coordinate a set of mission grids which operationally define the security environment of 2011. The resulting product would be approved definitions of future missions, including critical tasks to be accomplished for mission success; this would constitute a common future-oriented framework for decisionmakers.

Underlying a host of unresolved post-Cold War debates about the future has been the lack of formal consensus on capabilities. The mission-pull approach provides a basis for planners and decisionmakers to think long-range about missions and, ultimately, future capabilities; but the true added value of developing definitions of missions can be identified in discrete terms. First, clearly defined missions are goals that the services can use to direct long-range planning. This would replace a situation in which each service shapes long-range planning to coincide with its self-defined identity (such as the maritime role of the Navy or the expeditionary role of the Marines). Second, an approved list of missions could guide technological investments as declining resources limit possible technological applications. For at least the next twenty years this approach can drive the majority of technological innovations. Third, future missions are starting points for defining roles and missions. Since missions provide a joint, integrated, long-range vision for the services, they can serve as the basis for competition.

### Roles and Missions

Most would agree that roles should be assigned on the basis of future missions rather than on those of the Cold War. The first obstacle is semantic. The terms roles, functions, and missions each have specific meanings as discussions in these pages have indicated. But the term mission is widely used to suggest more than a CINC’s mission. The mission-pull approach, for instance, uses it more familiarly in references to operational objectives to be achieved sometime hence. The consequence is that the debate over roles and missions often does not focus on the central issue, a tenet of mission-pull: that roles, functions, and missions cannot be appreciated without grasping what tomorrow’s operational missions are likely to be. The corollary is that once missions are identified the capabilities needed to perform them must be acquired while unnecessary or redundant capabilities are discarded. Capabilities must be defined in terms of accomplishing missions.

Selecting capability areas, then, is the next step in applying the mission-pull approach to an analysis of roles and missions. Each area should reflect projected capabilities needed to carry out the missions of 2011. Defining areas on the basis of future missions with associated critical tasks will provide a way of determining whether currently programmed forces can perform the missions and whether forces that may later be available can perform them. This approach highlights an oft-neglected aspect of the roles and missions debate, namely, that it is not enough to avoid buying redundant or unnecessary capabilities; we must also, as stated earlier, avoid ineffective capabilities.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>economic warfare</td>
<td>military operations in support of or defending against economic war</td>
</tr>
<tr>
<td>Restore Comfort</td>
<td>humanitarian aid in ethnic conflict or rogue states</td>
</tr>
<tr>
<td>counterterrorism</td>
<td>offensive and defensive operations against terrorism</td>
</tr>
<tr>
<td>Just Cause</td>
<td>replacement of illegitimate foreign regime</td>
</tr>
<tr>
<td>peoples war</td>
<td>rural-based insurgency</td>
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<tr>
<td>Sarajevo</td>
<td>urban guerrilla warfare</td>
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<tr>
<td>Yongbyon</td>
<td>military operations against WMD facility</td>
</tr>
<tr>
<td>Tel Aviv</td>
<td>regional defense in WMD environment</td>
</tr>
<tr>
<td>Taiwan Straits</td>
<td>“blue water” conflict to deter invasion of third country</td>
</tr>
<tr>
<td>Strait of Hormuz</td>
<td>littoral warfare</td>
</tr>
<tr>
<td>MRC</td>
<td>major regional conflict in WMD environment</td>
</tr>
<tr>
<td>homeland defense</td>
<td>defense of CONUS against full threat spectrum</td>
</tr>
</tbody>
</table>
We used four criteria in defining capability areas: collectively, they must be comprehensive (theoretically offer capabilities to perform a range of missions), comparable (have similar levels of aggregation), distinct (represent qualitatively different aspects of a force and minimize the overlap between areas), and unconstrained (disregard fiscal or technological limits). Previous studies also were reviewed. It was determined that some force qualities previously designated as functional areas—especially readiness and command and control—were common to all areas and should be treated as inherent to them. Ten tentative areas were selected which represented a broad set of capabilities that taken together define the qualities needed by the Armed Forces of 2011:

- deep strike
- nuclear strike
- land combat
- force projection and sustainment
- air combat
- space operations
- sea combat
- information operations
- forcible entry
- missile and WMD defense.

These areas, however, represented only the first step in providing a framework in which to aggregate over sixty missions and two hundred critical tasks identified in twelve future operating environments. Each area had to be divided into mission areas or groups which together represent a key component of the capability. Only then was it found that the level of aggregation allowed for both a manageable and meaningful analysis of capabilities across future operating environments.

One example of this process is the capability area of forcible entry. Analysis derived four areas: force deployment, insertion of forces, conduct of offensive operations, and transition to next phase. Of the four mission areas, insertion of forces was used to illustrate the process. Once this area was selected, we surveyed matrices developed for each of the future operating environments to select those missions which relate to inserting forces. The related critical tasks for
each mission, with associated ratings on the level of difficulty, also were selected. The tasks then were organized by the assigned degree of difficulty.

Similar assessments of all mission areas of each capability area would provide a complete, in-depth analysis of the capabilities which the Armed Forces of 2011 will require. Such a rigorous analysis is necessary to address the tough roles and missions decisions which face defense officials today. The assessments might answer vital questions such as: are we investing in capabilities that are effective or ineffective, complementary or redundant, necessary or irrelevant? The answers, in turn, could be used to address questions on whether the services can provide effective capabilities for future missions. Most importantly, the mission-pull approach offers a rigorous method for the services and defense agencies in their competition for roles and functions on the basis of the ability to execute operational missions effectively.

N O T E S

2 For example, see Carl H. Builder, "Roles and Missions: Back to the Future," in Joint Force Quarterly, no. 4 (Spring 1994); and Daniel T. Kuehl and Charles E. Miller, "Roles, Missions, and Functions: Terms of Debate," in Joint Force Quarterly, no. 5 (Summer 1994).

3 This analysis was done by the Office of the Secretary of Defense (Program Analysis and Evaluation) in Autumn 1993 to support development of the mission-pull approach by OSD.

4 Futurologists and social theorists with a proclivity for perfection are of limited value as few of them systematically examine potential operating environments. Fewer still go into future operational military missions or threat environments in detail. The extant literature is primarily suggestive about future operating environments and consequently was used only to establish the glossary of potential operating environments.


6 Missions grids were developed by the Institute for National Strategic Studies, National Defense University Press, 1987; Charles W. Taylor, Alternative World Scenarios for a New Order of Nations (Carlsbad, Calif.: Strategic Studies Institute, U.S. Army War College, 1993); James E. Dewar and Morlie Levin, Assumption-Based Planning for Army 21 (Santa Monica, Calif.: The RAND Corporation, 1992); James A. Dewar et al., Assumption-Based Planning: A Planning Tool for Very Uncertain Times (Santa Monica, Calif.: The RAND Corporation, 1993); David E. Thaler, Framework for Linking Means to Ends (Santa Monica, Calif.: The RAND Corporation, 1993); and Ralph McNulty, Strategic Nuclear Warfare, Space Warfare, Strategic Transportation, and Special Operations.

7 Mission grids were developed by the Institute for National Strategic Studies, National Defense University Press, 1987; Charles W. Taylor, Alternative World Scenarios for a New Order of Nations (Carlsbad, Calif.: Strategic Studies Institute, U.S. Army War College, 1993); James E. Dewar and Morlie Levin, Assumption-Based Planning for Army 21 (Santa Monica, Calif.: The RAND Corporation, 1992); James A. Dewar et al., Assumption-Based Planning: A Planning Tool for Very Uncertain Times (Santa Monica, Calif.: The RAND Corporation, 1993); David E. Thaler, Framework for Linking Means to Ends (Santa Monica, Calif.: The RAND Corporation, 1993); and Ralph McNulty, Strategic Nuclear Warfare, Space Warfare, Strategic Transportation, and Special Operations.

8 The relationship between mission-pull and technology-push in developing capabilities is complex. But limited resources and uncertainty over a threat means mission-pull should dominate in the next 15–20 years. Beyond that, technology-push will likely become increasingly important.

9 Of them, the work of the Joint Requirements Oversight Council (1994) includes nine functional areas: strike, ground maneuver, strategic mobility and its protection, air superiority, counterproliferation of WMD, command and control and information warfare, intelligence-surveillance-reconnaissance, overseas presence, and joint readiness; the CJCS review (1989) also cited nine functional areas: land warfare, air warfare, maritime warfare, littoral warfare, homeland defense, strategic nuclear warfare, space warfare, strategic transportation, and special operations.
Much is written these days—especially in the pages of *JFQ*—about the need to foster joint culture. More often than not these calls for institutionalizing jointness are accompanied by a discussion of building joint culture on the foundation of service cultures. This raises some obvious questions. What exactly are service cultures? Who ultimately defines them? In a certain sense the answers are relatively apparent: soldiers *know* what Army culture is, sailors *know* what Navy culture is, and so on. But even if one accepts that the culture of each service is second nature to its members, how does that instinctual approach enlighten members of other services? What do marines really know about Army culture or airmen about Navy culture? Here a facile answer appears far more elusive, and a reliance on instinct becomes highly suspect.
How a service sees itself—from customs to warfighting spirit—can vary dramatically from how other services perceive it. Thus, if service culture is really the stuff of which joint culture is made, what do the services know about each other? As a response to that unabashedly rhetorical question, JFQ Forum presents a series of perceptions that address service identities in parochial as well as comparative terms. The articles focus not only on the expertise of the U.S. Armed Forces, but also on lessons drawn from the relationships among the services of other nations.

In “America’s Two Armies” the author states that sustained combat ashore is the norm for the Marines, not the exception. As a result the United States has the benefit of having two services concerned with conducting operations on land. But while the Marine Corps has unique capabilities that must be preserved, that alone cannot justify a second army in times of diminishing resources. How does that “sync” with joint doctrine?

“Once and Future Marines” reminds us that the premier practitioners of amphibious warfare have traditionally been called on to perform un-amphibious missions despite the fact that critics see the Marine Corps as wed to the amphibious assault. Geography, politics, and national interests underscore the need for an expeditionary force—a niche filled over the years by the Marines. But should that assumption go unchallenged?

Next, in “The Limits of Seapower: Joint Warfare and the Unity of Conflict,” the question is whether British defense policy should have a naval tilt. Without making a leap of faith that same question can be raised about the U.S. Navy. Forces with a geographic focus have limitations that lead them to joint and combined operations to offset limitations. For Britain the limits of seapower are more palatable than the limits of landpower or airpower as the leading edge of military prowess. Will the expanding body of naval doctrine in the United States reflect the same realities?

The thrust of “Why America Needs an Air Force” is that the rationale used in World War I to found the world’s first independent air arm—the Royal Air Force—is still relevant in the case of the U.S. Air Force. In the Persian Gulf War a separate service ensured doctrinal was in place which focused on airpower and thereby maximized mission reliability while minimizing casualties. Moreover, air forces also make an excellent instrument for creating ad hoc coalitions. Is this overall hypothesis as relevant today as it was in the heady days of 1917?

“Roles, Missions, and JTFs: Unintended Consequences” stresses that suppressing service culture—the unique way each service operates—inadvertently promotes homogeneity among the Armed Forces by depending on generalized all-purpose assets suitable for all occasions. One of the unintended consequences of this trend may be a military that is less effective, more costly, and not as capable of genuinely joint operations. To what extent should we accept these inherent risks suggested by the author?

These articles are not encyclopedic in their treatment of service culture. After reading them, however, if one is aroused to ask where the stand-alone article on the Army’s culture is or why the elimination of redundant combat support capabilities has not been raised, then the varied perspectives have indeed accomplished their aim. Your thoughts on those subjects should find their way into the pages of JFQ and other professional journals. Mull them and publish them—encourage debate! Let’s get it right before the “wet run.”

Lieutenant General Paul G. Cerjan, USA (Ret.), was the seventh President of the National Defense University. Previously he served as the Deputy Commander in Chief, U.S. Army Europe, and Seventh Army, and as the Commandant, U.S. Army War College.
Prior to the Persian Gulf War, many experts predicted the end of large-scale land warfare. As that conflict proved, however, ground forces that can be deployed over strategic distances and win decisive battles remain the basic currency of the military. The United States has enjoyed the luxury of two overlapping land forces for years, the Army and the Marine Corps. We have two services which see their core business as sustained land operations. Today, we are in the midst of harsh defense cuts. It is time to face the fact that America can no longer afford two armies.

A major effort to reexamine the roles and missions of the Armed Forces is now underway. It should look hard and carefully at the propensity of the Marine Corps to wage major operations on land. Given the statutory mandate of the Army to fight the Nation’s wars on land and the cost of fielding two rival land forces, the time has come for the Marine Corps to return to its traditional mission of amphibious operations and forego major land operations.
For various reasons the military has maintained redundant capabilities in the air and on the ground for more than forty years. But the willingness of the polity to support them is eroding as the strength of arguments mustered to defend them is waning. Simply put, much of what Army and Marine ground forces do is the same. This fact may discomfit some, but it must be explored.

The Argument

Armies have two characteristics which are central and defining: first, they are organized on a regular footing as an independent military service; and second, their core function is sustained land combat. The Marine Corps passes muster with flying colors on both counts. Indeed, Marine forces that fought in the Gulf were larger and more capable than many regular armies of the world, and they performed functions ashore indistinguishable from those of their Army brethren.

For much of their history marines provided naval commanders with both elite security and on-board striking forces for amphibious landings and raids. The marines or naval infantry of most major nations retain that role and serve as fleet auxiliaries, usually organized along regimental lines to conduct amphibious raids or spearhead landings ahead of conventional ground troops. For the Marine Corps, however, all that changed on the eve of World War II.

Pearl Harbor committed the United States to amphibious warfare on a grand scale. The military power of Japan in the Pacific was based on occupying island archipelagos and holding the naval anchorages and airfields found there. In the unique circumstances of the Central Pacific war, extensive amphibious operations made sense. While Army units conducted numerous amphibious assaults (including landings in the Southwest Pacific, North Africa, Sicily, Italy, Southern France, and the largest amphibious invasion in history, Normandy), the Navy-Marine Corps team evolved into a large, extraordinarily capable instrument of maritime and amphibious warfare.

By 1945 the Marines had grown to six large divisions supported by strong organic air forces. The post-war era saw the Marine Corps entrench itself as an independent service, complete with a hefty training base (including separate staff and war colleges) and its own bureaucracy in Washington. Today the active Marine Corps establishment supports three four-star generals: the commandant, a statutory member of the Joint Chiefs; the assistant commandant; and, on a rotating basis, the Commander in Chief, Central Command, as well as the Commander in Chief, Atlantic Command.

More than sixty Marine generals oversee a force whose active combat strength amounts to three divisions and three aircraft wings with supporting logistical units. Of the more than 18,000 commissioned officers, fewer than 8,000 actually serve "with the fleet" (that is, in operational billets with ground divisions or air wings), and many serve in officer-intensive aviation units which duplicate functions found in the Navy and Air Force such as strike aviation, air refueling, and electronic warfare. The balance occupy billets in the Pentagon, serve on joint staffs and in American embassies abroad, or are in various Marine headquarters or training assignments throughout the United States and overseas.

The presence of so many officers in non-operational billets is common in the other services, which must maintain large training establishments, provide for systems procurement and research and development, and perform all the other functions associated with raising, equipping, and training large active and Reserve forces. But the Marine Corps has few of these responsibilities. Its Reserve structure consists of one division and one air wing scattered across the country. Much of its hardware is developed by other services. It has no significant reconstruction or mobilization responsibility and no requirement to plan global land campaigns. It has no field army headquarters or echelons above corps, no National Guard establishment, no Corps of Engineers to adminis-
ter in every state and territory. The entire combat echelon of the active Marine Corps, moreover, is about the size of the Army's III Corps at Fort Hood. Most Marine officers, therefore, perform functions that help the Corps compete on an equal footing as a powerful, full-fledged service, not an integral part of the Fleet Marine Force.

If the status of the Marine Corps as a co-equal, independent service is well-established, what is the evidence that its principal, core business is land warfare? Except for their glorious exploits in the Central Pacific during World War II, modern marines have done very little by way of large amphibious operations. But they have a long and varied experience with protracted operations on land.

In World War I, Korea, Vietnam, and the Persian Gulf, Marine units from brigade to corps size fought inland under Army commanders. Marines have often had roles indistinguishable from those of Army units in Operations Other Than War (OOTW), such as in the Los Angeles riots and Provide Comfort as well as disaster relief after Hurricane Andrew. In fact, the sight of marines operating inland beside the Army has become so familiar that most Americans, and most political leaders, fail to see an obvious redundancy. This is not to suggest that, virtually without exception, the Marines have not performed brilliantly in these operations. But it does raise a compelling question in these austere times. Why do we have two separate services doing the same thing?

This preoccupation with sustained operations ashore is unavoidable for the Marine Corps. Like all healthy organizations it wants to preserve itself and expand in size and importance. The problem is that there are few opportunities to conduct large-scale amphibious landings. Sometimes landings are staged anyway, as when the Marines went ashore at Danang and Mogadishu. On the rare occasion when an amphibious assault becomes a true operational option, such as in the Gulf War, the combination of modern technology (such as Silkworm and Exocet missiles) and primitive technology make major amphibious operations exceedingly dangerous. To maintain organizational viability under these conditions, marines must engage in conventional operations ashore that look very much like traditional land warfare, inevitably raising the question: why does America have two armies?

Counting the Cost

For more than forty years the simple explanation for having two armies was that we could afford them. The Cold War provided a ready rationale for defense budgets, and the Marines were so firmly entrenched as a full-fledged service that no argument about redundancy could be made that was compelling enough to overcome its inherent political advantages. The same may hold true today; no matter how scarce resources become, the Marines' hold on public imagination may guarantee them a place as a separate service which fights on land. But while this may be construed as evidence of the organizational solvency and vitality of the Marine Corps, it is a poor substitute for rationally defined roles and missions in a sharply constrained budget environment.

The costs of maintaining two armies, however, go beyond tax dollars. As painful as it may be to reopen old wounds, the record of Army/Marine cooperation in battle is littered with the debris of interservice rivalry. From Saipan to Seoul, Khe Sanh to Desert One, Point Salines and Panama City to Wadi al Batin, the Army and Marine Corps have clashed over roles and missions. This historical record does not imply the existence of intentional parochialism or deliberate hostility among the services. This is a point that warrants repeating: differing opinions on the use of military forces do not necessarily suggest personal shortsightedness. Most military leaders, and marines in particular, have a keen sense of cooperation and selflessness born of years of team work in peace and war. Nor do marines bear all or even most of the blame for recurring tension. But there are reasons for the lack of close links between the Army and Marine Corps. Each service practices its own tried and tested operational routines and defends its prroga-

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ties and autonomy if threatened. Marine commanders are understandably reluctant to be placed under Army command, even when the preponderance of ground forces in a theater are Army as happened in World War I, Korea, Vietnam, and the Persian Gulf. Loss of operational autonomy to another service has never been greeted with equanimity.

Indeed this is just the point. Service perspectives can be fused into truly joint planning and execution when their responsibilities are grounded in the fundamental dimensions of land, sea, and air operations which define core competencies. It is only at dimensional margins, where defining competencies collide, that the services must genuinely reconcile competing views. One illustration is the highly visible and apparently unresolvable differences among the Navy, Marine Corps, and Air Force over theater fixed-wing air assets. When two services contend in one dimension, as the Army and Marines must do, they must perform exist under a fragile truce, punctuated by recurring budget and doctrinal debates in peacetime and accommodation and sometimes violent disagreement in time of war. Over the years the two services have by and large made things work; but the record shows that they have done so in spite of their unique service perspectives and not because of them.

Aside from traditional aversions, basic organizational problems can confound well-meaning attempts to integrate Army and Marine forces in sustained operations on land. A principal cause is the lack of logistical wherewithal in the Marine Corps to wage sustained ground campaigns at the operational level of war. Alone—or in concert with the Navy—Marines cannot field and sustain themselves ashore for long. Lacking operational sinews of war on land, the Marines must remain tied to the beach, or move inland and be linked to Army life-support systems.

Laymen often fail to realize what is involved in supporting land operations. Only the Army has brigade-sized artillery, armored cavalry, engineer, psychological operations, civil affairs, and military police units; only the Army fields high altitude air defense, intelligence, special operations, transportation, signal brigades and groups, as well as extensive corps-level logistics, maintenance, ammunition, and material handling units which make campaigning at the operational level possible over months and even years. Even in a relatively small operation such as the Kurdish relief effort in northern Iraq and humanitarian operations in Somalia, these capabilities proved to be essential. For larger and more protracted operations on land, they provide the difference between short-term tactical operations and long-term operational and theater strategic operations.

In brief, as a stand-alone formation, the Marine Expeditionary Force (MEF) is configured for short-term operations near the beach. Beyond that arena, logistics and the command, control, communications, and intelligence infrastructure needed to support extended operations must come from the Army. And if taxpayers are paying for Marine divisions to fight like Army divisions and be sustained in the field by Army logistics, supported by Army tanks and artillery, and flanked by Army combat formations,
then the boundary separating the core business of the two services is blurred indeed.

**Corps Business**

To be sure the Marines do have unique capabilities which must be preserved. The ability to organize and conduct amphibious landings and raids is an important part of our strategic repertoire. Self-contained Marine Expeditionary Units (MEUs) built around infantry battalions with aviation and logistics assets can be invaluable when stationed off potential trouble spots to evacuate U.S. nationals or perform missions where presence is critical. By stationing bulk stores and equipment at sea in Maritime Prepositioning Ships (MPSs), the Marines can deploy sizable forces to hot spots and, under certain conditions, conduct a forced entry from the sea. Both Marine security guards at American embassies and Marine ceremonial units play vital roles as representatives of the Nation at home and abroad. Not least, the Marines possess an ethos and elan which is a national treasure. They have earned their place through sacrifice and victory in battle. These important capabilities, however, are not enough to justify separate status as a second army. As noted above, an ability to play in conventional land warfare is imperative in justifying the large overhead of the Marine Corps. Over the years, Marine aviation has grown far beyond its original focus on close support of ground formations to incorporate a strike capability that reaches out many hundreds of miles. M1A1 heavy tanks and M198 155 mm howitzers have been added to Marine divisions.

Marine logisticians are now analyzing what steps should be taken to give the Corps a true theater sustainment capability of its own. In the late 1980s light armored vehicle (LAV) battalions were fielded in Marine divisions, and the Corps has considered organizing a heavy regiment in each division composed of tank and LAV units—in essence, a duplication of Army heavy brigades. At a time when other services have fought and lost the battle to maintain the end strengths proposed in the Bush administration base force, the Marines fought successfully to prevent their end strength from being reduced to a base force level of 159,100. These and similar initiatives have little to do with amphibious operations and everything to do with sustained, high intensity land warfare. The push to entrench this expanded capability for land warfare is reflected in official publications which tout the ability to deploy Marine Air-Ground Task Forces “with speed and reach, yet with the firepower, tactical mobility and sustainment of heavier forces.”

Some question whether the Army should field non-mechanized divisions at all, suggesting that all land warfare below the high intensity threshold should be the province of the Marine Corps. Aside from giving the Department of the Navy the lead military department in land warfare (due to the relative infrequency of major high intensity conflicts), this proposal ignores the fact that the Army can sustain its light forces ashore with comprehensive operational level combat support and combat service support which does not exist in the Marine Corps. Army light forces also possess unique capabilities to conduct large-scale airborne and air assault operations and an unmatched ability to fight at night in close terrain. Perhaps more importantly, the Army’s long experience with light forces and statutory primacy in land warfare—as well as a proven track record—argue against elimination of Army light forces.

Such proposals suggest far more than a need to mount a credible amphibious assault capability. In fact, since the Navy only has enough amphibious assault shipping to project two and a half brigade-sized elements of Marine Expeditionary Forces (MEFs) at any given time, half of the Marine combat echelon must travel and offload in secure locations rather than conduct the type of maritime forced entry which is ostensibly its raison d’être.

**Expeditionary Warfare**

Is it not possible that the future of the Corps could—and should—be uncoupled from the future of amphibious operations?
Without colliding head on with the Army’s established primacy in land warfare, the Marine Corps justifies its excess forces in a range of broader claims. The principal claim is that the world of expeditionary warfare belongs to maritime forces. Naval doctrine holds that Marine forces can and should engage in large-scale, sustained land combat so long as it comes “from the sea.” Army forces thus play supporting roles in all but the largest and most intense forms of land warfare. After the initial entry into an area or theater of war, current Navy/Marine Corps doctrine describes naval expeditionary forces as “capable of a full range of action—from port visits and humanitarian relief to major offensive operations.” These claims deserve closer examination. What exactly is meant by expeditionary warfare? And is it ineluctably a maritime phenomenon?

In the post-Cold War era, expeditionary warfare means the projection of military force from the continental United States to deter, compel, or defeat regional adversaries. As forward presence declines, power projection must assume a central role in national military strategy. The forms of military force will vary according to the situation and may include engineer, medical, civil affairs, and psychological operations units as well as pure combat forces. The force may be delivered by air or sea. It may proceed to its destination without opposition or be threatened by interdiction as it enters the theater of operations. It may be sustained by military or commercial sealift, by air, from prepositioned stores ashore and afloat, or by some combination of these means.

In the future, a major regional conflict requiring a serious response will feature short notice deployment of task-organized combat formations (battalion-sized airborne or Marine units or both), followed by more deliberate movement by air and sea of large combat units and associated support echelons. The force may arrive at ports and airfields still held by allies or conduct a forced entry against opposition from enemy ground forces and harassment from opposing air and naval units.

In short, expeditionary warfare is a form of joint warfare encompassing different kinds of capabilities from all the services. Power projection, forced entry, and logistical sustainment over strategic distances are not capabilities unique to a single service. They are not uniquely or even predominantly linked to naval and amphibious warfare. Marine forces are trained and equipped to conduct forced entry from the sea, but they have no monopoly on the expertise needed to move troops and equipment by sea. This is a role that the Army has done for decades and will continue to do as long as the airplane remains an inefficient platform for moving tanks and supplies.

Rightsizing the Marines

As defense budgets reach historical lows, the Armed Forces face an increasingly difficult dilemma: the military will be eroded unless roles and missions are sharply redefined to eliminate redundancies and duplications which are not absolutely essential. To preclude a hollow force, the Marines should be refocused on their true mission and core competency: spearheading amphibious assaults as experts in amphibious warfare and mounting amphibious raids and coastal operations of a maritime nature. Noncombatant evacuations contiguous to littorals, riverine operations, disaster relief in coastal areas, and similar missions call for the unique capabilities of the Marine Corps.

Structuring and funding the Marine Corps for divisional and multidivisional land operations as in the past will result in redundancy, inefficiency, and interservice
friction. Divided command and competing views on the best way to employ forces cannot be masked by ever louder and more frequent protestations of devotion to the creed of jointness from all quarters. The services are different, and must be to master warfare in their defining elements. When employed together in a single operating dimension, different operating styles and methods emerge quickly and powerfully. Good intentions and a propensity for innovation have served American commanders well in overcoming such difficulties, but the efforts have all too often relied upon a healthy margin for error and suboptimal strategies and campaign plans. Today, as a growing number of people view the stated strategy of winning two nearly-simultaneous major regional contingencies as barely executable, suboptimality and faith in an ability to muddle through are not good enough.

True joint warfare blends core competencies—on land, at sea, and in the air—to produce optimal force packages and campaign plans in aid of strategic objectives. Obvious redundancies call for careful scrutiny and review. To preclude overt redundancies in land warfare, Congress, National Command Authorities, and Joint Staff should clearly demarcate roles and missions for the Army and Marine Corps based on the principle of core business. For the Army, that means land warfare; for the Marines, that means amphibious warfare.

A fresh approach to traditional strengths and unique expertise means taking a new look at organization as well. Today the Marines field three active divisions and three active aircraft wings with organic logistics groups and air wings which comprise three MEFs. The Marine Corps Reserve provides another division and aircraft wing with supporting service support organizations which is thoroughly manned with former active duty marines. A three-division Corps might well survive a thoroughly rationalized analysis of roles and missions, but not in its current form.

Since half the Marine operational formations cannot be deployed for amphibious assaults, a standing organization comprised of three divisions—two active and one Reserve—with air wings and logistics groups needed to form complete MEFs, could provide the strongest amphibious force in the world. So structured, much of the overhead in the Marine Corps could be reduced or shared within the Department of the Navy. While initial entry, infantry, and amphibious warfare training should remain exclusively Marine business, most other training could be done at Army training centers augmented with Marine training detachments, as now happens on a limited scale.

With amphibious operations back at the center of their organizational vision, emphasis on the regiment as the basic building block for the Marine air-ground task force (MAGTF) would help refocus the service on its amphibious roots and move it away from its current orientation on major land campaigns. When needed, added armor and heavy artillery from corps level Army formations can be provided, as the Chairman of the Senate Armed Services Committee has suggested and was done in the Gulf. In extremis, two full-fledged MEFs would remain quickly available with another ready to stand up. A two-MEF active force is prudent and realistic; the last time America needed even that many amphibious assets...
was in 1945. Today, two active MEFs, backed up by one more in reserve, is the right size for America’s amphibious establishment.

Sustained combat ashore has been the norm for the Marine Corps, not the exception. On balance the system works, but not as smoothly and efficiently as might be anticipated if service boundaries were not involved. Longstanding areas of contention will almost certainly persist given the current roles and missions of the services, if for no other reason than that they always have. As long as the Marines fight on land along side the Army, they will resist unified ground command. As long as the Marines control powerful air forces, they will resist unified air command. And as long as the Marines are a competing land force, they will contend for center stage in those strategic and budgetary battles that define our military institutions. By so doing, the Marine Corps resists the iron laws of bureaucratic politics and does what it must to survive and prosper in an intensely competitive bureaucratic environment. Nevertheless institutional conflicts count on the battlefield. Unity of command, efficient use of every source of combat power to achieve concentration at the decisive point, speed in planning and execution, and many other crucial operational imperatives are inhibited, not strengthened, by these conflicts.

Such assertions are certain to draw fire from those who see the Marine Corps as the Nation’s military service of choice. The essential point, however, bears repeating: the Marines do not exist to win wars—either large or small—on land. That role is settled. Marines do not exist to win wars—either large or small—on land. That role is settled. The Marine Corps competes aggressively not only to provide maritime intervention forces, but perhaps more relevantly, large land forces “capable of a full range of action.” Such a role falls well outside the intent of the law governing service roles and missions and well outside the logic of defense budgeting in a post-Cold War world.

Overall the Marines have outperformed the other services by a wide margin in coping with downsizing. In avoiding direct clashes with the Army over roles and missions, the Marine Corps has done so largely in the interest of maintaining large ground formations configured to fight land campaigns. During the Cold War redundancies in land warfare could be accepted or even welcomed in the interest of bringing more forces to the fight, but those days are gone. With a thin margin for error, the Armed Forces need clear guidance and decisive leadership about service roles and missions, and those roles should not commit two services to sustained combat operations on land.

NOTES
2 Aside from close air support, there is no justification for such fixed-wing aviation other than a desire to own one’s own assets. Overtly acquired to support Marine Air-Ground Task Forces (MAGTFs), F/A18s are likely to participate as land-based tactical aviation like the NATO air umbrella over Bosnia where no Marine ground units are deployed and land-based Air Force units are clearly the optimal force.
3 For example, marines are often found on special operations staffs in unified command headquarters—despite the fact that they have no special operations community of their own.
4 To support a Fleet Marine Force of about 98,000, the Marines have legislative liaison, legal, acquisition, and Reserve affairs offices—all headed by general officers.
5 Observation in March 8, marines in full battle regalia splashed ashore at Danang, the first combat troops to set foot on the mainland of Asia since the end of the Korean Conflict. They rushed onto the beach, just as their fathers had stormed Pacific atolls during World War II—to be greeted by grinning Vietnamese girls distributing garlands of flowers and a poster proclaiming: “Welcome to the gallant marines.” Stanley Karnow, Vietnam: A History (New York: Viking Press, 1983), p. 416.
6 An account of internal discussions on proposed amphibious landings in the Gulf War is found in Rick Atkinson, Crusade (New York: Houghton Mifflin, 1993), pp. 169–73, 239.
7 On Saipan in 1944, LtGen Holland “Howling Mad” Smith, USMC, relieved the Army commander of the 27th Division, MG Ralph Smith, creating a storm that reached to the highest levels of the defense establishment. In Korea, relations between the Xth Corps commander, LGF Ned Almond, USA, and 1st Marine Division commander MajGen Oliver P. Smith were strained over employing Marines. The attempt to incorporate Marine air into ground operations in Vietnam precipitated another breach in service relations that was elevated to the national level and prompted GEN Westmoreland to consider resigning. (“I was unable to accept that parochial considerations might take precedence over my command responsibilities and prudent use of assigned resources.”) William C. Westmoreland, A Soldier Reports (New York: Doubleday, 1976), p. 344. See also, Willard J. Webb, “The Single Manager for Air in Vietnam,” Joint Force Quarterly, Autumn/Winter 1994–95.
The decision by the Marine commander of the Khe Sanh combat base not to relieve the beleaguered Special Forces camp at Lang Vei precipitated a deep rift that persisted for years. Army and Marine relations in Vietnam were so troubled that General Creighton Abrams, Westmoreland’s successor as Commander, Military Assistance Command, Vietnam, and later Army Chief of Staff, refused to consider a senior Marine officer as his deputy. Lewis Sorley, Thunderbolt! (New York: Simon and Schuster, 1992), pp. 208-09. In Grenada this author noted the frustration of Army ground commanders over the JF commander’s refusal to place the single Marine battalion under unified ground command, complicating Army attempts to coordinate unit boundaries on the small island among six battalions with the lone Marine contingent. In Panama, marines expressed frustration at having all but token forces in the initial assault, despite the lack of a requirement for amphibious operations. See Bernard E. Trainor, “Jointness, Service Culture, and the Gulf War,” Joint Force Quarterly, no. 3 (Winter 93–94), pp. 88–98. The decision by the Chief of Staff, United States Army, 1993), pp. 140-41.


The attempt to expand Marine logistical capabilities is apparent but somewhat confusing, even for Marine planners. For example, an authoritative source outlines the ability to deploy a MEF “complete with 30 days of supply” on one page, and then expands this to “capable of 60 days of sustainment, Marines are the one force that does not have to be reshaped to meet the expected threat” four pages later. See United States Marine Corps Concepts and Issues (Washington: Headquarters, U.S. Marine Corps, 1993), pp. 16, 20.


10 U.S. Marine Corps, Marine Corps Concepts and Issues, p. 16.

11 Assertions by senior Marine leaders that very large numbers of marines can be moved to a crisis scene in a matter of days should not be viewed uncritically. For example, one official text maintains that “a force of 45,000 marines—complete with 30 days of supply and over 300 fixed wing aircraft and helicopters”—could deploy from CONUS to any littoral region in less than 14 days. This claim is disingenuous at best. It presumes that MPS shipping is close by and has not been attacked, a secured airfield is available to receive units, and amphibious assault shipping is collected in sea ports of embarkation when the crisis erupts. These assumptions may obtain in some crisis scenarios, but clearly not in most. The numbers are also somewhat misleading, giving the impression of a large number of combatant marines and aircraft. In fact, more than 35,000 of the marines in the MAGTF serve in support, not combat, roles while more than half of the aircraft referred to have noncombat roles in transport, refueling, electronic warfare, etc. Ibid.


13 The Marine position on the subject is unequivocal: “If a crisis does require a heavy land-based army . . . the MAGTF will be the enabling element for their introduction.” U.S. Marine Corps, Marine Corps Concepts and Issues, p. 21.

14 The Marines devote an entire manual, FMFM1–1, Campaigning, to waging extended campaigns on land. Though the text includes case studies of such major land operations as the German invasion of Poland, Grant’s campaigns in Virginia, and Allied operations in northwest Europe, there is virtually no mention of cooperative ventures with the Army within the context of modern operations and only passing mention of the joint nature of modern warfare: “[A] MAGTF may be required to conduct a campaign . . . as part of a larger maritime campaign or as part of a larger land campaign by a JTF. In some cases the MAGTF may take the lead in the JTF headquarters.” FMFM1–1, Campaigning (Washington: Headquarters, U.S. Marine Corps, 1990), p. 29.
Eisenhower called it a “second land army.” Recently, a retired Army general referred to it as an “antique luxury.” To some it may seem that other services could replicate the Marines. After all, many nations maintain their security without such an institution. While there have always been critics of the Marine Corps, especially in times of tight budgets, questions about its purpose take on greater relevance today as Congress reevaluates the roles and missions of the Armed Forces.

Often regarded as an anomaly, the Marines are actually indicative of a larger anomaly—the American way of war. The Founding Fathers eschewed the European concept of a standing army that could be committed without popular consent. Instead they divided responsibility for defense between the President and Congress under the Constitution. While the President was commander in chief, the duty to “declare war” and “raise and support armies” rested with Congress.

The Nation’s initial foreign policy challenges made it apparent that the President needed a limited means of resolving conflicts abroad. Geography, as well as acts of Congress, mandated a naval force. Marines were to be used at the President’s pleasure both ashore and at sea. Congress repeatedly affirmed this authority. In fact, legislators would state that this was the most important duty of the Marine Corps.
Early History

The Marine Corps was created by Congress on November 10, 1775. Early legislation on recruiting marines was unique in directing that care be taken to select men acquainted enough with “maritime affairs as to be able to serve to advantage by sea when required.” Congress obviously wanted marines to not just be naval infantry but “soldiers of the sea.”

Throughout the Revolution marines served to advantage in various roles—in ships’ detachments or fighting beside their blue-jacketed brethren in naval raiding parties. At the end of the war, however, the Corps along with most of the military establishment quietly went out of existence, the feeling being that a standing army was a threat to nascent republics.

That idealism received a sharp blow by 1798. Commerce was being preyed on by Barbary pirates and French privateers. Despite a basically inward focus, there was no escape from the fact that the new United States greatly depended on overseas commerce for its economic survival. This dependence led Congress to recreate a maritime force and quickly pass the Naval Act of 1794 and the Marine Corps Act of 1798. Congress, however, added another sentence to the traditional role and function assigned to marines during the Revolution: now they were also to be used for “any duty on shore as the President, at his discretion, may direct.”

There was a good reason for giving the President such discretionary powers. At the time, the United States was hotly engaged with its former ally, France, in a “quasi-war.” Hoping to avoid taking on a European superpower in a full-fledged conflict, President John Adams opted to conduct a limited naval campaign designed to get Napoleonic France to respect the Nation as a neutral.

From 1798 to the 1880s, the Corps essentially fulfilled this traditional role and function derived by their Revolutionary War experience and the Marine Corps Act of 1798. When major wars occurred in 1812, 1846, and 1861, the Corps quickly expanded to fight jointly alongside the Army while continuing to support the Navy with ships’ detachments. It was a secure institutional existence, and although some still questioned the need for a Marine Corps, its function within the national force structure remained virtually unchanged for almost the entire 19th century.

Roles and Functions Watershed

In 1893 Frederick Jackson Turner told the American Historical Association that the United States no longer had a western land frontier. Nearly simultaneously, naval strategist Alfred Thayer Mahan developed his ideas on the role of seapower in shaping national policy. Without a continental frontier, and given the maritime orientation of our commerce, many saw U.S. interests moving offshore.

However, by the 1890s the Marine Corps, like the horse cavalry, had become functionally obsolete. To many it was a vestige of a bygone era since it no longer fulfilled the traditional role of ships’ detachments. Faced with an officer corps numbering only 75 in 1880, even pro-Marine reformers called for a “funeral or resuscitation.” But as Presidents and administrations toyed with various organizational ideas regarding the diminutive Corps, the Nation’s global outlook changed dramatically with the end of the Spanish American War. Suddenly, the United States found itself a world power with far-flung responsibilities. With national interests stretching from the Philippines to Guantanamo Bay, the need of a seaborne force to protect American interests abroad and, if need be, seize advanced naval bases for a new steam powered fleet became evident.

Thanks in large measure to American experience during the Spanish American War, Mahan wrote a corollary to his ideas on seapower about maintaining a large fleet-in-being: “In the future, the Marine Corps must constitute... the backbone to any force landing on [an] enemy’s coast.” Colonel Commandant Charles Heywood observed after the war that the use of marines in extended operations near Santiago Bay in Cuba “showed how important and useful it is to have a body of troops which can be quickly mobilized and sent on board transports, fully equipped for service ashore and afloat, even during extended operations.”
to be used at the discretion of the commanding admiral." Although Heywood previously supported keeping marines in a traditional role as ships’ detachments, he now proposed creating a 20,000-man force of “well drilled and equipped marines” ready to sail at a moment’s notice and respond to world troubles without the necessity of calling on the Army.2

But this proposal was not meant as a crass attempt to undercut the Army. Heywood, like President John Adams in 1798, recognized that sea-based forces were a means of conflict resolution short of war. By using marines for lesser conflicts a robust Corps would neither compete with the Army nor constitute a second land army. Moreover, committing the Army to overseas intervention meant that a foreign policy threshold had been crossed. Sea-based forces were seen as temporary, hence the cause of less consternation from an international point of view. Again, such an arrangement as suggested by Heywood comported nicely with America’s self-image as an occasional world power. Protected by surrounding oceans, the United States opted to bask in relative isolationism.

Vera Cruz was critical to the institutional development of the Marine Corps

In 1914 it became clear that the United States did indeed have overseas interests beyond its territorial possessions. The Marines received their first test as a seagoing force-in-readiness when President Woodrow Wilson ordered U.S. forces to quell unrest and protect American interests near Vera Cruz, Mexico.

The initial landing force consisted of a traditional mix of marines and Navy bluejackets. This had been the standard procedure for decades and naval officers in charge saw no reason to change a proven formula. However, some quickly regretted this decision.

The Vera Cruz operation was critical to the institutional development of the Marine Corps. Moreover, problems encountered during the landing presaged similar and more deadly ones faced by British-led forces at Gallipoli in 1915. The operations served to remind the War Department just how difficult landing on hostile shores could be. For example, even though the Army had prepared for nearly a year to deploy to Mexico, its logistical tail and defective transports foreclosed any hope for rapid deployment. In fact, much to its chagrin, the Army did not arrive until after the fighting was over.

The deployment of naval forces fared only slightly better. Navy bluejackets supporting the landing took heavy casualties in house-to-house fighting, the result of a lack of expertise in land warfare. Because of lessons learned at Vera Cruz, some who participated in the landing, including a number of future commandants—Lejeune, Neville, Russell, and Vandegrift—began to argue for a professionalized force to occupy the critical interstice between an intervention force and larger, more capable follow-on Army forces.

The lessons of Vera Cruz proved important in another regard. They allowed the Corps to resolve an internal debate about its own future role and function within the national force structure. One group of officers, led by double Medal of Honor winner MajGen Smedley D. Butler, favored continued emphasis on deploying small bodies of marines as colonial troops or forces functionally designed for small unit operations to keep the peace in places like Haiti or Nicaragua “where the Marine Corps was already engaged.” Others, however, led initially by MajGen Commandant John A. Lejeune and later by a visionary planner, Major Earl H. Ellis, stressed that the Corps should be equipped and trained for instant readiness to not only fight our Nation’s small wars but to provide substantial operational support to naval campaigns. For Lejeune and Ellis, this role and function implied an amphibious focus. Further, such emphasis would keep the Marine Corps concentrated as a force-in-readiness for the fleet rather than parcelled out in detachments as Butler suggested.

By 1939 the Marines had been used 139 times, mostly for Presidentially directed duties. Secretary of War Patrick Hurley stated in 1931, “The Marine Corps can land on foreign territory without it being considered an act of war, but when the Army moves on foreign territory, that is an act of war. That is one of the reasons for a Marine Corps.”

The view of Lejeune and Ellis proved highly successful in the Pacific during World War II. After some severe trials at Tarawa,
Saipan, and Iwo Jima, the Marines developed, in the words of the eminent strategist J.F.C. Fuller, “one of the most far-reaching tactical innovations” to come out of the war, providing a test bed for demonstrating the feasibility of amphibious assaults against enemy-held objectives.

The Army and Marine Corps conducted many amphibious operations both individually and jointly throughout the war. Only a few were single-service operations. Thus, despite the deserved perception of marines as amphibians, the service held no monopoly on such operations. The true and transcending value of the Corps, therefore, was its skillful synchronization of the application of seabased power projection, making the sea and the shore no longer obstacles that hindered the prosecution of land operations. The Marines became “enablers” for follow-on joint forces. Both the Guadalcanal and Saipan operations indicated this strategic focus.

Post-War Crisis

Like the close of all major conflicts fought by the United States, the end of World War II led the country to reexamine its military infrastructure to determine what sort of post-war national defense organization would be needed. Because amphibious warfare was not the only innovative operational capability to be fully developed in the war, some began to advocate greater investment in strategic airpower and atomic weapons. Many thought that those two breakthroughs alone made land warfare largely obsolete. As a result, distinctions between the roles and functions of the services and their underlying cultures became blurred. More than a few defense officials supported the dissolution or diminution of the Nation's land forces in the name of efficiency and economy.

The Korean War, however, caused such plans to be put on hold and proved to be another roles and functions watershed for the Marines. The Korean War proved to be another roles and functions watershed for the Marines.

The Korean War taught hard lessons about limited war and the inability of airpower alone to wage it. By 1952, with the lessons of Korea still being learned, Congress moved to recreate forces able to fight small wars as they had in 1798. Passage of the Douglas-Mansfield Act, sometimes referred to as “the Marine Corps Bill,” served to give the Corps a more stable force structure of three divisions and three air wings. But Douglas-Mansfield must be seen in the same light as the Marine Corps Act of 1798. The 1952 law, like that passed in 1798, envisioned using marines "to conduct such land operations as may be essential to the prosecution of a naval campaign." The 1952 law, however, contained the sort of ambiguity legislators relish. Naval campaigns are difficult to define precisely. What the law really reflected was the congressional desire for a standing force prepared to conduct contingency operations from the sea. This, of course, implied a focus on expeditionary warfare.

But distinctions among the roles of the services blurred during the Cold War. The surprise of the Korean conflict created a perception that America must be prepared for “no-notice war.” The Pentagon favored the sort of military advocated in 1955 by Army General James Gavin: “a sizeable force-in-being, ready to move by land, seas, or air and fight anytime, anywhere.” An unintentional result according to one observer was that “the connection between the American Army and the American people was weakened in the name of insuring more rapid response” with an “Army answerable more to the Executive than to the American people.”

The consequences of this departure from the American way of war became apparent in the Vietnam conflict. A major portion of the Armed Forces was committed not to a people’s war, but to what many viewed as Johnson’s or Nixon’s war. The War Powers Act was one expression of legislative concern over what some dubbed an imperial Presidency. In the wake of Vietnam, the relationship between the Army and the people was reaffirmed. As General Fred C. Weyand, USA, aptly commented, “The American Army is really the people’s army” and “not so much an arm of the executive branch as it is an arm of the American people. The Army, therefore, cannot be committed lightly.”

Back to the Future

Successive commandants have reemphasized the expeditionary nature of the Corps in words reminiscent of the Marine Corps
Act and Heywood. General Robert H. Barrow said “we must be prepared to fight anyone, anytime, anyplace. If not, who else?” General Alfred M. Gray stated in unequivocal terms that “the Corps is an expeditionary intervention force with the ability to move rapidly, on short notice, to whatever need[s] to be accomplished.” General Carl E. Mundy, Jr., was even more emphatic when he commented that expeditionary warfare as practiced by marines is a “capability that has been carefully designed... over the years of historic use to be the cornerstone of United States defense.”

In the 1990s the Marines advertise themselves as the Nation’s premier force-in-readiness prepared to fight anytime, anyplace. In fact, the Marines have intervened in small conflicts numerous times since 1945. In a long and winding road from the Spanish American War, the Corps seems to have traveled a great circular path that has led them back to expeditionary warfare.

The past has become prologue. Throughout the 20th century ostensible Marine amphibians were called on to do very un-amphibious work. In fact, while the identity of the Corps is fixed in the public mind (and perhaps its own) as singularly amphibious, its greatest utility is in conducting expeditionary operations on short notice under a Presidential order.

Nonetheless, some continue to see the Corps as exclusively wedded to amphibious assaults as symbolized by John Wayne’s portrayal of Sergeant Stryker in “Sands of Iwo Jima.” Having amphibious expertise is important as the lessons of Vera Cruz, Tarawa, and Inchon attest, but the Marine Corps continues to be unique among world military organizations for the sole reason that the United States is unique among nations. Geography, politics, and global focus have mandated that America possess forces of an expeditionary nature. Although the Corps claims a 219-year lineage, it actually has a much shorter functional history—certainly less than a century—although with distinct ties to the era that predates the Spanish American War. Today’s Marines have a niche in joint force structure as necessary and relevant as other land, sea, and air forces. They occupy the critical interstice between the shore and the sea while continuing to be a ready means of conflict resolution short of all-out war.

The American way of war reflects geography as well as political culture. The Nation is not landlocked but situated amidst the world’s oceanic community. The inherent dilemma we face was described by General George Marshall in 1938: “Geographic location and situation make it literally impossible to find definite answers to... who will be our next enemy... [in] what theater of operations will [our next war] be fought and what will be our national objectives?”

The existence of the Marine Corps ensures strategic balance in an uncertain future. As a microcosm of the military, it can respond to varied and far-flung crises, which it has done on some 209 occasions since World War II. By doing so the Marines prevent the Armed Forces from being fragmented and misdirected from their intended purpose. This division of labor is fundamental to a strategy which must contend with the possibility of fighting two major conflicts as well as meeting lesser threats. Moreover, the Marine Corps buys time for mobilization—after the American people decide to go to war.

Justice Oliver Wendell Holmes wrote, “The life of the law has not been logic; it has been experience.” So it is for the laws that guide the American way of war. The Marine Corps reflects this approach to warfighting. It is the Nation’s warrior class—those ready to go into harm’s way to protect national interests from minor international threats. It also allows the citizenry ample time to determine if they will commit blood and treasure to war. These fundamentals are relevant to the United States as it considers an aberration of the Cold War—a large standing military.

NOTES
The theme of this article is hardly a new one; indeed it was well aired in the interwar years by Major-General Sir Frederick Maurice when he wrote:

"If, as the Field Service Regulations say, the prime object of the Army in war is "in cooperation with the Navy and the Air Force, to break down the resistance of the enemy’s armed force in furtherance of the approved plan of campaign," it follows that the Army can be most effectively employed and our military power as a whole can be most effectively exercised when our Army is within comparatively easy reach of the coast. Therefore in choosing the object of a war, when we have any liberty of choice, that particular feature of our power must be ever in our minds, and we should be very chary of going far inland unless circumstances leave us no option in the matter."

Those words must have made particularly poignant reading in the last weeks of May 1940. Stated as a question, my theme reappears as the challenge, "should Britain’s strategy and forces have a maritime ‘tilt?’"

It is politically correct, as well as strategically prudent, to observe that today the prevention, and if needs be the conduct, of war is both invariably joint (multiservice) and typically combined (multinational) in character. So much is true and even obvious. Rather less obvious is what this joint force truth implies for an ever more resource-constrained British military establishment. As always, the first challenge is to identify the right question.

The question is not how best to shape British policy, strategy, and military capabilities for the distinctly transitional conditions of the 1990s, essential though that is for immediate political cover. Rather it is how to shape policy, strategy, and military capabilities so that they both yield the necessary effect for the transitional period of the mid-1990s and provide a legacy for the future. Designs effected in this transitional period should be such as to provide a sound basis upon which the British strategic contribution to the next great balance-of-power struggle can be founded.
History does not repeat itself, at least not in detail. Nonetheless, Britain in the mid-1990s, seen strategically, is more than casually reminiscent of Britain in the Locrano era of the mid-1920s. Often in defense debates assumptions about the relevant time dimension are an underrecognized factor molding attitudes and opinions. Is the problem for the defense planner one of the military serving foreign policy in the mid-1990s, or is it preservation of the ability to respond tolerably promptly to the strategic consequences of this period? For a related thought, I suggest that the challenge today is not to so reform NATO that it becomes well crafted to cope with the unsettled conditions of the mid-1990s. The Alliance is far too important to risk expending its scarce political capital all but frivolously on Balkan quarrels. NATO should be reformed when we know how to reform it, which is to say when we can discern the shape of the return of threats to vital security interests. The task is to keep the NATO framework sufficiently alive that it can be purposefully revived when bad times return, as surely they will.

**Puzzles for Peace with Security**

The strategic history of the 20th century can be deployed to illustrate many propositions, but one of the more striking contrasts is that between the complexity of the defense planner’s world in the 1890s and today. A century ago the strategic world was two-dimensional, to ignore the faint glimmer of more extensive possibilities: land and the surface of the sea. By way of sharp contrast, the defense planner must contend with five geographically distinctive dimensions of war, as well as with what could amount to a nuclear “wild card” that could trump otherwise successful non-nuclear performance. Today, therefore, the designs of the defense planner must accommodate the possibilities of war on land, at sea, in the air, in space, and on the electro-magnetic spectrum. The need that Julian Corbett recognized and underlined for war at sea and on land to be coordinated by preponderantly maritime or continental strategy was frequently honored in the breach. How much more difficult it is today to coordinate defense plans for the expanded dimensions of war, and also to understand just what military prowess in one geographically medium implies for combat power elsewhere and for strategic effectiveness overall.

Contemporary seapower, for example, has so far coopted more maritime-relevant airpower that it is a matter of choice to distinguish where the one ends and the other begins. Slowly but inexorably seapower is recognizable also that it must coopt spacepower if it is to be fighting fit on the frontier of information-age warfare. It is difficult to assess the relative military effectiveness, and hence the strategic potency, of seapower. Navies both fuse with air and space forces, as they always have done with modest-size amphibious assault forces, and are able to perform traditional naval tasks much more effectively because of the enabling action taken, say, in an air—and one day a space—campaign.

Defense analysis that declines to assume an end-to-end character and that has a noticeably truncated view of the sources of military effectiveness can fail to comprehend the joint nature of modern war. Sharp-end analysis, for example, of the strategic bombing campaigns conducted in Europe and Western Pacific during World War II, or of the air campaign against Iraq in 1991, can neglect to notice that those generally land-based air campaigns were, in effect, conducted as extensions of superior seapower. Landpower, seapower, airpower, and spacepower are distinguishable, though the potency of each typically depends on the performance of one or more of the others; each (with the exception of spacepower) embraces well-established activities that would appear to belong more properly to another (for example, a navy with its own small army and air force); and each contributes more or less strategic effectiveness overall to the outcome of the authentically unified phenomena of deterrence and war. It is possible to recognize the uncertainty of margins between, say, seapower and airpower, or landpower and airpower, as well as the synergisms for improved performance that exist among geographically

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specialized forces. It is also important, however, that appreciation of the scope for strategic choice should not be lost amidst wise-sounding military ecumenism.

Uncertain margins recognized, the synergism of jointness granted, there are possibilities for strategic choice among geostrategic emphases that remain. The fact, for example, that warfare ultimately must have landward reference, and that navies since 1940–41 cannot perform their tasks absent a tolerably benign air environment (cover for their overhead flank), most emphatically does not mean that seapower or maritime strategy are bereft of identity or meaning. Even in the most challenging case for the tidy-minded theorist, that of superpower Cold War wherein land-based intercontinental ballistic missiles could threaten to function as long-range artillery menacing barrage attack against naval task forces, and sea-launched missiles could threaten to neutralize the most continental of target arrays, still it made sense to distinguish maritime from continental strategies. J.F.C. Fuller insisted that of the principal characteristics of a weapon, its range of effective action was by far the most significant. To discuss the limitations and advantages of seapower, it is essential to acknowledge first that both landpower and seapower can find the reach occasionally to grasp each other’s center of gravity ashore and afloat. Second, there can be no evasion of the complication posed by the emergence of a mature airpower that truly has a global range (though not for a sustained campaign, as contrasted with a raid or two). It is usual to compare maritime with continental strategies, and similarly to think of national strategic-cultural orientation in terms of that binary choice. In the view of some commentators, however, a third choice has finally appeared. In early 1991 banners proclaiming that “Douhet was right!” were hung from some U.S. Air Force buildings. To cite the immortal words of the principal author of the air campaign in the Gulf War, “The world has just witnessed a new kind of warfare—hyperwar. It has seen airpower become dominant.”

In a slightly less triumphalist view, Edward Luttwak proclaimed that “airpower execution caught up with airpower theory, as witnessed by the conduct and results of the Gulf War.” The theorists of airpower in America have continued to seek vindication of service independence in unmistakable evidence of the capacity to achieve decision in war by independent action in and from the air. This somewhat curious and strategically forlorn ambition may not be unique to air forces, but certainly it is strongly characteristic of them. The fact is that airpower is important in virtually all conflicts and very occasionally just might be a military executive agent for decisive success. More to the point, perhaps, airpower’s potency over an increasing range of operational contexts (not just the desert or the sea on a clear day) implies a growing ability to function as the key force in either deterrence or defense, the key force to which land, sea, and space elements strictly have only adjunct status. Yet the limitations and advantages of seapower find ample parallels in the actuality and even the potential of airpower. For example, Rear Admiral J.C. Wylie may not be entirely correct in writing that “the ultimate deterrent in war is the man on the scene with a gun,” but one knows what he means and can appreciate what speed, altitude, and distance can mean for local control.

Politically, strategically, operationally, and tactically, each of the geographically distinctive dimensions of war enhances the performance of the other. Indeed, the strategic challenge often is to find ways to transmute success in one environment into good enough performance in one or more of the others. As Donald Kagan observed in the magisterial conclusion to his commentary on the Peloponnesian War, “...[the] war was one of those classic confrontations between a great landpower and a great naval power. Each entered the war hoping and expecting to keep its own element and to win a victory in a way that conformed to its strength at a relatively low cost. Within a few years events showed that victory would not be possible that way for either side. To win, each had to acquire the capacity to fight and succeed on the other’s favorite domain.”

The virtues of jointness suggested by fashion and good manners as well as common sense can, however, be overstated. It is
true that because the seat of political purpose must rest on land, seapower, airpower, and spacepower typically will play enabling roles, which is to say roles that enable conflict to be concluded successfully on land. Contrary to the apparent implication of that point, however, advantage at sea, in the air, or in space quite literally may provide a decisive edge in war overall.

To grasp the joint nature of warfare is all very well, but general truths can be less than compelling when applied to particular historical choices in defense policy and planning. It is one thing to assert the essential unity of deterrence and war and the many synergisms that work among their different dimensions. It is quite another to know what that should mean for actual historical choices.\textsuperscript{12} Not all policymakers and defense planners find much in Clausewitz’s conclusion:

\textit{Theory cannot equip the mind with formulas for solving problems, nor can it mark the narrow path on which the sole solution is supposed to lie by planting a hedge of principles on either side. But it can give the mind insight into the great mass of phenomena and of their relationships, then leave it free to rise into the higher realms of action.}\textsuperscript{13}

Typical scholarly evasion, one might think. The scholar explains the structure of the problem and thereby helps educate the minds of those who must make discrete choices on policy, forces, or taking action. The great man was correct, of course, though not in a way that busy officials find useful. The rather bounded utility of Clausewitz’s reasoning helps explain the longstanding popularity of the more positivist view of theorizing represented by Jomini,\textsuperscript{14} a tradition continued by Mahan,\textsuperscript{15} and—in our time—perpetuated by “stability theorists” from the intellectual stable of the RAND Corporation in the 1950s and after.\textsuperscript{16}

The sheer complexity of the multidimensionality of warfare poses puzzles for peace and security. It may be true that the five dimensions of war function synergistically to enhance overall strategic effectiveness, but is it also useful? If everything enhances everything else, what should we buy? A helpful guide through what otherwise can be an impenetrable thicket of ideas on joint and combined operations lies in a sensible approach to a long familiar concept.

\textbf{Balanced Forces}  
That familiar concept contained in the credo of politically correct modern strategic thinking is balanced forces. “I believe in jointness, and in balanced forces that sometimes will be combined,” and so on and so forth. Rarely is it evident what is meant, let alone implied, by endorsing balanced forces. It sounds very much like a politician’s concept. Few people are inclined or willing to stand up for unbalanced forces; indeed, if you are sufficiently careful in your lack of precision, you will never need to do so. In common with stability, the notion of balance can mean virtually whatever you wish it to mean. Since the superpowers negotiated off and on for twenty years in SALT, then START, without benefit of an agreement on what was stabilizing and what was not,\textsuperscript{17} perhaps the indeterminacy of balanced forces should not be cause for surprise. I will attempt to advance the argument by suggesting five non-exclusive meanings for the concept of balanced forces.

First, services need to be balanced for their external strategic integrity rather than for their internal beauty. The latter is not to be despised, but it stands to external integrity much as tactical prowess stands to strategic effect. Whatever their composition, the services exist primarily as more or less complex instruments of the grand strategy of the state; they are not funded to function as a well-oiled machine as an end in itself. Military power, therefore, should be balanced against best estimates of a nation’s need for it. It is not for nothing that mass, or concentration, is cited as a principle of war: numbers matter. A naval establishment may be wonderfully balanced among its constituent parts—in a happily clockwork strategic universe—but there may be too little of it to deter, and if needs be to fight, the Queen’s enemies.

Second, and to be more respectful of a clockwork universe, the services need to be balanced as a military machine. Land-based elements that conduct an air campaign may require the supply of fuel and ordnance by sea; naval forces operating far beyond ready sustenance from shore bases require the assistance of a fleet train,\textsuperscript{18} et al. Whatever the mix chosen among environmentally specialized forces, whatever the trends in joint doctrine and combined operations, the military must work in combat if it is to serve national
or coalition security well enough. It is essential, however, that the understandable fascination in peacetime with the internal integrity of the services, so that they can work well tactically and operationally, should not obscure unduly their strategic function.

Third, the services need to be balanced against the calculated demands that could be placed on them across a more or less extensive range of conflict scenarios. This, most profoundly, is a matter for judgment in foreign policy. It is not for the armed forces to try to decide how intensely the nation may be possibly engaged here or there in the future. Nonetheless, the services, suitably joint in orientation and hopefully combined usefully with the forces of other polities, have to be developed so as to be balanced for deterrence or defense vis-à-vis several kinds of conflicts, most probably in diverse geographical contexts. The spectrum of conflict extends from unpleasantness that may attend humanitarian intervention, through local and regional quarrels, up to and including the appearance of yet another great balance-of-power struggle.

Fourth, the services should be balanced for tolerable fit with unique national strategic needs and preferences, as well to exploit national strengths and provide suitable cover for weaknesses. In other words, consistent with the generation of an adequate strategic effectiveness in support of overall foreign policy, British and other armed forces should be balanced expediently for comfort and convenience in a strategic culture: they should reflect a nation’s geostrategic circumstances, traditions, habits of mind, and effective practices. That may sound unduly conservative, even romantic, or both; really it is just prudent. One does not have to endorse, for example, a particular view of British strategic culture that Corbett derived significantly from studying the Seven Years War, or that Basil Liddell Hart adopted in repudiating Britain’s 1916–18 vintage continental role, in order to find value in the concept of a British way of war. Similarly, the exaggeration of the maritime dimension in British policy and grand strategy by Corbett and Liddell Hart should not blind us to the exaggeration of the continental dimension that one finds even in the analyses of such distinguished scholars as Paul Kennedy and Michael Howard. Even if we do not theorize about this century, assuredly we theorize from this century. This century has, of course, underlined the periodically appalling scale of the continental dimension to Britain’s security problems.

Finally, armed forces need to be balanced by strategic reasoning rather than arithmetically. The principle of balance could suggest scales that measure equal weights. The nation should not invest in armed forces that are neatly balanced among themselves either in terms of resource inputs or even performance outputs. Who cares whether service (functional) budgets are arithmetically equal any more than whether or not British landpower, seapower, and airpower all generate like amounts of combat power? Such standards would be absurd. The armed forces need balance to meet the strategic demands of those conflicts that foreign policy insists they enter.

I have not suggested here that Britain’s services should be so balanced for comfortable fit with dominant national strategic culture that they become massively specialized (over-specialized) for operations in and from one geographical environment only. Having said that, I must add that what might be called full service armies, navies, and air forces can provide an impressive flexibility in their ability to influence events in other environments. Often there are alternative military ways of performing tasks for foreign policy. Landpower, seapower, airpower, and one day spacepower are no more clearly mutually distinctive than are land powers, sea powers, or putatively air powers or space powers. Most polities have some land, sea, and airpower. The questions are how much of each, and is there a dominant geostrategic orientation for each?

It is useful to descend from the great abstractions to include two significant caveats. First, grand strategy, no matter how valid at its own elevated level of analysis, always is vulnerable to embarrassment in particular historical cases. Events that could produce conflicts in which Britain would decide it must join in some capacity would be no more random than pertinent foreign policy decisions. But the future can only be anticipated by classes of possibilities; it cannot be...
predicted in detail. One can always point to a truly exceptional conflict that might generate strategic demands the nation could meet only by monumentally adaptive military practices. (One particularly clear example is the scale and duration of Britain’s continental commitment in The Great War). If so much is granted, still the nation should not, indeed politically could not, balance preparations to fit the emergence of what could amount to a truly super threat.  

The second caveat is that just because one identifies possible conflicts of interest to Britain, and just because competent military performance in those conflicts would require joint operations of a most testing kind, it does not follow necessarily that Britain either needs to intervene or would need to intervene with decisively effective British forces in all environments. These thoughts bring us to the subject that can be deferred no longer—policy guidance for defense planning.

The Perils of Planning

I am enough of a positivist to be suspicious when I read that the leitmotiv for planning is the need to cope with the unexpected or manage uncertainty. It used to be said that the coronation of uncertainty as a strategic principle governing NATO’s concept of flexible response was all too appropriate, given the confusion in our minds. If our response was unpredictable even to us, how much more uncertain must it seem to Soviet statesmen? It is very well to speak seemingly wisely and prudently about preparing for the unexpected, but what does, or should, that mean in terms that could lend themselves pragmatically to assist the defense planner? Where are the boundaries of the unexpected: an asteroid from space, a nuclear-armed Zhirinovsky insecurely in command of the Russian ship of state, a United States that decides it has done its duty often enough in this century for the balance of power and world order?
There is a wide menu of options for defense planning; there is probably a methodology to suit most tastes. But planning methodologies lack a quality that is key to the purposeful integrity of the enterprise: namely, political guidance expressing foreign policy judgment has to be provided as an input for defense planning. Defense planning does not have integrity unto itself. There is no correct way to conduct defense policy and force planning, though the positivist defense rationalist in this writer persists, against the historical evidence, in believing that there are better as contrasted with worse ways for defense planners to proceed.

Field Marshall Sir Nigel Bagnall observed that, “over the centuries identifying a nation’s future strategic priorities has proved to be a very imprecise art, and as a result peace-time force structures have seldom proved relevant when put to the test of war.” This a harsh judgment, yet probably correct and certainly well worth worrying about. There is no elixir that a defense planner can imbibe that will allow him or her to distinguish the fanciful from the real future. Nonetheless, it is possible to offer some general thoughts that approximate in spirit, at least, what Clausewitz identified as the character and purpose of theory. Theory exists so that one need not start afresh each time sorting out the material and plowing through it, but will find it ready to hand and in good order. It is meant to educate the mind of the future commander or, more accurately, to guide him in his self-education, not to accompany him to the battlefield.

First, an approach suitable for dealing with the unexpected or uncertainty excludes foolish and impracticable pursuits of surprise avoidance. The future is full of surprises, some pleasant like the collapse of the Soviet empire and some unpleasant like the persistent violence of intra-Balkan hatreds, most of which carry little if any obvious meaning for British defense policy. However, although we cannot plan against surprise, we can plan against many of the worst of predictable surprise effects. For example, the precise identity and timing of a modestly scaled but possibly not modestly armed ballistic missile threat to British forces or Britain itself cannot be predicted; we will be surprised in detail. Nonetheless, we can prepare prudently and effectively to neutralize the effects of such surprise. The forms that conventional deterrence could assume include threats to take both offensive and direct defensive action.

Though history is inconveniently more than cyclical but less than arrow-like, still a great deal about the future that should interest defense planners is identifiable in general terms. With a suitable bow to the fashionable chaos theory that alerts us to possible nonlinearity in events, the continuities in the conditions that shape strategy and statecraft are impressive and worth recalling. For the leading example, geography in all its aspects and implications for policy, as well as culture and the preferences it teaches and expresses, mean that planners and their political masters do not confront a tabula rasa when they wonder what the late 1990s may bring. It is instructive to identify what is known and unknown in useful detail in order to determine what information is available for planning. Needless to say, perhaps, you will be aware that it may be an unknown unknown that poses the most severe challenge. Nuclear planning was often troubled by the discovery of hitherto unknown or underappreciated weapon effects. Defense planners cannot know exactly what will be demanded of the military or where; but they should have a reasonable idea concerning the why, the where, the whom, and, even in general but still useful terms, the kind of what.

Second, it so happens that we do know important things about the security environment of the future. For example, bad times always return; perhaps the 1990s will disprove this dictum, but the smart money is on the continuing validity of the lessons from the better part of three millennia. Also, we know that the purportedly novel primacy of issues of economic and environmental (et al.) security over traditional areas of security almost surely reflects the confusion of an extraordinary, temporary period, for some permanent sea change in security. Of necessity, military power is built on economic power, but at any given historical juncture, military power will come up trumps: guns outrank fat purses.

Third, a British policymaker or defense planner cannot know precisely when, where, or by whom British interests will be in peril.
But, following as much of Sun Tzu's counsel as should prove practicable, he can know himself and his own society in advance of certain knowledge of the enemy.31 He can specify the hierarchy of national interests—from those of a survival down to an other category—that, in descending order, are more and then less likely to require military support. It is interesting but not crucial for the defense planner to acquire an improved understanding of the unfolding character of the global security environment. The crucial question is what this unfolding character means for Britain. A national interest discriminator has to be applied by the makers of foreign policy.

Fourth, Britain remains very much a maritime nation. The international trade on which the prosperity of its industrial civilization depends is overwhelmingly, as it has always been, maritime international trade. For heavy or bulky goods, Mahan remains authoritative in his 1890 judgment that "both travel and traffic by water have always been easier and cheaper than by land."32 Marred to the continuity of the seas and oceans and the continuing comparative advantage of sea transport in ton-mile costs, Britain's insular geopolitical condition all but ensures the necessity of a maritime framework for its foreign policy. Unless allies are logistically competent and accommodating, or the mission has the character of a special operation (which is to say it is very small in scale, brief, and stealthy), the center of gravity for British strategic effectiveness has to remain maritime.

Fifth, whatever statesmen may prefer by way of policy logic in guidance for their defense planners, there is, après Clausewitz, a grammar to military affairs that can and should impose itself on defense plans.33 For example, if Luttwak was correct in his judgment that "airpower had finally done it" in the Gulf in 1991, what if anything does that imply for the relative weight of investment that airpower merits in our defense future? Although it is unwise to draw sweeping conclusions and to rewrite doctrine on the basis of one campaign that may or may not have lessons of wider validity, surely it would be unwise to ignore relationships visible in the latest active passage of arms on a large scale. Because every war is waged in unique conditions, it does not follow that its military meaning is utterly distinctive.

The joint and combined warfare stories evolve. Defense planners need to monitor evidence and argument concerning the relative combat prowess and significance of the different dimensions of war and the different components to each dimension. A difficulty with revolutions in military affairs is that they are never historically precisely bounded, nor are they universal in their authority. Consider the longstanding debate over the survivability of surface ships. Strategic, operational, and tactical contexts are everything. The tactical relationship between surface ships and their foes must alter with the political identities of adversaries (whose surface ships and whose weapons menace them?) and the highly variable geography of potential combat. Similarly, debate over the future of heavy land forces needs to be informed by awareness of trends in net tactical advantage as between armored fighting vehicles and their enemies (anti-tank guns, helicopters, infantry anti-tank missile systems, mines, and new unconventional weapons). But a general trend that plainly leans to the tank's disadvantage may well mean little in a particular place, at a particular time, against a particular enemy not well equipped to neutralize one's tanks and armored personnel carriers.

The strategic course of this century points out that defense planning is a perilous enterprise. More often than not, those providing defense guidance and planners themselves were significantly in error. This is not the place to explore why that should be, but it is the place to register the fact. Why were Field Marshal von Moltke (the elder) and Lord Kitchener so lonely in their prescience about the probable duration of the next European war? A systematic study of pre-war expectations would be a worthwhile enterprise—though probably it would reveal no common methodology for success, rather the statistical point that someone had to get it right!

Limitations and Advantages

Those who engage in public debate over strategy will be painfully aware of the significance of context (viz., notional-theoretical,
Each kind of geographically oriented force has distinctive limitations and advantages, albeit limitations and advantages of varying weight for different conflicts. The limitations of seapower are:

- **essentially an enabling agent**
- **difficulty gripping continental foes**
- **strategically slow in operation**
- **tactically relatively slow**
- **high expense of platforms means few platforms, modest-scale distribution of value**
- **weather**.

By contrast, the advantages granted by superior seapower are:

- **flexibility, mobility, adaptability**
- **endurance on station**
- **enables global strategy**
- **noncommitting continuous presence**
- **places strategic frontier close to enemy's coastline**
- **provides means to bind together global coalition, provides interior lines of communication**.

For the sake of comparison, similar lists can be developed for other forms of military power. Airpower includes the following disadvantages:

- **gravity, expense to offset**
- **sophistication, expense, low numbers**
- **weather**
- **brevity of presence**
- **altitude—distance from the ultimate seat of action**
- **political boundaries in the air**.

The advantages of airpower are:

- **ubiquity, a global medium**
- **overhead, encompassing, surrounding, comprehensive flank, high ground**
- **range and reach**
- **speed of passage**
- **geographically unrestricted routing**
- **superior observation**
- **flexibility in concentration**.

In thinking about the limitations and advantages which pertain in general terms to each form of military power, it can be instructive to attempt a four-way analysis. Specifically, land, sea, air, space, and nuclear forces can be analyzed in terms of what each capability can uniquely perform, cannot perform at all, tends to perform well, and tends to perform poorly. The services plan to perform in joint and combined contexts precisely to offset limitations. For Britain, if it is necessary to choose where the balance should be among geographically focused dimensions of war, the limits of seapower are more bearable, and culturally and strategically more tolerable, than would be the limits of landpower or airpower as the leading edge of military prowess.

This analysis has had as its center of gravity the issue of seapower in relation to landpower and airpower for Britain. The subject here is not the strategic utility of seapower versus landpower versus airpower versus spacepower, at some abstract, free-floating level of strategic assay. And, finally, the argument has avoided contention over sea control vis-à-vis power projection in good part because there is not much worthy of discussion in that realm. Jan Breemer is wrong. Naval strategy is not “dead,” rather it is resting pending the next call to action when bad times return to world politics, as surely they will.


12 Paul M. Kennedy, The Rise and Fall of the British Empire (New York: Charles Scribner’s Sons, 1976), and Michael Howard, “The British Way in Warfare: A Reappraisal,” in The Causes of Wars and Other Essays (London: Counterpoint, 1983), pp. 189–207. Kennedy more recently noted that “this further swing in the historiography towards the continental aspect of British grand strategy], if continued, suggests that the danger may soon, or already, be that scholars become too dismissive of the influence of sea power upon history and thus explain away the popularity of Mahan’s ideas as being simply due to the heady expectations of that ‘age of navalism’ which occurred in the two decades prior to the First World War.” “The Influence and the Limitations of Sea Power,” The International History Review, vol. 10, no. 1 (February 1988), p. 7.


14 This thought is pursued in my work entitled Weapons Don’t Make War: Policy, Strategy, and Military Technology (Lawrence, Kans.: University Press of Kansas, 1993), pp. 95–99, “Super Threats.”


16 Field Marshal Sir Nigel Bagnall, “Foreword” to Hoffkirk, Land, Sea or Air?

17 Clausewitz, On War, p. 141.

18 Liddell Hart, History of the First World War, p. 323.


21 Emphasis in original.


23 “While negotiating START in 1987-91, the parties were not operating on any mutual understanding of the meaning of ‘stability’ . . . only at the final stages of talks did the Americans and Soviets arrive at a common definition of strategic stability, albeit a general and vague one.” Alexis G.A. Ashton, “We Could Have Done Better,” The Bulletin of Atomic Scientists, vol. 47 (November 1991), p. 37.


28 See Geoffrey Parker, The Influences of Sea Power upon History and Strategy, London in the Nineteenth Century (Oxford: Clarendon Press, 1963), p. 84. “When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.”

29 Emphasis in original.


31 Sun Tzu, The Art of War, translated by Samuel B. Griffith (Oxford: Clarendon Press, 1963), p. 84. “When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.”

32 Sun Tzu, The Art of War, translated by Samuel B. Griffith (Oxford: Clarendon Press, 1963), p. 84. “When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal.”

33 Emphasis added.


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In the summer of 1917 Britain was under siege. German submarines had been causing havoc on the seas for three years, but a direct terror struck as Gotha bombers attacked London. The government immediately appointed a committee to study this threat. On August 17, 1917 the committee unequivocally recommended creating an independent air force. In proposing what became the Royal Air Force (RAF), the committee relied on reason, not precedent. Because the origins of the first armies and navies are not similarly documented, the RAF provides a case study of the establishment of a new branch of the military. Any explanation of why the United States needs an air force can be illuminated by surveying the history of warfare since 1914, starting with the way in which a group of army and naval officers brought an independent air force into being.

On the Basis of Reason

Britain created the world’s first independent air force as a response to air raids on its cities during World War I. Prime Minister Lloyd George formed a “Committee on Air Organization and Home Defence Against Air Raids” and staffed it with army and naval officers in order to turn the problem over to...
military experts. The committee, under Field Marshal Jan Christian Smuts, recounted the “acute controversies” between separate army and naval air arms over how military air-power should be organized. It noted that existing air services, the Royal Flying Corps of the army and the Royal Navy Air Service, were used like artillery—to accomplish tasks assigned by their respective services. These organizations were not capable of establishing policy or planning and conducting major air operations since they lacked expertise, means, and especially authority. The requirement to form an autonomous air force, however, was clear to the committee:

Essentially the position of an air service is quite different from that of the artillery arm, to pursue our comparison; artillery could never be used in war except as a weapon in military or naval or air operations. It is a weapon, an instrument ancillary to a service, but could not an independent service itself. Air Service, on the contrary, can be used as an independent means of war operations. . . . Unlike artillery, an air fleet can conduct extensive operations far from, and independently of, both Army and Navy.

The soldiers and sailors who comprised the Smuts committee focused on the needs of the country rather than the demands of their services. The committee realized that both services were fully competent in their respective fields, but neither was “specially competent” to devise and direct the independent air operations Britain planned for 1918. In recommending creation of a separate air force, these officers ensured that strong air support would be available to both the army and the navy. Their expressed reasoning was farsighted, objective, and comprehensive. Strategic perils on the near horizon were their first consideration. The committee reasoned that a national air force was needed to fully develop the new technology, organize forces to make the most of that technology, and employ those forces to make the greatest possible contribution to the war. Their deliberate focus on the implements of air warfare was timely and crucial, since all the belligerents were approaching a point of exhaustion and beginning to see the military revolution at hand: “Manpower in its war use will more and more tend to become subsidiary and auxiliary to . . . mechanical power.”

Organization was another consideration. The committee made eight recommendations in its report to the Prime Minister. The first was to create a ministry for air, a cabinet department equal in status to those of the army and navy. The second was to form an air staff “equipped with the best brains and practical experience available.” An air department was the first step in building a national air force; manning the service with air professionals was necessary to make it function. Effectiveness and efficiency were the third consideration. The report surveyed the field of possibilities for organizing an air force and discarded each option that could have the effect of reducing national air strength and effectiveness. In sum, the committee determined that an air force was essential. The officers who made these recommendations explicitly considered putting them off until after the war but determined that failing to create an air force was a risk. Ultimately the foremost reason for establishing an air force, without precedent or evidence of modern airpower capabilities, was national survival.

On the Basis of Evidence

When Congress passed the National Security Act of 1947 it had ample evidence to justify an air force, and nuclear deterrence was only the latest. In the theaters of World War II, airpower had proved necessary and sometimes sufficient to achieve major war aims. The campaigns in the Southwest Pacific provide excellent examples of joint air operations. General Douglas MacArthur described Japan’s first major defeat in the theater in these words:

The outstanding military lesson of this campaign was the continuous calculated application of air power, inherent in the potentialities of the Air Force, employed in the most intimate tactical and logistical union with ground troops.

Across the globe at the same time, American air forces in Britain were attacking German war industries while others in the Mediterranean wrested control of the air from
the Luftwaffe, shielded surface forces from air attack, supported a series of amphibious campaigns, and bombed Axis oil supplies. As soon as Sicily was in Allied hands, the Mediterranean air effort was focused on Italy to prepare for amphibious landings at Salerno and Messina. After six days of concentrated bombing, Mussolini was overthrown and the Italian government sued for peace. Ground forces continued to fight a terrible campaign in Italy in an intimate union with air forces, but only German occupation forces opposed them.10

Two Axis belligerents of World War II—Italy and Japan—surrendered after Allied forces occupied their outlying territories, but before assaults on their central homelands began. This can be attributed to a fear of airpower or invasion. More precisely, these factors are inseparable since mastery of the air was a prerequisite for amphibious operations. As General Dwight Eisenhower remarked to his son after Normandy, “If I didn’t have air supremacy, I wouldn’t be here.”11

Before the campaign for Northwest Europe could begin, Allied air forces gained control of the air over the theater, attacked key industries, and prevented the German forces from reinforcing Normandy after D-Day. As Allied forces advanced, the U.S. 9th Air Force operated primarily in support of ground forces while the 8th Air Force worked primarily far beyond the lines, creating long-term advantages. But it would be a mistake to draw a sharp distinction between the missions of tactical and strategic air forces; all available forces worked together repeatedly, as overall needs required.12

Allied air forces secured the air over every theater save one. On the Eastern Front, neither Russia nor Germany succeeded in using air forces to gain lasting ascendancy over its opponents. Both used their air resources primarily in a combined-arms fashion, to support ground operations. By contrast, the American and British forces centralized control of air assets at the theater level, alternated between independent and supporting missions as needed, and created higher opportunities for the overall campaign.13 The tactical and operational competence demonstrated by Soviet and German air forces in supporting their ground arms could not make up for strategic shortfalls in air planning. It would be futile to try to explain what might have happened if either side had employed its forces using a higher-level construct of joint operations, but it is significant that the Eastern Front was by far the bloodiest in World War II.14

A U.S. Air Force

Thinking about a postwar air force began seriously in 1943, when then Major General Thomas T. Handy of the General Staff wrote a planning paper on future defense needs. He pointed out the requirement for “a complete correlation of national policy with military policy and the political ends to be sought with the military means to achieve them.” General George C. Marshall, the Army Chief of Staff, endorsed the paper and made this marginal note: “I think maintenance of sizable ground expedi- tionary force probably impracticable. Having airpower will be the quickest remedy.”15

Handy and Marshall focused on future policy needs, and then Vice President-elect Harry S. Truman wrote presciently in 1944:

Our standing air force will undoubtedly remain larger than ever before in peacetime. We will need an active air force to carry out the policing missions that will be required of us by the forthcoming United Na- tions agreement to put out aggressor fires while they are still small. This air force will be more alert and experimental than ever before—it will keep up with the latest developments, and will create developments of its own. It will be in a constant stand-by condition, a powerful deterrent to any fleet of long-range bombers or salvos of super-robot bombs capable of long flight and pinpoint aim.16

Note that Truman had no knowledge of nuclear weapons at this time; he foresaw that the future air force would be a “powerful deterrent” in itself. Fulfilling this role required that this air force be ready and responsive. The need for a separate air force was clearest to commanders at theater-level
who saw most directly the benefits of employing such forces both in coordinated joint operations and in areas where other forces were absent. Eisenhower was so convinced of the need for a separate air force ("No sane officer of any arm would contest that thinking") that he conveyed this conviction to a meeting of the Army Staff in December 1945, saying:

the Air Commander and his staff are an organization coordinate with and coequal to the land forces and the Navy. I realize there can be other individual opinions. . . . But that seems to be so logical from all of our experiences in this war—such an inescapable conclusion—that I for one can't entertain any longer any doubt as to its wisdom."

The National Security Act of 1947 formalized the responsibilities assigned to the Air Force, but did not create a monopoly on operating air forces. Rather, it stipulated that the United States would rely on the Air Force to develop and apply airpower. No other service is so charged. With this mandate Congress established symmetry among services, fixing responsibility for developing and maintaining specialized military competence in the ground, sea, and air media.

Creating the Department of the Air Force and a service within it ensured that there would be a military arm responsible for nurturing the potential of aviation, developing air capabilities to serve national needs, formulating and executing air policy and strategy, and fostering special competence and expertise unique to conducting military operations in the air environment. Since the Air Force was founded, the Nation has relied on it for deterrence, combat, and early crisis response as well as strategic, operational, and tactical leverage—and as a way to achieve national policy aims in joint and combined operations, as it surely did in 1991.

The Gulf War

The accomplishments of all the services in Desert Storm have been seriously under-valued. The Iraqi military had more combat experience employing modern weapons—including precision guided munitions, night vision devices, recent generation artillery and rockets, cluster bombs, laser designator, and electronic warfare—than the coalition nations which it faced. Iraq had spent and borrowed tens of billions of dollars equipping its forces in its war against Iran with the goal of using technology and firepower to minimize casualties. Some of its soldiers and airmen had as many as eight years combat experience. Iraq was a formidable regional power and well aware of it. These facts are too often overlooked in the light of the swift collapse of Iraqi forces. Allied operations could have begun with an air effort, frontal assault, flanking attack of any size, airborne operation, amphibious assault, or combination of these measures. Trevor N. Dupuy analyzed all these possibilities, projected casualties, and concluded, "the proper solution is to begin the war with the air campaign [to minimize casualties]. . . . If this should result in an Iraqi surrender, so much the better." Desert Storm was not solely an Air Force triumph; it was a modern warfare success in which air forces played a bigger part than in earlier wars. It relied on specialized competence in all media of warfare, on excellence in weaponry, tactics, logistics, operational art, and strategy. No amount of superiority in one field could have overcome deficiencies in others, except at great cost. It demonstrated that the Armed Forces of the United States, when employed synergistically, are exceedingly difficult to defend against. Command at the component level leveraged each arm within a joint construct that ensured mutual support and created synergy. The air component rapidly gained command of the air, devastated Iraqi command and control, destroyed key strategic targets (including electrical power generation and transportation), isolated the battlefield, and destroyed about half of Iraq's firepower in Kuwait—all before the allied ground offensive began. But how did having the major share of this airpower organized, trained, and equipped by the Air Force make a difference? Eliot Cohen has pointed out that Air Force dominance in planning air operations against Iraq ensured coherence of the allied plan:

American defense planners should look at what happened and ask whether these improvisations do not point the way to greater effectiveness. After several decades of insisting that "service" means "parochial," military reformers might ponder the individual merits of the services, each of which can pool a great deal of operational expertise along with a common world view and an esprit de corps difficult to find among a melange of officers.
Had Gulf War operations been guided by a doctrine calling for simultaneous employment of all forces, or had air operations been driven solely by surface force support requirements, allied forces would have suffered far more casualties. The Air Force ensures that there are always professionals within the armed forces thinking about how airpower can best serve joint forces and the Nation.

In conventional conflicts since World War II air forces have set the conditions for joint operations, establishing advantages and opportunities for all components. As Admiral William F. Halsey told Congress after World War II: "The lesson from the last war that stands out clearly above all the others is that if you want to go anywhere in modern war, in the air, on the sea, on the land, you must have command of the air." This is no less true today, although space supremacy and informational dominance have become necessary accompaniments to air supremacy.

Many of the reasons for creating an air force have not changed significantly since the Smuts committee issued its report in 1917. First and foremost, an air force exists to develop and maintain special capacities to promote and defend national interests (as the other services do, each in a distinct way). Though air attack on the United States seems a remote possibility, the Nation must have an air force capable of helping its friends and allies protect their people and forces from hostile attacks. The big picture mission of the Air Force, to control and exploit air and space, has two dimensions. In the foreground, controlling includes everything needed to control air or space. In the background, exploiting includes tasks that are best done in air or space and those that confer special advantages when conducted by air or space forces. The big picture mission of the Air Force, to control and exploit air and space, has two dimensions. In the foreground, controlling includes everything needed to control air or space. In the background, exploiting includes tasks that are best done in air or space and those that confer special advantages when conducted by air or space forces.

Increased speed, reliability, and responsiveness have fortified the presence of air forces, if relatively. The ability to conduct independent missions in areas where ground and naval forces cannot reach or are not present remains a primary military advantage of an air force. To cover the logical field of possibilities noted by Smuts, an air force can support efforts on land and at sea, operate where ground and naval forces cannot, and undertake operations that can be performed only from the air. Similarly the Army and Navy have unique operating capacities for which the Air Force cannot substitute. The complexities of air operations still stem from operating in three dimensions with no option to stop moving, from operating above the apparent horizon with nowhere to hide but the immensity of airspace or the interstices of the terrain, and from the interdependence of air and space units. However, the complexity of air and space systems today was undreamt of decades ago. It takes a decade or more to master a modern aircraft—aircrews and system maintainers never stop learning. Preparation to plan and conduct air operations is a lifetime commitment, just like the mastery of ground and naval warfare.

The current place of the Air Force in conventional warfighting and Operations Other Than War would not have surprised the Smuts committee, which observed that "as far as can at present be foreseen there is absolutely no limit to the scale of [airpower's] future independent war use." What might surprise those prescient soldiers and sailors? Perhaps the ease of operating coalition air forces together in a common purpose. Possibly the global preeminence the U.S. Air Force enjoys, largely as a result of investing in technology which maximizes mission reliability and minimizes lives at risk. Probably not the interplay of air capabilities and national security policies. The one outcome that might surprise the army and naval officers on the Smuts committee today is the power of their foresight.

NOTES


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The Smuts committee, noting that British aircraft production in 1918 would exceed army and navy support requirements, wrote: "In settling in advance the types of aircraft to be built, the operations for which they are intended apart from naval or military use should be clearly kept in view. This means the Air Board has already reached the stage where the settlement of future war policy in the air war has become necessary. Otherwise engines and machines useless for independent strategic operations may be built." H.A. Jones, The War in the Air: Being the Story of the Part Played in the Great War by the Royal Air Force, appendix II (Oxford: Clarendon Press, 1917), pp. 10-11.

Ibid., p. 10.

Ibid., p. 11.

Ibid., p. 12.

Field Marshal Sir Douglas Haig took exception to the Smuts committee in a letter to the Chief of the Imperial General Staff dated September 15, 1917. While some objections may appear to be sophistry, Haig allowed that the military potential of air forces could best be determined by those with practical knowledge, and that their optimism was a matter of "urgent importance." Letter reproduced in Air Power Historian, vol. 3, no. 3 (July 1956), pp. 153-57.


"Southern Italy: Strategic Confusion, Operations for General MacArthur in the Pacific, vol. 1, Army Ground Forces Operating as One of Three Autonomous Army Commands Along with Army Air Forces and Army Service Forces. Neither the ground nor the service forces commanders were JCS members. This confusing command arrangement combined with shortfalls in Army Air Force support created unacceptable constraints on one of airpower's key strategic attributes, responsiveness. Wolf, Planning and Organizing the Postwar Air Force, pp. 23, 27-29, 48, 74.

It is not possible to recapitulate airpower history since World War II. But rather than dodging Vietnam, accept this summary of Momoy, Summers, Krepinevich, Goldflelter, and Tifft: relying on firepower or airpower is not a satisfactory substitute for strategy. There are many lessons from Vietnam, but none so vital as the need for sound and clear strategic thinking. This, at least as much as the excellence of the services, paid off in Desert Storm. See, for example, Anthony H. Cordesman, The Iran-Iraq War and Western Security, 1984-1987 (New York: Jane's, 1987). Anthony H. Cordesman and Abraham R. Wagner provide a more complete, updated appraisal in The Lessons of Modern War, vol. 2, The Iran-Iraq War (Roulse, Colo.: Westview Press, 1990), but typographical errors make this a frustrating account to read.


Quoted in House Armed Services Committee report of October 1949 hearings in Emme, War in the Air, p. 639.

Something we take for granted because of the rapid retaliatory capability of the Armed Forces. This is a tremendous bargain compared to maintaining a leakproof defense.

Jones, The War in the Air, p. 10.

Roles, Missions, and JTFs: Unintended Consequences

By STEVEN L. CANBY

The challenge facing the American military is to sustain the size and readiness of its forces while reducing its budget. Greater jointness is needed; but it will not resolve or significantly affect this challenge. Nor is there a mother lode in realigning roles and missions. Jointness seeks to gain synergism and avoid parochialism by command arrangements and broader multiservice training. It unfortunately institutionalizes the presumption that joint operations are preferable to single-service operations even when jointness complicates an operation that should be swift, small, and discrete. Current initiatives to realign roles and missions simply re-plow the same old fields in the same old way. The variables today are political: the spotlight shining on the current effort will give greater weight to its conclusions, while the aura of jointness may diffuse those variables by evoking multiservice complementarity (static synergy) and assistance (enabling). Savings will accrue, though mainly at the expense of force structure and loss of service identity in support functions.

A qualitative approach is needed to maintain the integrity of the force, reach higher levels of readiness and training, and lower costs. That approach is maneuver warfare, as conceptualized in a theory which displays its organizational, manpower, and training implications. Such issues must be addressed together with vexing problems like burdensharing, reconstitution, and acquisition.

The Armed Forces are being buffeted by uncertain strategic bearings and budgetary issues. The U.S. military is designed to fight similarly organized militaries that threaten our vital interests, while the demands actually being placed on them come from less threatening rogue states and peace operations, the latter often resembling acute cases of the domestic missions of the National Guard. In the main, change in the military has meant downsizing to capture a much sought peace dividend. Forces are shrinking, arguably to a level too small to support an articulated strategy of meeting two nearly simultaneous major regional contingencies.

Congress, particularly the House Armed Services Committee, would reduce budgets more. Because it sees budgets and forces as irrevocably linked and virtually synonymous, it is pressing for a major realignment of roles and missions to reduce what it sees as waste from duplication and overlap. Another thrust is consolidating support functions. The agenda thus calls for further draw-downs in wings, ships, and divisions and still greater defense-wide provision of common training and logistical support.

Order a naval rating to “secure the house” and he’ll enter it, close all doors and windows, and probably throw a line over the roof and lash it down.

Order an infantryman to “secure the house” and he’ll enter it, shoot anything that moves, and then probably dig a trench about it.

Order an airman to “secure the house” and he’ll stroll down to the local estate agent and take out a 7-year lease on it.

—A British military adage
The Joint Staff and U.S. Atlantic Command (ACOM), which presides over most CONUS-based forces, are institutionalizing joint (multiservice) exercises and adaptive joint forces packages to stretch productivity, substitute home-based force projection for forward basing, and rectify the long-standing embarrassment of a lack in interservice cooperation. They are also seeking to deflect the impact of realignment with themes of multiservice synergy and enabling. The Armed Forces should have unity of effort and be interoperable and mutually supporting. Ironically, successive Secretaries of Defense have preached multinational interoperability to our NATO allies but have never achieved multiservice interoperability at home.

It is another thing, however, to view units nominally similar and functionally interoperable, such as wings and divisions, as composed of interchangeable components and to divide and group their disparate parts in task forces and expect them to function as intricately as single-service units (especially if single-service units suitable for a mission already exist). For large and medium-sized contingencies, there is a need for an overarching joint command framework (that is, CINCs and joint commands) to fit in and coordinate service contributions; but there is little need for component packaging. For small contingencies, especially those of a coup de main nature, jointness itself may not be operationally desirable and should be held to a minimum.1

The nature of the new world order and increasing dominance of fire mean more operations should be conducted as coups de main. The possibilities are so diverse that it is not practical to anticipate and organize pre-existing adaptive joint force packages truly tailored for each variation. Instead one must rely on officers attuned to mission orders and highly trained in specialized arms along with subordinate units cobbled together on an ad hoc basis. This is necessary since reaction time is normally short and the increased (Clausewitzian) friction inherent in jointness multiplies the risks of another Desert One debacle (a case where what is known in today’s parlance as an adaptive joint force package, though well-rehearsed, fractured under stress along cultural lines).

Intricate operations such as Desert One are facilitated by reducing the friction of jointness through joint culture. On the other hand, a contingency need not be joint and a joint force can be built sequentially rather than by a “mix-master” of “oars in the water.” And of course for mainline operations requiring major forces, service cultures offer an indispensable insight into the way each service operates in its unique land, sea, or air environment. Suppression of service cultures is only acceptable, and perhaps even mandatory, for the few units which must act in multiservice unison in chaotic environments. But requirements for those few should not be extended to the entire force. As Bernard Trainor has warned, service cultures are intangibles to be exploited, not suppressed.1 Nonetheless, procedures and vocabularies (for instance, a term like secure) should be standardized to avoid confusion and facilitate interoperability.

Suppressing service cultures may well induce a conformity which could lead to “a military that is inflexible, uncreative, and most importantly predictable.”4 That contention may be difficult to prove but it is suggested from observing large multiservice and multinational staffs. It is true that suppressing cultures undercuts service identities and the morale benefits which accrue from it, and counteracts the aim of joint packaging, namely, orchestrating diverse capabilities from within each service and thereby shielding them from the realignment ax. Knee-jerk suppression of service cultures and uniqueness inadvertently reduces the essence of combined arms—its diversity—to a new homogeneity already manifest in the American military, that is, generalized branch arms and all-purpose units putatively suitable for all occasions and therefore less than optimal for each.

The unintended consequences of unbounded jointness may be a force that is less effective, more costly, and not fully capable of...
of intimate joint operations even if inflexibility and predictability are not problems. A realignment of roles and missions compounds these negatives. For example, realignment has its eye on eliminating one or more of the four service air forces on the grounds of efficiency. Marine aviation is a likely candidate. This may result in trading an intimately integrated joint team for an uncertain one whose jointness may be potent but definitely not intimate and agile.

How Much Jointness?

No one opposes jointness in principle. The issue is its meaning. Jointness must balance the reduction of friction among the services against negatives like layering command arrangements and costly field exercises. Only a fraction of officers need be cross-trained in service cultures and languages. It may also be desirable for standing joint commands to be composed of augmentation cells with predesignated augmentees and command post exercises on medium-sized operations—as smaller, intimate joint operations are based upon service headquarters around which predesignated augmentations from other services rapidly form. Equality among services should not be a driving concern.

Jointness is demanding. But fortunately much can be resolved by unity of command and predesigned interoperability like compatible communications and refueling. Also, except for Army ground forces and Air Force tactical aviation, demand for intimate interfacing is surprisingly small. It can be limited to interfacing special capabilities that one service has and another finds too small or episodic in demand to duplicate, and by focusing on linkages like fire direction centers rather than involving whole units. When full units must be involved, the added stress jointness places on the services can be bounded and moderated by predesignating a pool of units on a long-term basis, rather than the current habit of generalizing the requirement and passing it from one unit to another and starting from scratch each time. Moreover, a lot of what passes for jointness is contrived or unnecessarily difficult. Navy ships may occasionally need attack helicopters assigned to them that should come from sea-familiar Marines with the Army backfilling normal Marine Corps aviation. And Navy fighters should not provide close support for the Army when another service can do this specialized task and the Navy backfills the interdiction role, and so forth. And sometimes jointness reveals a deficiency as in the case of putting Army Rangers aboard aircraft carriers. What happened to Marine Special Boat Squadrons?

Joint training is not cost-free; it comes at the expense of other training. This constraint is illustrated in FM 25–100, *Training the Force* (see figure). Readiness and training proficiency of units vary like a sine curve with units “up” only a third of the time. Maintaining readiness in line units under the current personnel system is like being on a treadmill. Hi-tech, like the Army’s digitized battlefield, adds more demands. Jointness means something else must give, such as branch proficiency or multi-branch combined arms training. The Marines, however, are a joint land-sea-air team. Their inclusion in things that are joint for jointness sake would mean less combined arms training and less intimacy in providing the jointness it already has with the Navy.

U.S. military units are “continuous life” units because personnel come and go individually. Readiness and training proficiency are accordingly bounded, never reaching the extended high and the short down periods of unit-replacement “born, live, and die” units. In continuous life units, the payoff from joint training for units is short-lived and is lost soon after deployment as personnel leave, and any residual effect can only be retained by assigning the task to the same unit repeatedly. Otherwise the worst of both
The loss of expensively-gained unit skills shortly after joint training, and repetitive train-ups starting from scratch each time as units with totally different officer and NCO cadres lacking joint experience are tasked. In sum, if the future is operating jointly on a continual basis, a new personnel system is needed—one that allows greater training continuity and hence greater training depth and retention of expensively-gained unit skills.

A cheap and comprehensive solution is simply collocation, given that the number of Navy units which must be cross-trained with Army and Air Force units is not large. Familiarity reduces a need for formal exercises. On the Atlantic seaboard companies or battalions from Camp Lejeune and Fort Bragg can periodically switch places as can Army and Marine units on Oahu. Similarly, Marine and Air Force squadrons or half-squadrons from nearby bases can collocate and operate from within the larger wing/group structure of their host service.

Collocation, synthesized with a unit replacement and rotation manning system, can also be used to form large pools of highly trained units for a Combined Joint Task Force (CJTF). Thus far NATO CJTFs have been little more than cobbled-together national units serving under a facade of multinational command arrangements. Collocation is especially attractive for CJTFs since units such as squadrons and battalions can be based abroad without normal base operating support costs and, ironically, can be grouped with non-national elements in smaller units than is desirable for multiservice national units. This is because not only must deployments be multinational in scope, but it is desirable that opponents not be able to focus on particular national elements to undermine CJTFs. Furthermore, many interventions like that in Rwanda are small and do not involve intense combat. Nor does collocation preclude reforming national units for combat or unilateral action.

In the past the Armed Forces frequently lacked unity of effort and only reluctantly accepted subordination to officers of other services. Today the problem is interoperability in all its facets and a service tendency in providing defense-wide functions to give short shrift to jointness while assigning a priority to its own components. The authority of the Goldwater-Nichols Act as now institutionalized in ACOM, and the authority of CINCs, resolves this problem through multiservice complementarity: the static meaning of synergism. The danger is that the process is biased by the presumption that multiservice actions are preferable to single-service actions.

The Air Force contends, once incorrectly although perhaps correctly today, that its bombers and fighters can unilaterally smash an enemy and attain victory with few casualties. They therefore shield aviation, special electronic assets, and airlift from joint or combined use. The Air Force has its own priorities, and its fighters have become a semi-strategic light bomber arm with little thought given to their role in furthering land and coalition warfare. Jointly, Air Force tactical aviation can be thought of as a primary element of the combined arms team. Its name itself is a misnomer, for in continental warfare it ought not to be used tactically but operationally to realize synergism.

One difficulty in coming to closure with the practical application of jointness is tied to the meaning of the synergism provided...
by combined arms on land and at sea. It is one of those terms given lip service without appreciation of depth of meaning or the sophistication of its implications. The Air Force employs tactical aviation in an applied firepower, attritional mode. The definition of combined arms is vaporous, to wit: "the tactics, techniques, and procedures employed by a force to integrate firepower and mobility to produce a desired effect upon the enemy." Combined arms is not about integration but about orchestration. This is a confusion in military art that goes back for several millennia. There is no conflict between specialization and synergism; indeed specialization on the battlefield generates (dynamic) synergism. Its power is seen episodically when rather small light arms (land and sea) have ripped apart large heavy forces; yet the reverse occurs when smallish heavy forces are provided with a complement of other arms.

The arms of a combined arms team (except counter battery) should ideally not be used arm against arm, as is the tendency, but against another arm to expose its weakness for still another arm to exploit. This implies distinct differentiation among the arms. Indeed much of the history of the operational art is about creating and orchestrating diversity to reduce an enemy to impotence and create conditions for its collapse. In the case of the air-ground team, single-service combined arms expand to multiservice combined arms. In maneuver warfare, landpower makes enemy operational reserves move and become exposed to airpower, while air lowers an enemy’s tempo of operations to give one’s own ground an advantage in tempo, and therefore an ability to avoid frontal assault and to pin and envelop the enemy. This conceptual point was missed entirely in Desert Storm as air forces were used strategically and tactically but not operationally in the maneuver style. Inadequate Iraqi air defense meant allied ground forces could have swept quickly and bloodlessly around and well away from overextended Iraqi forces within Kuwait to the Euphrates and Tigris in a strategic turning movement reminiscent of Napoleon’s Ulm campaign. Any attempt to interfere with this movement would have required Republican Guard units without air defenses moving 100 kilometers across open desert before making contact.

The confusion associated with integrating combined arms has run over into jointness. The proper term here is "orchestrating." The notion of integrating the disparate ways in which the military thinks about employing force leads to Bernard Trainor’s admonition. Orchestrating disparate ways the services think about employing force is an entirely different matter. Similarly, jointness should be valued for its synergism, however large or small the force.

Deriding jointness was once a sign of service parochialism. In the wake of the Goldwater-Nichols Act, however, jointness has become an instrument for transcending parochialism. But its utility certainly includes deflecting force slashing under a realignment of roles and missions by displaying multiservice complementarity and enabling assistance, and through the participation of all services in contingencies so that redundancies do not appear. When actions like Grenada and Panama occur each service participates. This may justify budgets, but it is perverse. The Army and Air Force were not needed in Grenada, and the Navy and Marines were not needed in Panama. Such actions—unless units are permanently assigned for quick reaction missions—inherently lead to a lack of familiarity with joint operations. They add a command layer and make coordination more complex than in a Navy-Marine operational maneuver from the sea, and thus less agile and less suitable for mounting fast-breaking responses like a coup de main, a capability increasingly important to escape today’s all-pervasive firepower.

Surprise (often gained from smallness), tempo, and (battle) synergism are force multipliers and can often accomplish what size and firepower cannot. Accordingly, there
should be a greater division of labor and specialization among services, and jointness in this type of operation should often take the form of lead services rather than formalized joint commands. Some contingencies are more appropriate for the Army-Air Force with their special forces. Others are more suited for the Navy-Marine team. There is a natural division of labor between the two and they generally need not and should not be blended except for large deployments such as Desert Storm where both were needed and intimate jointness was not a requirement anyway.

The Limits of Realignment

The purpose of realigning roles and missions is to achieve savings by consolidating support establishments and eliminating redundant field forces. Few oppose consolidating support services; but while more can be done, there are limits. Some support functions observe economies of scale, and consolidation may lead to diseconomies, a prevalent phenomenon in the military. Medical support is a case in point. The services share training facilities, dispensaries, and hospitals. But unifying medical support would be dysfunctional. At best it would mean another level of headquarters; at worst it would lead to standardized medical field services (that is, the small units assigned to ships and divisions which account for half of all medical personnel) where each meets a different need and functions in a different environment. Medical consolidation has three negatives: more overhead, loss of service identity, and none of the savings which normally derive from tailoring services to meet specific needs. Nonetheless significant cost savings can be made in medical support by re-engineering dental and labor-intensive field services—an approach outside the framework of a realignment of roles and missions.

The thrust of a realignment, however, is in sorting out combat forces for the services. The payoffs are huge. Contrary to widespread belief, however, a review is not an appropriate vehicle for appraising the major forces. Its own economic logic is flawed, for it is based on attrition style warfare when the services are grappling for an updated maneuver style, and it is unable to handle the political-military premises underlying the structure and use of forces. This reduces the process to appraising minor redundancies like Navy SEALs patrolling deserts with fast attack dune buggies and savings from the Army providing tank and reinforcing artillery support to the Marines in lieu of their own organic components.

The methodology of a realignment of roles and missions breaks down when premises dictate diverse forces for diverse purposes rather than all-purpose forces. This is apparent in areas that many see as budgetary show-stoppers: bombers versus carriers and consolidation of air forces and infantry—huge dollar issues striking at the heart of force sizing.

The most prominent of them is the bomber versus carrier fray. The Air Force advances the compelling case that stealth, precision weapons, and quick response bomb...
damage assessment by satellite offer heretofore unobtainable capabilities. The Navy argues equally compellingly that regional conflicts mandate carriers like never before. These arguments proceed from differences in national strategy. If that strategy requires destroying opponents, bombers are clearly the answer, though naval forces are not totally eliminated from the equation due to complementarity and their enabling strategic bombing (and other operations). But if strategy is more complex and involves Operations Other Than War (OOTW), then equally clearly bombers lose and carrier task forces gain value. This is an old argument that a realignment of roles and missions will not resolve.

A second saving allegedly lies in consolidating tactical air forces. In practice this means reducing the four air forces to three with Marine helicopters going to the Army and Marine fighters split between the Air Force and Navy. This destroys the Marine Corps and may well be the agenda some hide. Air Force, Navy, and Marine fighters may utilize much the same equipment, but their employment and coordination requirements differ vastly. Coloring Marine aviation blue and regrading its raison d’être as green is one way to alter perceptions and reduce tactical air forces to three though nothing substantively changes. Logistical support is already hued blue. Its danger lies in blue’s increased leverage over green and naval aviation’s insensitivity toward the specialization and command arrangements that make Marine aviation effective.

The issues in tactical aviation (which consumes half the conventional force defense budget) are sizing and internal economies. The realignment of roles and missions is deceptive in that it has little to say about either and amounts to running a rabbit across the fox’s trail. Even if there were but one tactical air force, there would still need to be four branches reflecting the peculiar needs of each service—hence the issue of sizing remains. The alternative is more expensive all-purpose wings moderately effective in all environments. And even this does not address a key sizing and budgetary question: the air-to-surface trade-off. Nor are internal economies insured when the focus is on consolidating existing institutions rather than how they were organized in the first instance. U.S. military aviation is labor intensive and cost-ineffective relative to other top air forces, the Swedes and Israelis in particular.

There is nothing inherently wrong with four tactical air forces per se, as long as each is different and costs are controlled. The first condition is met; the second is not and consolidation likely worsens it. Naval aviation is sea-oriented and force projection keeps it from entangling with land-based aviation. Air Force tactical aviation should be “operational,” while Marine aviation is more “island” oriented and therefore appropriately “tactical.” Furthermore, Marine aviation is leaner by a factor of two than the Air Force’s even though Marine air is expeditionary and operates from inherently inefficient, roughly hewn air strips. Consolidation in this case thus leads to three negatives: higher costs, lower effectiveness, and less intimacy in joint operations.
The third large saving involves eliminating apparent duplication in non-mechanized infantry of which the Army has four and the Marines three divisions. Three of the Army’s are specialized airborne, helicopter assault, and mountain/cold weather. Only one is “all-purpose” and it is tied to Korea. The three Marine divisions are amphibious-oriented but more generalized than the Army’s. They are also larger, hence more vulnerable on both counts to a realignment in roles and missions.

Another perspective should be considered. The Army is attuned to large-scale warfighting and the Marines traditionally show the flag and keep the peace among lesser entities. Both are needed. Yet it is difficult to maintain both functions within the same military service. It is too much to ask the Army and Air Force to orient themselves both to hi-tech warfare against similar militaries and to peace support missions where their weaponry must be muzzled and will actually inhibit their agility and ability to field “cops on the beat.” Vastly different skills are needed and one will always wither under the other. The British Army is a case in point. Its colonial performance was nearly brilliant; but its performance on the European continent has been spotty.

The implication is that rather than homogenizing Army and Marine infantry and reducing a division, realignment could save money by stressing their distinctiveness. Marine infantry should be oriented toward raiding and quick interventions mounted from the sea, light armor constabulary duty, and peace support. Such forces need to be politically attuned, equipped, and trained for these missions. Money is saved because the forces are light and do not need the full array of arms and services. Present practice is to use regular formations for these missions even though they are too encumbered to perform well and they thus bloat the size and cost of commitment.

American combat forces are not large by international standards and should not be shrunk further. Nonetheless, they are too expensive, and while their readiness and training proficiency is high, those standards were set for a conscript military, not for a long service military. Jointness and roles and missions are not the solvent. But maneuver theory is in all its ramifications. Beyond operational and equipping implications the power of maneuver warfare lies in recasting the internal procedures by which the military operates: manning, training, and mobilizing. These were last cast half a century ago and are now entirely dated and no longer in harmony with new service operational concepts of maneuver warfare and requirements for supporting peace operations.
A recent gathering of Washington-types was convened to discuss Richard Kohn’s provocative essay entitled “Out of Control: The Crisis in Civil-Military Relations.” Since the beginning of the Clinton presidency, articles critical of the current state of civil-military relations have appeared with some regularity. Of them, only Kohn’s—published in the Spring 1994 issue of *The National Interest*—struck a nerve. His thesis is blunt and uncompromising: today’s military is “more alienated from its civilian leadership than at any time in American history and more vocal about it.” As befits a distinguished historian, Kohn marshals an impressive array of evidence to support that thesis. He cites a clutch of incidents—all previously reported in the media but quickly discarded when they used up their quota of newsworthiness—that taken together suggest an officer corps that views the current crop of civilian leaders with thinly veiled contempt. Yet Kohn does not regard the problem as merely military antago-nism toward the President and his adminis-tration. Rather, he argues that a combination of political, strategic, and structural factors have contributed to an erosion of civilian control over time, a trend whose effects are only now becoming apparent.

The discussion of Kohn’s article drew a roomful of both serving and former government officials, journalists, retired officers, and policy-oriented academics who examined his thesis that civilian control in the Clinton era had become increasingly tenuous. The question they considered was simple: has anything really changed? The ease with which the Washington veterans reached a consensus and disposed of Kohn’s argument was dramatic: whatever the particulars of Clinton’s difficulties with the military, in their view, nothing of substance had changed. In their experience, the Pentagon had always engaged in political maneuvering as evidenced, for example, in efforts to derail...
The U.S. military is now more alienated from its civilian leadership than at any time in American history, and more vocal about it. ... The roots of the crisis go back to the beginning of the Cold War, when the creation of a large, “peace-time” standing military establishment overloaded the traditional process by which civilian control was exercised. ... Civilian control is not a fact, but a process, that varies over time and is very much “situational,” that is, dependent on the issues and the personalities, civilian and military, involved at any given point.


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the President’s initiative on gays in the military. Shorn of its peculiar cultural sensitivities, that controversy revealed the military indulging in the sort of interest group politics that it routinely (and in the eyes of this group all but inevitably) plays. When it comes to matters that the services consider vital to their well-being—budgets, weapons systems, defense policies—no President in recent memory has controlled the military in the strictest sense of that term. To imagine that all aspects of basic national security policies promulgated by presidential edict are actually decided in the Oval Office is simply naive. Much of the real action occurs behind the scenes through negotiation, intrigue, deal-making, and the occasional artful dodge—a complex game that the Pentagon plays with single-mindedness and considerable skill. As those accomplished in the ways of Washington must know, this is how the system works. Kohn’s slightly overwrought hand-wringing notwithstanding, it always has.

This view that nothing has changed is important—and misleading. Drawing on first-hand experience extending back to the Cold War, these sophisticates effectively demolished the common journalistic take on Clinton’s rocky relationship with the military: that the problem is one of simple animus on the part of senior officers who cut their teeth in the Vietnam-era. Putting personalities aside this view has utility, but to then conclude that all is well with American civil-military relations is dead wrong.

Roosevelt and Marshall

For the top brass to find itself at odds with a sitting President is hardly a new phenomenon. Yet to recall how senior officers in an earlier era handled disagreement with the man in the White House is to point out how much things have in fact changed. Nor is it necessary to reach too far back into history: consider the relationship between President Franklin Roosevelt and Chief of Staff of the Army General George Marshall. Perhaps more than ever people today appreciate Roosevelt as a masterful commander in chief. Marshall, by the same token, remains the preeminent icon of American military professionalism. He seems somewhat austere by present-day standards—imagine a soldier who considers it unseemly to cash in on his renown and who therefore declines lucrative offers to publish his memoirs or sit on corporate boards. Yet when it came to matters of strategy during World War II, Marshall and Roosevelt clashed repeatedly. Indeed, Marshall was not alone among the President’s advisors in considering FDR’s forays into grand strategy as impulsive and whimsical if not, on occasion, altogether daft.

At no time was disagreement between the two sharper than in the difficult months between the fall of France in early summer 1940 and America’s entry into the war in December 1941—a period, it seems fair to say, when challenges besetting the Nation outweighed even the danger of permitting acknowledged homosexuals to serve in uniform. The outlines of the dispute are well
known and can hardly have been more fundamental. With aggression running rampant across Asia and Europe, the United States was engaged in a crash effort to bolster defense, preparing for the moment when the predators turned their attention to the Western Hemisphere. As Marshall saw it, rearming America was an absolute priority. Yet with that process barely underway, Roosevelt concluded that the Nation must simultaneously aid Britain in its lonely struggle against Germany. By any measure, the British cause was forlorn. Meeting the demands of Winston Churchill and his chiefs of staff, moreover, would only squander the modest gains made until then in rearming America. Material diverted to Britain would almost surely be wasted, the U.S. build-up would be thrown off schedule, and national security would not be enhanced but jeopardized further.

Marshall was not alone in seeing aid to Britain as a dubious proposition. Even apart from considerations of grand strategy many Americans found reasons for opposing efforts to rescue the British Empire. Those elements—including members of Congress, influential journalists, leaders of ethnic groups, and lobbyists—formed a ready source of support for military professionals who were persuaded that even a slight delay in rearming the Nation was intolerable. Yet Marshall chose not to exploit the opportunity offered by such potential allies. Instead, he directed his objections forthrightly to the President. When Roosevelt rejected Marshall’s representations, insisting that the United States would aid Britain, the Army Chief of Staff loyalty accepted the President’s decision. Marshall would not, to use his own expression, “fight the problem.” On the contrary, he would henceforth do his utmost to make FDR’s policy work. Thus, for example, when Congress in early 1941 took up lend-lease, legislation designed to share the largess of American industry with Great Britain, Marshall’s emphatic testimony on its behalf was crucial—perhaps decisive—in securing its passage.

History shows that in this the instincts of Roosevelt, the strategic tyro, were superior to the considered judgment of Marshall, the seasoned professional. More important for our purposes, however, is what Marshall’s behavior evidences with regard to the substance of civilian control. Despite the political explosiveness inherent in the question of aid to Britain, Marshall did not attempt to advance his cause by engaging in leaks to favored journalists. He did not undermine FDR by making end runs to the President’s many congressional critics. He did not avail himself of the pages of Foreign Affairs or other journals to drop oblique hints regarding which policies the Army would or would not support. Nor, once it was clear that Roosevelt was not to be budged, did Marshall sow a paper-trail of dissent to deflect criticism from himself if things turned sour.

Instead, by deferring to the President Marshall invested our policy with a coherence needed for success. In doing so he helped turn a long shot into a winner. In Marshall’s eyes, there was no other recourse. As he remarked years later, “I honestly thought that it was ruinous [to the country] for me to come out in opposition to my Commander in Chief.” Neither by coy maneuvering nor by foot-dragging would Marshall presume to challenge the legitimacy of the President’s authority.

The Post-Cold War World

Contrary views of present-day political elites notwithstanding, Marshall’s reaction shows just how much the norms of civil-military practice have changed over the decades. Practices seen today as within the acceptable bounds of military conduct—such as active duty officers publishing defiant op-ed pieces or service chiefs overshadowing their service secretaries—are in fact recent innovations. In Marshall’s day, they were unheard of and would have been considered improper and unprofessional. Indeed, today’s politicized and politically adroit military is yet one more legacy of the Cold War. In ways that many Americans fail to appreciate, the imperative of keeping the Nation on a perpetual, semi-mobilized footing transformed the traditional civil-military equation. As a result, the Pentagon’s influence mushroomed, mostly at civilian expense.

The inherent dangers of confrontation with the Soviet Union provided powerful incentives to leave the implications of this transformation in civil-military relations unexamined: neither of the superpowers could afford to convey to the other an impression
that its soldiery was under anything except the tightest rein. Thus, as long as a Cold War-induced compact on national security policy remained intact, the potential consequences, adverse or otherwise, of any changes in civil-military relations remained hidden: on the questions of most fundamental importance, military leaders and senior civilian officials saw eye-to-eye. By and large, therefore, the subject could be consigned to the status of academic curiosity.

Yet no sooner did the Cold War end than that strategic compact began to unravel. A mere four years after the fall of the Berlin Wall—arguably the most important geopolitical event of this century—the chief characteristics of U.S. national policy have become drift and inconsistency. A great debate is underway to redefine America’s role in the world, a debate inextricably linked to parallel controversies over the existing content and future evolution of our culture. Today’s military feels no compunction about thrusting itself foursquare into that process at points of its own choosing. In doing so, its perspective is anything but disinterested. Like other participants in the debate, the services evaluate the present and envision the future through the distorting lens of their own institutional biases and expectations.

But unlike other participants the Pentagon has a massive budget, large pockets of which are hidden from public scrutiny. It allocates a substantial chunk of research and development dollars. By virtue of vast defense spending it has intimate relations with corporate America. This Cold War legacy invests the military with a capacity to tilt the debate in ways that advance its interests but do not necessarily serve the common good. Unless subjected to rigorous oversight, this capacity is open to abuse. In a society increasingly confused about its basic values and showing signs of moral decay, these tendencies could even at some point in the future pose a threat to the established order.

Nearly forty years ago Samuel Huntington noted that: “In Western society civilian control has suffered the fate of consensus... No one, civil or military, is ever against civilian control. Consequently, it has achieved acceptability at the price of becoming meaningless.”

In an era that bids fair to be rich in perplexity and frustration, Americans can ill afford the luxury of consensus that is devoid of meaning. There is no crisis in civil-military relations today, but we must insure that we do not invite one through either inattention or inadvertence. Doing so requires acting promptly to reinvigorate civilian control over the military, helping it to recover from the anemic state into which it has slipped in the course of the last fifty years. Although returning to the era of George Marshall may be impossible, a fresh and stringent delineation of allowable military prerogatives is in order.

Once the parameters have been established, civilian officials must fulfill their obligation to assert authority energetically, forcefully, and consistently. This will not only safeguard democracy but may even—as it did in Marshall’s day—produce sound policy. If nothing else, it will preclude the possibility of Americans ever awakening to discover that civilian control has become a fiction. Soldiers and civilians alike share an abiding interest in insuring that that day never dawns.
Is there a crisis in American civil-military relations? Is the influence of generals on policy excessive? Several experts on military affairs think so. Richard Kohn, the former chief historian of the Air Force, has argued that civilian control of the military has decayed to an alarming degree. Edward Luttwak specifically indicts the Joint Staff for having conducted a bloodless coup against the civilian leadership of the Pentagon. Russell Weigley, a respected military historian, contends that civilian control "faces an uncertain future." These are serious charges. Are they true? The answer largely depends on what one means by civilian control of the military. Is Kohn afraid that the Armed Forces are about to overthrow the Constitution? Well, no. “The real problem of civilian control is the relative weight or influence of the military in the decisions the government makes, not only in military policy and war, but in foreign, defense, economic, and social policy (for much military policy can have vast implications for various aspects of national life).” The situation outlined by Kohn is, of course, a far cry from the threat of an imminent coup. But it apparently is enough to set
off alarm bells in the night. To some, any military presence at the policymaking table represents a danger to the Republic. They seem to prefer an officer corps that meekly acquiesces to civilian dominance over military affairs.

In the view of the writers cited above, a major villain is General Colin Powell, the former Chairman of the Joint Chiefs. Luttwak calls him the “most manipulative of generals” and contends that he “overruled” President Clinton “with contemptuous ease” on issues such as revising military policy toward homosexuals and using force in ex-Yugoslavia. Kohn accuses Powell of “turning the age-old Clausewitzian formula about war being an extension of policy on its head” by insisting that “political objectives must be carefully matched to military objectives and military means and what is achievable.” He also states that Powell developed a “new national security policy for the country” in 1990–92 without consulting his civilian superiors. Kohn further takes Powell to task for publicly airing his views on military intervention in Bosnia.

Did Powell exceed his powers? It is clear that the Goldwater-Nichols DOD Reorganization Act of 1986 substantially strengthened the office of the chairman. It is incontrovertible that Powell exercised his statutory powers more fully than the first chairman to function under the new law, Admiral William Crowe. But his actions seem altogether consistent with the intent of Congress in passing Goldwater-Nichols: precisely to strengthen civilian control by making the chairman rather than the corporate Joint Chiefs of Staff the principal military advisor to the President.

Powell certainly had strong views on the relationship between the use of force and political objectives. We know that he was very effective in conveying those views to the President and the Secretary of Defense. But Luttwak’s claim that Powell “overrode” Clinton is absurd. On gays in the military and intervention in Bosnia, Powell gave advice to Clinton who, for whatever reasons, took it. According to accounts which have been published since the Gulf War, Powell opposed the early employment of military force against Iraq after the invasion of Kuwait. His commander in chief at the time chose not to accept that advice.

As to Kohn’s contention that Powell unilaterally imposed a personal strategic vision on the Nation without coordination and consultation, it should be noted that the Goldwater-Nichols Act reinforced the leading role of the chairman in developing military strategy. However, such strategy is developed in the context of a broader national security strategy to which the chairman is only one contributor. If Powell succeeded in shaping the debate over national security strategy, it is a tribute to his powers of intellect and persuasion, not a manifestation of some sinister conspiracy against civilian control of the military.

If Powell exceeded his powers, can it be argued that Goldwater-Nichols is flawed? Those reforms, it should be recalled, were passed to nearly universal acclaim by national security experts, including Luttwak and Kohn (indeed Luttwak, displaying his characteristic humility, claims credit for the passage of the Goldwater-Nichols Act). Only a handful objected. Some, like John Kester, were concerned over the power of the chairman. Others, like this writer, feared that a unified staff would be driven by strategic monism, the dominance of a single service view or strategic pluralism when strategic pluralism is the appropriate approach for the United States. A variation of this concern was voiced by others, such as former Secretary of the Navy John Lehman, who worried that the strategic view of the naval service would be overwhelmed by the Army and Air Force.

This writer now concedes that his concern over strategic monism was misplaced. Strategic pluralism still reigns, but the arena has changed. The Joint Staff, after all, consists of officers from the Army, Navy, Marine Corps, and Air Force who still demonstrate a healthy attachment to the strategic concepts of their respective services. The result is what Congress intended: improved coordination and cooperation, not total integration or the...
dominance of one strategic view. That, ironically, is now exactly what Luttwak deprecates:

Charged to define an all-new military structure for the post-Cold War era, the Joint Staff duly cogitated and calculated and coordinated—only to come up in the end with the same old mix of ground, air, and naval forces as before. Itself manned by fixed ratios of Army, Navy, Marine, and Air Force officers at each hierarchical level, the Joint Staff predictably obeyed the logic of its own composition by resisting any genuine reappraisal of the mix of U.S. military forces. . . . The Great Pentagon Reform has shown us that the only thing worse than interservice rivalry is interservice harmony.

What Luttwak really deplores, his touching solicitude for civilian control notwithstanding, is precisely the lack of strategic monism. His expectation that Goldwater-Nichols would result in the institutionalization of his strategic concept explains why he initially supported the reforms with enthusiasm. The fact that U.S. strategy is increasingly based on the recognition of complementary service strategic concepts rather than strategic monism accounts for his new opposition.

There are at least four other reasons to reject the contention by Kohn et al. that there is a problem with civil-military relations. First and most importantly, civilian control of the military is not merely bureaucratic control of senior officers by DOD officials. This view, which suffuses the writings of Kohn and other critics, implies that the military should not debate a policy advanced by bureaucrats, no matter how harebrained it may be. It implies that not only policy but also strategy are within the exclusive domain of Pentagon bureaucrats.

Thus it should not be a surprise that Kohn’s exemplar of civilian control of the military is none other than Robert Strange McNamara who, it is observed favorably, as Secretary of Defense under Presidents Kennedy and Johnson, “ignored or dismissed military advice, disparaged military experience and expertise, and circumvented or sacked generals or admirals who opposed him.” But McNamara also confused strategy with economics and accordingly bears a major responsibility for the greatest military failure in American history—the Vietnam debacle.

Civil-military relations were simplified in the nineteenth century by the quarantine of the military, both intellectually and geographically, and by the rigid distinction between war and peace. The Cold War demanded a more holistic strategy, but the future is likely to require an even more inclusive notion, possibly leading to a fundamental transformation of U.S. civil-military relations.

The point is that what may look like a crisis in civil-military relations is instead a change in the conditions to which civil-military relations must adapt.

Finally, if the military is so influential, if it can “overrule” the President and the Secretary of Defense “with contemptuous ease,” why has it so meekly acquiesced in Clinton’s Haiti policy? Haiti, after all, is exactly the type of operation that the military would most like to avoid. Why has force structure been cut by 30 percent from the Bush administration’s proposed base force? Why is it likely that the services will lose several weapons systems which they believe are necessary to future effectiveness? Why are combat specialties being opened to women? Why is it likely that the courts will
eventually lift the ban against practicing homosexuals in the military?

Kohn and others of his ilk are correct in one respect: there is a growing disparity between the quality of military officers and their civilian counterparts, although they err in thinking that this constitutes the whole of civil-military relations. This change is primarily a result of improvements in Professional Military Education (PME), especially at the war college level, and the fact that, as Congress intended in passing the Goldwater-Nichols reforms, the services now increasingly select their best officers for joint duty assignments after they complete courses at the war colleges.

In the first instance, PME emphasizes the relationship of policy, strategy, and resources. This helps to foster a military perspective with a coherence that is often absent among the civilian officials who make defense policy. In the second instance, the better educated officers frequently compete with civilians who are technocrats rather than innovative thinkers, appointees whose jobs are repayment for political debts, and a Pentagon bureaucracy that is increasingly designed to “look like America.” Thus it is not surprising that General Powell was successful in shaping the debate over not only a post-Cold War military strategy, but national security strategy as well. But if the relative weakness of civilian policymakers constitutes a real crisis in civil-military relations, it is easily rectified. As Luttwak concedes, “The only true remedy is to keep a very strong Joint Staff, but to balance it with the counterweight of equally assertive civilian leadership.”

No evidence exists to suggest that civilian control of the military, properly understood, has atrophied. The President and Congress determine policy, from force structure and acquisition to the use of military force. Senior military officers have a constitutional responsibility to ensure that a military voice is heard. Of course, if the civilian leadership chooses not to accept military advice, it is the duty of any commissioned officer to carry out the resulting policy or tender his resignation. This is exactly what professional officers have always done. Until there is reason to expect some other response, there is no crisis in civil-military relations.

NOTES
Joint force commanders and joint planners have an obvious interest in the balance of forces in regions where they may be called on to conduct operations. Understanding foreign capabilities requires exchanging information with friendly governments and collecting intelligence against other governments—traditional activities technologically updated for the information age. Commanders and planners also have an opportunity to help shape regional environments by influencing policy on arms exports and conventional arms transfers. To have an impact, planners must recognize that in the mid-1990s the transfer of conventional weapons poses genuine dilemmas that make it difficult even for experienced and conscientious policymakers to establish firm guidelines. Some dilemmas are rooted in the differing goals found in legislation on arms sales while others stem from a strategic environment which, according to General Gordon Sullivan, Chief of Staff of the Army, is shifting “from the unitary and relatively predictable adversary we knew in the Cold War, to the diverse, ambiguous, and dynamic threats that we confront today.”

Some emerge from the enhanced importance of economic competitiveness.

**Summary**

Joint force commanders and planners can exercise a positive influence in shaping regional security environments through their roles in developing arms exports policy. To be effective this process must take into consideration economic and security factors that work for and against such exports. This includes fostering regional stability, curbing the proliferation of weapons of mass destruction, and bolstering economic competitiveness. A review of the relative benefits of placing American manufactured avionics on MiG–29s recently helped frame an important policy on upgrading foreign aircraft. The Joint Staff, combatant command staffs, and service staffs can play a part in drafting export policy as the administration addresses issues like the integration of technology on foreign platforms, transfer of theater missile defense systems, and initiation of international cooperation on restraining conventional arms transfers. This could influence the kind of weaponry that the Armed Forces face on a future battlefield.
Strengthening Collective Security

There are three arguments in favor of arms exports. First, these exports can help allies and friends defend themselves against existing and emerging threats. According to the Arms Export Control Act that governs such sales, the United States and other “free and independent countries” have “valid requirements for effective and mutually beneficial defense relationships” and for “international defense cooperation.” America has sold weapons to and shared technology with friendly nations to increase interoperability and lower costs to all parties concerned. As planners in both the European and the Pacific Commands know, there is extensive cooperation among NATO members, Japan, and South Korea. Moreover, in the Persian Gulf War the Department of Defense released technology previously available only to treaty partners to Arab coalition members.

The administration is building on this cooperation. In April 1993 then Under Secretary of Defense for Acquisition and Technology John Deutch informed the NATO Conference of National Armaments Directors that DOD intends to “create a renaissance of defense cooperation” across the Atlantic. Secretary of Defense William Perry, former Secretary Les Aspin, Under Secretary for Policy Frank Wisner, and Under Secretary John Deutch all have told Japan that the United States wishes to increase military cooperation with that nation.

Arms cooperation with Japan and other Asian nations bolsters the strategy of cooperative engagement which U.S. Pacific Command has developed to support strategic goals. Also, U.S. Central Command and the Saudi air force reportedly are discussing the integration of communications systems in conjunction with the Peace Shield Command and Control Air Defense System which American companies are building in Saudi Arabia.

Efforts at arms cooperation will be limited by declining defense budgets in most countries, by industry and legislative pressure to keep production at home, and by a belief that military-related technology is key to economic competitiveness. Nonetheless, the United States and other nations probably will develop significant cooperative programs that will support future military operations. For instance, it is reported that although European countries are reluctant to purchase the all-U.S. Joint Surveillance and Target Attack Radar System (JSTARS), they may accept an approach that allows them to put American radar and electronics on a European airframe.

Countering Proliferation

The second incentive for arms exports is countering the threat posed by the proliferation of weapons of mass destruction and advanced conventional weaponry. Aside from declared nuclear-weapon states (United States, Britain, France, Russia, and China), at least twenty other nations have acquired or are attempting to secure weapons of mass destruction. In most areas where U.S. forces could conceivably be engaged on a large scale, such as in Korea or the Persian Gulf, likely adversaries have chemical and biological weapons. Moreover, North Korea, Iraq, and Iran appear determined to acquire nuclear weapons. These nations have evaded international nonproliferation controls, such as the Nuclear Suppliers Group and the Missile Technology Control Regime, and developed indigenous capabilities to produce weapons in part by actively seeking dual use (civilian and military) technologies abroad, both legally and illegally.

Former Secretary of Defense Les Aspin identified increased proliferation as a major threat (along with regional instability, reversion of reform in Russia, and economic dangers). The Under Secretary of State for International Security Affairs testified before Congress that “proliferation of weapons of mass destruction, ballistic missiles, and advanced conventional arms, as well as the technologies which are necessary for their development” represents the “most critical security threat we face.”

DOD is dealing with this problem in part by working with friendly nations to identify and counter ballistic missile threats to U.S. and allied forces in Europe, the Middle East,
and Northeast Asia. Washington and Tokyo, for example, have discussed deploying the upgraded Patriot missile and the projected Theater High Altitude Area Defense (THAAD) missile in Japan to deter or defend against a North Korean attack by nuclear weapons carried on ballistic missiles. The United States has also discussed theater missile defense with South Korea and members of NATO.

Bolstering Economic Growth

The third argument for promoting defense sales comes from the increased importance of foreign trade to the economy. For perspective, one should recall that when President Jimmy Carter tried to reverse the growth of arms exports in 1977, the initiative was perceived (except by defense companies) as a defense and foreign policy issue rather than an economic consideration. That is in stark contrast to the policies and perceptions of the nineties. President Clinton has emphasized that overall arms exports are critical to economic growth while Secretary of State Warren Christopher instructed chiefs of mission “to support actively U.S. firms by seeking out market opportunities . . . giving [firms] our full backing in competitions for contracts and projects [and] keeping a sharp eye on what foreign competitors are doing.”

Within DOD, Secretary William Perry (while still serving as Deputy Secretary) stated, “We should not only be willing to sell equipment to foreign countries, but the government should be willing to help in certain limited ways.” But he added, “provided that we can assure that sales do not risk proliferation of weapons of mass destruction, particularly nuclear technology, and that we are not aggravating an unstable region in which regional wars are likely.”

The Deputy Director of the Defense Security Assistance Agency (DSAA), which manages government-to-government arms sales, testified before Congress that “as our own defense spending decreases, defense exports have become much more important to the viability of individual U.S. defense firms and to our overall defense industrial base.” This official also stated that “some of our important domestic defense programs” (such as the F-15 and Patriot) depend upon foreign sales “to keep production lines open and to preserve the jobs of highly skilled U.S. defense workers.”

At a recent meeting a DSAA official commented: “You are still worried about Russia and China as military competitors. The competitors that industry is worried about are Britain, France, and Israel, because they are going after our share of the global defense market.”

More widely, the administration believes that defense research and development (R&D) and defense sales have a significant impact on civilian production. For example, Laura Tyson, Chair of the President’s Council of Economic Advisors, has pointed out that foreign sales by defense-related industries furnish companies with revenues to support long-term R&D for civilian as well as military products. In a study of international competitiveness she notes that “the countries that boast the major commercial aircraft producers are also the biggest arms-selling democracies.”

DOD has increasingly invested in dual-use R&D, given the Advanced Research Projects Agency a critical role in converting defense industry to civilian production, and created the position of Principal Deputy Assistant Secretary for Dual-Use Technology Policy and International Programs. Under Secretary Deutch has established a study group on global defense markets, and representatives of the Office of Management and Budget and the newly formed National Economic Council have attended meetings of the group.

Restraining Arms Exports

These three factors favoring arms exports are balanced and at times outweighed by equally strong considerations in favor of restraint. The first is a congressional injunction that the executive branch take the lead in trying to limit worldwide arms sales. Though the Arms Export Control Act supports defense sales that contribute to collective security, the act also states that it is the “sense of the Congress” that the President should “maintain adherence to a policy of restraint in conventional arms transfers.” The act affirms that American policy is “to encourage regional arms control and disarmament agreements
and to discourage arms races.” It notes that “particular attention” should be paid to “controlling the flow of conventional arms to the nations of the developing world.”

These congressional guidelines have helped hold down the technological level of weapons in Latin America and sub-Saharan Africa. Further, they inject a note of caution into most decisions on arms exports. They reinforce the fact that, in contrast to foreign sales of commercial goods, the President is required under law to approve all sales of “defense articles” and “defense services.” Although defense industries support more relaxed legislative guidelines, there is no indication that Congress thus far intends to make major changes.

Two current senior defense officials proposed a parallel approach to restricting international arms sales prior to being named to the Clinton administration. In a Brookings study, William Perry (now the Secretary of Defense) and Ashton Carter (now the Assistant Secretary for Nuclear Security and Counterproliferation) developed a concept of global cooperative security to replace the Western-oriented collective security of the Cold War. Under this concept all nations would work toward the goal of “restrain[ing] the ground forces and tactical air assets that provide the firepower for offensive operations.” Moreover, they would “less stringently limit systems that are more or less unambiguously defensive and that can only be used to resist offensive intrusion on national territory.”

To reinforce the control of global arms transfers, the United States is seeking multinational agreements for restraint, particularly with regard to unstable regions and rogue states such as Iran, Iraq, Libya, and North Korea. American diplomacy is concentrating on establishing a successor organization to the Coordinating Committee for Multilateral Export Controls (COCOM), through which NATO and Japan embargoed defense-related technology to the communist bloc during the Cold War; reviving the five-nation (United States, Britain, France, Russia, and China) initiative on arms control in the Middle East; and increasing the transparency of arms sales by means of the United Nations Register of Conventional Arms.

**Maintaining Regional Stability**

The second reason that the United States exercises restraint in arms sales (and urges other nations to do so) is to preserve specific regional military balances. The Joint Chiefs of Staff have stated that weapons proliferation contributes to regional instability around the world, indicating that “technology on the open market, such as high-resolution satellite imagery and space navigation and communications systems, may also give advanced capabilities to powers that could never afford to develop them on their own.” This is why Secretary Perry’s statement of support for defense exports contained the cautionary note “provided that we can assure that sales do not risk proliferation of weapons of mass destruction, particularly nuclear technology, and that we are not aggravating an unstable region in which regional wars are likely.”

The proliferation of weapons of mass destruction reinforces the requirement for restraint in conventional arms transfers. At the outset of the Gulf War, for instance, coalition commanders were particularly concerned about the possible Iraqi use of biological and chemical weapons. But the coalition victory depended upon maintaining superiority in advanced conventional weapons and preventing the use of weapons of mass destruction. Coalition air strikes were intended to destroy Iraq’s air defense system and large inventory of tanks as well as Scud missiles and biological and chemical weapons plants. Iraqi air defenses and armor owed much to Western and Soviet transfer of weapons and technology.

A similar situation exists with respect to Iran. The United States strongly opposes Iran’s development of nuclear weapons and acquisition of ballistic missiles from China and North Korea. These weapons, if deployed, would add a degree of terror to a broader military buildup that already troubles Iran’s neighbors and threatens stability in the Gulf region. The United States has shown that the anxiety over Iran goes far beyond weapons of mass destruction by attempting to persuade its allies to ban the

**proliferation of weapons of mass destruction reinforces restraint in conventional arms transfers**
sale of civil aircraft which could transport troops and weapons for offensive operations and by considering an embargo on trucks which could support ground operations.

The United States also seeks to limit conventional arms transfers to South Asia, where both India and Pakistan are considered friendly nations. This region is a testbed for counterproliferation policy since these two countries reportedly possess nuclear weapons. In such an environment each side pays close attention to its rival’s fighter aircraft capabilities. Because the United States wishes to avoid any action that could lessen its ability to act as an honest broker, DOD has responded with restraint to proposals that American companies help upgrade India’s MiG–21 aircraft.

**The Technological Edge**

A final factor in restraining arms exports is the need to protect our lead in key technologies for both military and economic reasons. Defense officials agree that U.S. superiority in military technology must be sustained as troop strength and weapons drop. The Bottom-Up Review spoke of a technological revolution and stated that we must “maintain the technological superiority of our weapons and equipment.” The former Vice Chairman, Admiral David Jeremiah, observed that “increasingly, our [military] superiority depends on having the latest microchip, the latest superminiature sensor, or the most advanced information-processing software.” Furthermore, General Sullivan said that the “thrust of Army exploitation of the microchip is to improve battlefield awareness through horizontal integration and insertion of digital technology.”

Economic competitiveness also influences decisions on exports. The very sales that would furnish revenue to support military and civilian R&D could transfer advanced technology to major commercial competitors. Congress has stipulated that the Secretary of Defense must consider the effects on the defense industrial base of any existing or proposed memorandum of understanding (MOU) on arms cooperation. Congress also requires the Secretary to solicit the recommendations of the Secretary of Commerce on the trade implications of such MOUs and their potential effects on the “international competitive position of United States industry.”
Technology reciprocity (a two-way street) is now key to armaments cooperation. In 1989 Congress conditioned acceptance of co-development of the FS–X fighter program on assurances of access to manufacturing technology for active phased array radars and composite aircraft wings, two areas in which Japan appeared to lead the United States.

The administration is trying to increase reciprocity in both civilian and military technology, particularly with respect to Japan. The President’s national technology program calls for greater access to “foreign science and technology” as well as a “trade policy that encourages open but fair trade.” American trade officials are pressing Japan to guarantee industry a specific percentage of the Japanese market in semiconductors, telecommunications, and automobile parts. Senior defense officials have urged Japan to be more forthcoming in sharing military technology. One proposal is to exchange American military technology for Japanese dual-use technology.

To help ensure that defense industries remain competitive a decade or two from now, DOD ordinarily prefers that American firms export finished military systems or components (end items) and the technology needed to maintain them. DOD is reluctant to transfer design, development, and manufacturing technology because this could strengthen foreign competitors.

**The Joint Dimension**

Joint commanders and planners bring two strengths to policymaking that involve the broad range of security and economic considerations which have been described. The first is a sense of urgency. Joint planners in Washington and regional commands must know as quickly as possible which weapons or technologies are going into each region. One flag officer on the Joint Staff told a recent meeting that he needed firm decisions on whether U.S. companies would be allowed to upgrade Soviet-built fighter aircraft worldwide. He could live with any decision; but his staff had to project the military capabilities of potentially friendly and hostile forces so that the CINCs could adjust operational plans accordingly.

Action officers adopt an even blunter approach to Pentagon policymaking. One member of the Joint Staff who will soon take command of an artillery battalion told his civilian counterparts: “I have a very practical interest in arms exports. I want to know which weapons my battalion may go up against.” In this view (too easily overlooked in Washington) destabilizing weapons systems are those that prevent commanders from accomplishing their missions.

The second contribution that planners make to arms export policy is operational knowledge of weapons and technology. If members of the Joint Staff or regional commands start as amateurs in arms export procedures, they are already professionals in the substantive issues at stake. The Joint Staff, combatant commands, and services regularly review applications to sell weapons and defense technology abroad (that is, munitions licenses). Moreover, when a nation seeks a system that is substantially more capable than the corresponding one now deployed, the Joint Staff—often aided by regional CINCs—provides an assessment of threats to that nation and a judgment as to whether the proposed improvement is militarily justified.

**Fighter Upgrades**

In late 1993 and early 1994 the Joint Staff applied its experience in munitions licensing to help develop an important arms export policy. The Directorate for Strategic Plans and Policy (J-5) asked DOD to determine whether
American companies would be permitted to modernize MiG–29 fighters in twenty countries in Europe, the Middle East, and Asia. J-5 maintained that these MiGs represent a quantum leap in capability over other Soviet-produced fighters that have been widely exported (the MiG–21 being described as an entry level system). Thus DOD had to consider that improvements in MiG–29 communications, navigation, radar, and weapons systems might change the military balance in regions critical to U.S. interests. Such improvements also could challenge American air superiority in those regions.

Civilian as well as military staffs throughout the Pentagon accepted this determination. The DOD Arms Export Policy Working Group drew up a policy that specified whose MiG–29s can be upgraded and what level of technology can be provided. That policy takes into account factors such as foreign policy, regional stability, defense sales, and technological superiority.

Joint Staff and CINC planners also can help resolve difficult export cases concerning the integration of U.S. technology in foreign aircraft. American companies that specialize in defense electronics and systems integration see the growing global market for aircraft modernization as an opportunity to sell products beyond a shrinking domestic market. Some Pentagon officials support such sales as the only way to maintain the lead in many technologies critical to military superiority.

Manufacturers, however, believe that upgrades may reduce sales of new aircraft. In their view, integrating American avionics (the world’s best) into Russian or European airframes offers a relatively cheap way for foreign governments to acquire modern fighter aircraft. Some Pentagon officials support such sales as the only way to maintain the lead in many technologies critical to military superiority.

Joint planners will influence the administration’s policy statement on conventional arms transfers. The Joint Staff has been tasked to draft the section of that statement on arms transfers. The Joint Staff has been tasked to draft the section of that statement on arms and technologies which if transferred could have a marked impact. Civilian and military staffs throughout the Pentagon accepted this determination. The DOD Arms Export Policy Working Group drew up a policy that specified whose MiG–29s can be upgraded and what level of technology can be provided. That policy takes into account factors such as foreign policy, regional stability, defense sales, and technological superiority.

Beyond fighter upgrade policies, the Joint Staff, regional CINCs, and services are directly supporting the DOD counterproliferation initiative by determining which friendly countries face the greatest military threat from hostile ballistic missiles and what would be the most effective U.S.-allied defenses in each situation.

Finally, joint planners will influence the administration’s policy statement on conventional arms transfers. The Joint Staff has been tasked to draft the section of that statement on arms and technologies which if transferred could have a marked impact. Since opposing arguments on defense sales tend to offset one another, this operational and technical section may have a greater impact on arms exports than others dealing with broader policy and economic considerations.

It has been said that because CINCs may have to face any weapon that enters their regions, they instinctively oppose transferring “anything more advanced than a spear.” But the author also has heard field grade and general officers comment that “The President has said ’It’s the economy, friend,’ and we will support him.” That tension will be felt by joint planners trying to evaluate the many factors that bear on arms export policy in the mid-1990s. If planners remember that their job is to explain how the weapons and technologies under review will affect operations, they can help shape decisions that will strengthen both national security and economic competitiveness.

2 Arms Export Control Act, Public Law 90–629 (as amended), section 1.


Joint Force Quarterly

1994 Readership Survey

A questionnaire distributed to all readers of JFQ with issue number 3 (Winter 1993–94) yielded a total of 576 responses through June 30, 1994. The following summary of the survey’s results provides a snapshot of the readers and their preferences during the journal’s first year of publication.

Readership Profile

Of all respondents, 83 percent were members of the Armed Forces. The service affiliation of the active and Reserve component respondents combined was Army, 30 percent; Navy, 32 percent; Marine Corps, 7 percent; Air Force, 30 percent; and Coast Guard, 1 percent. Majors and lieutenant commanders comprised 29 percent of military readers; lieutenant colonels and commanders, 32 percent; colonels and captains, 19 percent; general and flag officers, 8 percent; and junior officers et al., 12 percent.

Readership Acceptance

Of the officers, 49 percent normally read most articles and another 41 percent read some of them. Other than feature articles the most stimulating contributions (ranked in order of popularity) were Out of Joint (or commentary), professional notes (The Joint World), book reviews, and letters to the editor. In terms of overall relevance, balance, and accuracy, 31 percent rated JFQ to be excellent and 65 percent either very good or good. In responding to how faithfully the journal met its purpose—to promote understanding of the integrated employment of land, sea, air, space, and special operations forces—28 percent stated that it was right on target and another 66 percent indicated that it met the purpose either very closely or closely.

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While the earliest example of jointness in American military history may be the subject of an open debate, two campaigns conducted during the Civil War display characteristics attributed to joint operations today. The capture in 1862 of Fort Henry and Fort Donelson, on the Tennessee and Cumberland Rivers respectively, involved riverine operations mounted by the Army and Navy. Though Union forces achieved their objectives, there were no joint commands or doctrinal pubs to show the way. The successful assault on Fort Fisher on the South Carolina coast in 1864–65 was an operation undertaken on a much greater scale that called upon the warfighting skills of soldiers, sailors, and marines. That victory revealed the emerging organizational capabilities of joint forces and demonstrated that senior commanders were becoming adept at employing the assets of each service to wage war both on land and at sea.
An analysis of two campaigns of the Civil War—at Fort Henry and Fort Donelson on the Tennessee and Cumberland Rivers and at Fort Fisher on the North Carolina coast—may determine the significance of these early joint operations on the evolution of the American way of war. Did the Union have a coherent joint strategy in 1861–62? Were ad hoc joint operations conducted based upon the personalities of Army and Navy commanders? What role did politics play in fostering interservice cooperation? Were there any lasting effects of jointness during the Civil War?

In 1861 Clausewitz had been dead for thirty years. However his major work, On War, had yet to be translated into English and was largely unknown to Americans. The tactical manuals in use at the U.S. Military Academy, Mahan’s Out-Post and Hardee’s Tactics, did not mention joint operations. Jomini’s The Art of War, the principal strategy text of the day at West Point, contained a short item on “descents” (a term of art for amphibious operations), but stated that such operations were “rare” and “among the most difficult in war.”

Naval thinking on joint operations was sketchier. The traditional attitude was that aspiring officers could learn everything they needed to know by putting to sea at an early age. The Naval Academy was not established until 1845, but since no naval counterpart of Jomini had yet emerged the Navy paid little attention to the theory of war, let alone amphibious or other joint operations.

Experience in joint operations before 1861 was limited. The Revolutionary War involved several amphibious expeditions including a combined French-American fiasco at Newport in 1778 and a successful operation at Yorktown in 1781. But the fact that the Navy was not established until 1794 (and then virtually abolished again by Jefferson) illustrates that no lasting lessons on the efficacy of joint operations were learned.

The most recent experience before the Civil War was Winfield Scott’s unopposed landing at Vera Cruz in 1847, a superbly executed operation using the first specially designed landing craft in U.S. military history. Some 8,600 troops were put ashore in a few
hours without losing a man, a fitting prelude to a brilliant campaign. Scott, aged 75, was general-in-chief of the Army in 1861, though physically unfit for field service. He foresaw a long and difficult war. In May 1861 he wrote to his successor, George B. McClellan, describing his famed Anaconda Plan to strangle the Confederacy by means of a blockade and to invade the South by joint operations conducted down the Mississippi to New Orleans. The appointment of McClellan to command the Army of the Potomac, friction among generals, and Scott’s debility prompted his retirement and replacement by McClellan in November 1861. McClellan’s tenure as general-in-chief lasted only four months; yet it has been claimed that in this time he formulated a revolutionary strategy of joint operations that would begin with strikes at Charleston, New Bern, Mobile, and New Orleans, and then, driving inward along railroads and the Mississippi, cut internal communications and split the Confederacy. In this interpretation, the Peninsular Campaign is viewed as a triumph of jointness that was only unsuccessful because of Lincoln’s obtuseness in keeping McDowell’s corps in Washington, by fumbling on the part of the Navy, and by the demotion of McClellan, which “prevented him from coordinating the movements of other Federal armies . . . or obtaining reinforcements from less active theaters of war.”

The final conclusion is that a major opportunity slipped away:

The Navy . . . was allowed to pursue an independent strategy while the Army commanders, lacking McClellan’s foresight and flexibility of method, agreed with the Lincoln administration that wars were only won by slugger it out on the battlefield. The failure of the Peninsular Campaign signalled both the demise of Federal grand strategy and the demise of [joint] operations planning. This revisionist interpretation is deeply flawed. First, it posits that McClellan could have, with the nebulous powers of general-in-chief, achieved results with field armies that he was unable to do with his own when in active command. Second, the notion that McDowell’s corps was essential to victory on the peninsula is nonsense. McClellan always greatly overestimated his opponents, and McDowell would not have made a difference. Third, McClellan had no authority whatsoever over naval forces. To assume that as general-in-chief in Washington he could have forced Army-Navy cooperation in distant theaters flies in the face of experience throughout the Civil War. Finally, this interpretation simply ignores fatal flaws in his character. An unwillingness to move quickly and fight, consistent overestimation of his opponents, secretiveness about his intentions, and contempt for his political masters in this most political of wars destroyed McClellan in the final analysis. There is absolutely no reason to think that if he had been general-in-chief and given everything he wanted in the Peninsular Campaign it would have made any difference. Spinning out grandiose plans was an activity that McClellan enjoyed; execution was another matter. Neither command arrangements nor doctrine for joint operations existed at the time. Successful joint operations, like much else, would have to be improvised by those on the scene.

Forts Henry and Donelson

The first large-scale joint operation in the western theater was the campaign for Fort Henry and Fort Donelson, which brought Ulysses S. Grant to public attention. Central Tennessee was of strategic importance to the Confederacy. It was a fertile farming area and held large iron deposits as well as numerous forges and furnaces. With the lack of industrial capacity in the South, the area was a resource almost beyond estimate. The immense natural problems of defending it, however, were devilishly complicated by Kentucky’s attempt to remain neutral. Since neither side wanted the opprobrium of violating this neutrality, defensive works to protect central Tennessee had to be built outside Kentucky.

Given the poor roads and lack of north-south railways, the likely invasion route into central Tennessee was by the twin rivers, the Tennessee on the west and the Cumberland on the east. To counter this threat Confederate fortifications were constructed on both rivers in 1861. Fort Henry, on the Tennessee,
was poorly located on low land facing Kentucky over the river. Fort Donelson, 12 miles east on the Cumberland, was a stronger position. It sat on a bluff 75 to 100 feet above the river and was surrounded by gullies that would hamper assault by land. In November 1861, Union Army forces in the area were shaken when Major General Henry W. Halleck assumed departmental command in St. Louis. Grant was subordinate to Halleck. But not all Union forces in Kentucky were under Halleck. Rather he shared responsibility for the state with Major General Don Carlos Buell who commanded the Army of the Ohio from Louisville. Buell’s department included Kentucky east of the Cumberland and all of Tennessee.

Lincoln was eager for a campaign in Tennessee to succor the Unionists in the eastern part of the state. But mounting such an expedition depended on naval forces which did not as yet exist. The first naval commander in the west, John Rodgers, was sent to the Mississippi primarily to interdict clandestine commerce, although he was also charged with beginning work on the Anaconda Plan’s advance down the river. This thrust, it was thought, required construction of a fleet of ironclads. Building them was a joint Army-Navy affair, and squabbles over the contract resulted in the recall of Commander Rodgers and his replacement by Captain Andrew Hull Foote.

Foote, a strongly religious New Englander and a strict temperance man, was instructed by Secretary of the Navy Gideon Welles to cooperate with the Army without subordinating himself. He threw himself into constructing the ironclads and seven were launched by November. The Army Quartermaster Corps, however, was terribly slow in paying the contractors. Foote also had enormous trouble getting crews. As late as January 9 Foote still had to commission Cincinnati and Carondelet with only one-third of their crews. And at the start of the Fort Henry expedition Halleck was still authorizing Grant to detail soldiers for gunboat duty. Nevertheless, by the end of January Foote had a workable gunboat fleet.

In early January Halleck directed Grant to reconnoiter up the Tennessee to keep Polk from sending reinforcements to Bowling Green, toward which Buell was planning an advance in response to Lincoln’s desires. This excursion turned into a miniature version of General Ambrose Burnside’s “mud march” a year later. Grant said, “We were out more than a week splashing through the mud, snow, and rain, the men suffering very much.” The reconnaissance had its intended effect in that Polk sent no reinforcements, and General George Thomas was victorious at Mill Springs, thereby erasing the threat of a Confederate move against Buell’s flank. Grant, however, was restless and impatient; he saw opportunity in a joint operation up the twin rivers but had to persuade Halleck to approve such an expedition. He accordingly traveled to St. Louis for an interview with Halleck, which went badly. Halleck barely knew Grant but was familiar with the stories of Grant’s drinking.

Grant recounted the scene in his memoirs:

I was received with so little cordiality that I perhaps stated the object of my visit with less clearness than I might have done, and I had not uttered many sentences before I was cut short as if my plan was preposterous. I returned to Cairo very much crestfallen.

Crestfallen Grant may have been, but his spirits revived upon his return to Illinois, where he consulted with Foote, who agreed on the advisability of a joint operation down the rivers. Therefore, on January 28 both officers cabled Halleck, asking permission to occupy Fort Henry. Foote stated that four ironclads would suffice. Foote’s endorsement of the plan changed Halleck’s mind.

Grant and Foote worked closely together in arranging transportation and planning for the landing of troops. The expedition sailed...
Fort Donelson: Situation on the Night of February 14–15, 1862.


Fort Donelson: Situation at Noon on February 15, 1862.

on February 4 and landed troops early the next day some miles north of Fort Henry. The land advance was slow because of severe rains and poor road conditions. On February 6 Foote took his gunboats down to the fort and began a bombardment.

The river in the winter of 1862 crested some 30 feet above normal. This flood was a disaster for the Confederacy because it made the mines anchored to the river bottom useless and put part of Fort Henry under water. Brigadier General Lloyd Tilghman, commanding there, had 3,000 men and 17 guns; however, only two of the riverside guns, a Columbiad and a 24-pounder rifle, were effective against armor. Tilghman, thinking Fort Henry indefensible, had sent most of his men to Fort Donelson.

The artillery battle between Foote's gunboats and the fort was heavy. USS Essex was hit in a boiler by the Columbiad, causing “carnage” below decks and scalding the captain and others. USS Cincinnati, Foote’s flagship, absorbed over 30 hits. But then the fort’s 24-pounder burst, killing most of the crew, and the Columbiad was accidentally spiked by a broken priming wire. With the gunboats firing at point-blank range, Tilghman raised a white flag. The river was so high that the boat sent to accept the surrender floated in through the fort’s sally port. Grant’s forces arrived only 30 minutes after the surrender, having been delayed on the roads, and Foote turned the fort over to the Army.20

Foote, who felt unprepared for another attack against fixed fortifications so soon after the heavy Fort Henry action, nonetheless attacked Fort Donelson on the 14th. This bombardment was as unsuccessful as the one on Henry had been successful. Donelson, located on high bluffs, could subject gunboats to an intense plunging fire. One after another, the gunboats were disabled and floated back downstream. St. Louis, now Foote’s flagship, was hit 59 times and Foote himself was wounded. The weather had now turned bitterly cold, and Grant was faced with conducting a siege under unfavorable condi-
tions. On the 15th he met with the wounded Foote, who said he would have to return to Cairo to repair damages but would return within 10 days and lay siege to the fort with his gunboats. In the meantime, the least damaged vessels would remain on station.21

While Foote’s attack had been a tactical failure, it had important operational results. The Confederate commanders in the fort, mesmerized by the naval threat, had allowed Grant to invest the post, missing the opportunity for strategic withdrawal and the saving of the 17,000 who eventually surrendered. After squabbles within the Confederate command, the episode ended with unconditional surrender to Grant on February 16.

The Henry and Donelson Campaign illustrates several points about the conduct of joint operations at this stage of the war. First, of course, in the absence of unified command or meaningful joint doctrine, the conception and execution of joint operations totally depended on ad hoc actions by
the responsible commanders, and therefore upon their personal chemistry and communications. Foote and Grant were very different individuals—one a teetotaler who preached sermons, the other a cigar-smoking quasi-alcoholic who had left the Army under a cloud—yet they worked well together. Whatever their differences, they shared a common inclination to attack the enemy, both hating inactivity. They maintained excellent communications without undue worry as to who would get the credit—a quality rare in Civil War commanders.

The second point is that the command arrangements which did exist on the Army side hampered rather than encouraged successful joint operations. Although Grant described Foote as “subject to the command of General Halleck,” he was not in any formal sense. His instructions from the Navy Department were to cooperate, and he did that admirably; but he was not Halleck’s subordinate. Halleck therefore had true operational control of only half the joint operation. Moreover, Halleck’s dislike and distrust of Grant almost destroyed the operation before it began.

In addition, departmental arrangements then were highly unsatisfactory. Halleck had no operational control over Buell, who was supposed to be moving in support of Grant, but who adamantly refused to budge. Another two years would pass before the North developed satisfactory high command arrangements, and even then they depended more on personalities than on well-thought-out doctrine.

Finally, although the Henry-Donelson Campaign produced important strategic results, it was not followed up. Halleck seemed more intent on curbing his ambitious subordinates than on exploiting the victory. As a result, Grant’s services were essentially lost to the Union until fall 1862, and much that lay open to conquest after Henry and Donelson (including East Tennessee, so vital to Lincoln) had to be won by bloody attrition later.

Fort Fisher
Operations at Fort Fisher in December 1864 and January 1865 differ from the Fort Henry and Fort Donelson campaign in several important particulars. First, by late 1864 most observers would have pronounced the Confederates defeated as opposed to early 1862 when the issue was still in question. Second, there was difference of scale, the assaults on Fort Fisher being vastly larger. Third, the amicable relations that had marked the Union high command during the Henry-Donelson Campaign were conspicuously absent in the first phase of the operations at Fort Fisher. Finally, of course, Fort Fisher was a coastal rather than a riverine operation and the execution bore more similarity to the amphibious landings in the Pacific during World War II than to Fort Henry and Fort Donelson.

Fort Fisher was located on a peninsula between the Cape Fear River and the Atlantic Ocean 18 miles south of Wilmington and described as “the largest, most formidable fortification in the Confederate States of America.” After the Battle of Mobile Bay,
Second Attack on Fort Fisher


Wilmington, always popular with blockade runners, was the only port open for such commerce—the South’s sole lifeline to the outside world. One hundred blockade runners sailed in and out of Wilmington during the war.\(^2\) Blockading the port was difficult because two separate inlets into the river, separated by 25 miles of shoals, had to be watched—an arc 50 miles long.\(^2\)

Colonel William Lamb, the commander, had been working steadily on the fortifications for two years. By late 1864, an L-shaped earthen work consisting of a half-mile land face crossed the peninsula. Made of 15 thirty-foot traverses containing bombproofs and connected by a tunnel, the fort mounted 20 Columbiads, three mortars, and several field pieces. For a half-mile north, trees had been felled to present a clear field of fire. The land face was also defended by a minefield—a great innovation. Twenty-four buried shells and mines were connected electrically to re-
rascality and almost total failure in the field.\textsuperscript{28} The problem with his assuming command was that he and Porter despised each other. But the immediate effect of Butler's interposition was delay. Some of this was the normal confusion attendant upon such a switch; most of it, however, was due to the famous affair of the powder-boat.\textsuperscript{29}

Butler was greatly interested in innovative military technology and an unsuccessful inventor himself. Prompted by newspaper accounts of the destruction caused by the accidental explosion of two gunpowder barges in England, he conceived the idea of packing a hulk with explosives and running it in near Fort Fisher. At a meeting with Grant and Porter in November, he predicted that such a huge explosion would flatten the fort's wall and kill most inside, so that infantry could walk in and take it. Grant was unenthusiastic but let the scheme proceed. Porter, despite his dislike for Butler, was taken in and agreed to provide the ship, explosives, and transport. The ship selected was \textit{USS Louisiana}, a flat-bottomed, shallow-draft vessel assigned to blockade duty. It was disarmed, cut down, camouflaged to look like a blockade runner, loaded with 200 tons of gunpowder, and fitted with an elaborate ignition system.\textsuperscript{30}

The expedition left Hampton Roads on December 13 and 14. Butler's transports carried two divisions, 6,500 men; Porter had 57 ironclads, frigates, and gunboats. The expedition arrived off Wilmington December 19, but a gale began to blow and the transports returned to Beaufort to wait it out. The storm lasted three days which enabled Colonel Lamb to bolster his defenses; by December 23 he had some 1,400 troops in the fort, though a third were "junior reserves"—boys 16 to 18 years old.\textsuperscript{31}

Butler sent Porter word that he would return on the 24\textsuperscript{th}, with bombardment and landing on Christmas Day. Porter, whose ships had ridden out the gale without serious damage, decided to set off the powder-boat early on the 24\textsuperscript{th}—in the Army's absence—and begin bombardment the same day. When he heard this, Butler exploded. The old animosity between the two commanders fused with the Navy's seeming desire to get all the glory. Butler promptly steamed south in a rage, ordering his transports to follow as soon as they finished taking on coal. \textit{Louisiana}, under Commander Alexander C. Rhind, was towed close to Fort Fisher on the evening of the 23\textsuperscript{rd}. Her engines were lit and the crew got away. \textit{Louisiana} went up in a huge explosion shortly before 0200 on the 24\textsuperscript{th}. Allan Nevins called it "one of the most ludicrous farces of the war." Rhind, watching his work go up in smoke, remarked "There's a fizzle," and went below. The explosion, though impressive, did absolutely nothing to the fort except waken its garrison and badly frighten the teenaged recruits. There would be no easy entry into Fort Fisher.\textsuperscript{33}

On December 24, Porter began an exceptionally heavy naval bombardment, firing over a hundred rounds a minute. The fort replied with fairly limited fire because the bombardment made the gun emplacements exceedingly uncomfortable and to save ammunition. Nevertheless, several of Porter's ships were damaged by fire. More serious were five accidental explosions of Parrott rifles in the fleet which caused 37 casualties and forced Porter to silence the 100-pounders.

Butler finally arrived late in the day, exceedingly disgruntled by Porter's actions. Porter, in turn, was peeved at the transports arriving too late to attempt a landing that day and suspended the bombardment. Some 10,000 shells had been thrown into Fort Fisher with very little effect.\textsuperscript{34}

The landing took place north of the fort on Christmas. About 2,000 troops went ashore under Weitzel's command, while Porter resumed the bombardment. While unopposed, the landing soon made it apparent that the fort was still full of resistance. Canister exploded in the advancing ranks, and mines took their toll. Moreover, the wind was coming up, which meant reembarkation might be impossible. Finally, Confederate prisoners boasted that 6,000 men under General Robert Hoke were on their way from Wilmington. Though Butler's orders from Grant explicitly directed him to entrench and besiege the fort if necessary, he
thought it impossible to carry the place by storm and did not want to undertake a siege. He therefore ordered a withdrawal, although officers on the scene felt that a determined attack would have worked. The withdrawal had to be broken off when the surf became too high to bring in the boats. Butler sailed for Hampton Roads, leaving 700 men on the beach. 

Porter was livid. Even prior to the attack, relations between the two had become so bad that they only communicated through intermediaries. Now Butler abandoned the joint effort, leaving his men and Porter in the lurch. Porter, to his credit, kept up continuous fire and managed to get the 700 men off the beach when the wind changed the following day. He then gradually withdrew to Beaufort.

The rebels were naturally jubilant at the repulse of the huge expedition. Lamb telegraphed, “This morning, the foiled and frightened enemy left our shore.” The departmental commander, General Braxton Bragg, wrote President Davis commending Lamb and Brigadier General W.H.C. Whiting, for “gallantry, efficiency, and fortitude displayed under very trying circumstances.”

Reaction in the North was stinging. Grant wired Lincoln that “The Wilmington expedition has proven a gross and culpable failure....Who is to blame will, I hope, be known.” Porter, in writing to General William T. Sherman, whom he hoped would replace Butler, criticized the Army: “When you have captured [Savannah] I invite you to add to your brow the laurels thrown away by General Butler after they were laid at his feet by the Navy, and which neither he nor those with him had the courage to gather up.” To Welles in Washington Porter wrote: “I feel ashamed that men calling themselves soldiers should have left this place so ingloriously....[In] a war like this, so many incompetent men in the Army are placed in charge of important trusts....If this temporary failure succeeds in sending General Butler into private life, it is not to be regretted.” Later, when Butler attempted to blame the failure on the Navy, Porter pronounced Butler’s report “a tissue of misstatements from beginning to end.” The fiasco ended Butler’s military career.

While Porter had wanted Sherman to replace Butler, Grant’s choice, Major General Alfred H. Terry, was excellent, as unlike the flamboyant Butler as imaginable. Though not a professional soldier, he had risen to command a corps on merit. He was quiet, dependable, and easygoing, attributes that helped in dealing with the mercurial, self-promoting Porter. Grant’s instructions to Terry left no doubt that he did not want a repetition of the former command friction. He wrote to Porter in the same vein:

I send [Terry] with the same troops General Butler had, with one picked brigade added, to renew the attempt on Fort Fisher....He will consult with you fully, and will be governed by your suggestions as far as his responsibility for the safety of his command will admit of.”

Porter was somewhat dubious of Terry, because he had been a subordinate of Butler’s and because the additional troops he brought were colored, of whom Porter disapproved. However, once the two men met at Beaufort on January 8, things went well. After a three-day gale they set out on January 12, the largest expedition ever to sail under the American flag to that time. Porter had 59 war-
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Porter had been dissatisfied with the accuracy of naval gunnery in the first bombardment; far too many shells had sailed over the fort and landed in the river or simply buried themselves in the sand. His instructions directed commanders to not fire at the fort's flag but to pick out the guns. The Parrott rifles, whose explosions had caused problems, were to be fired with reduced charges if at all.41

The Confederate garrison was only 700 strong. Hoke's division, which had arrived just as Butler withdrew, had itself been withdrawn to Wilmington by Bragg, who did not think that the Union would attack again before spring. Lamb, on sighting the fleet, urgently appealed to Bragg, who ordered Hoke back, telling him to prevent a landing, and if it had already occurred to establish a defensive line to protect Wilmington.

Porter began the bombardment before dawn on the 13th, hoping to provoke the fort's guns into disclosing their location by muzzle flashes. This worked, and after sunrise the rest of the fleet joined in, firing as heavy as, and substantially more accurately than, the December bombardment. The landing began between 0800 and 0900 hours. To guard against a repetition of the December fiasco, where the men had been marooned for a day, the troops carried three days' rations. Terry's biggest fear was an attack during the landing by Hoke's troops; therefore, the federal troops were ordered to establish a defensive line facing north. But the landing was unopposed and 8,000 men got ashore by mid-afternoon. Porter kept up the bombardment until dark and left ironclads at work all night to discourage repairs to the fort. Several ships were damaged but none severely.42

By this time, Hoke's division had advanced from Wilmington and set up a defensive line facing north. Despite appeals from the fort, Bragg, thinking the Union force too strong to resist, at first refused to order Hoke to attack on the peninsula. Lamb was reinforced with North Carolina soldiers and sailors, bringing his force to about 1,550. On the 14th, Bragg ordered Hoke to attack and went to the scene. On seeing well-entrenched Federal troops (who he overestimated), Bragg thought the assault futile, especially given the power of the fleet. He countermanded his order and Hoke remained quiescent.43

Porter resumed the bombardment on the 14th. It had a substantial effect. General Whiting, who thought Bragg a fool and had come to share the fort's fate, said, "It was beyond description, no language can describe the terrific bombardment." The fort took some 300 casualties, and only one gun on the landface was still operational.44

Porter and Terry met that night aboard Porter's flagship and planned the land assault. The fleet would bombard until 1500 on the 15th. Then two columns would assault the fort, one Army, one Navy. While 4,000 Army troops assaulted the landface near its western end, the Navy with 2,000 sailors and marines would attack the northeast bastion. The remaining 4,000 soldiers ashore would protect the rear against an attack by Hoke. The naval assault was a dubious proposition, consisting of sending sailors ignorant of infantry tactics and armed only with cutlasses and pistols against strong works. Perhaps Porter, despite excellent cooperation with Terry, was loath to give the Army all the glory of storming the fort. The assault failed and the sailors were badly cut up by musket fire and canister, taking about 300 casualties. Pinned down, they desperately attempted to dig holes in the sand and finally broke and ran.

However, the naval assault had done the Army attackers a great service. Convinced that this was the main attack, the rebel manpower and attention were diverted from the landface. Even as the exultant Confederates watched, in Lamb's words, "a disorderly rout of American sailors and marines," Union flags appeared on the western end of the landface. A counterattack was mounted, but then the fleet opened up on the Confederates massed in the fort, creating havoc. Fierce hand-to-hand fighting ensued at the landface, where ships could not fire without hitting friendly forces. The fight moved from one traverse to another and did not end until about 2200 hours.45 The fort surrendered with some 2,000 men and 169 guns. Terry sustained 955 casualties and Porter 386. An-
other 250 Union casualties resulted from an accidental explosion in the main magazine on the day after its surrender.

The essential part joint operations played at Fort Fisher was readily apparent to participants of both services. Porter wrote to Welles: "[Terry] is my beau ideal of a soldier and a general. Our cooperation has been most cordial; the result is victory, which will always be ours when the Army and Navy go hand in hand." 46 Stanton wrote to Terry and Porter: "The combined [joint] operations of the squadron and land forces of your commands deserve and will receive the thanks of the Nation, and will be held in admiration throughout the world as a proof of the naval and military prowess of the United States." 47

What conclusions can be drawn about jointness from these two Civil War campaigns? The first is that joint warfare existed and could be effective. Joint operations did not come of age until World War II or perhaps until passage of the Goldwater-Nichols Act in 1986; but commanders such as Grant, Porter, and Foote thought jointly in considering the resources which the Army and Navy brought to the table, and how each of the services fought to achieve common objectives. Both the Fort Henry-Fort Donelson and the Fort Fisher Campaigns presented many problems of terrain, weather, logistics, tactics, and strategy. Jointness solved them to the extent needed for success. Joint operations perhaps were not essential to victory, as Joint Pub 1 claims, but they contributed in important ways to attaining victory. 48

Second, by the end of the war, joint operations had reached a high degree of sophistication. The contrast between the rather small-scale Henry-Donelson operation, advocated by Grant in the face of opposition from the Army, uncoordinated with other movements, and not followed up, and the Fisher operation, which was done on a huge scale with the full support of both the War and Navy Departments, and detailed planning, is instructive. Fort Fisher illustrates as well the industrial and organizational maturity which the war vastly accelerated in the North. Much of this sophistication would be lost after the war (as logistical nightmares and command squabbling during the Spanish-American War were to show), but for the United States to have attained it in the 1860s, with a volunteer army, was a remarkable feat. Indeed, operations of this scale and maturity were not seen again until World War II.

Finally, notwithstanding such advances, the command structure for joint operations remained deficient throughout the war. Ultimately, success or failure of these operations depended upon the personalities of the Army and Navy commanders. In the absence of a unified command, it was only by cooperation and good relations between them that victory could be attained. The hatred between Butler and Porter was enough to doom the first expedition to Fort Fisher in spite of the military, economic, and political power that lay behind it. In our own age we have succeeded, we think, in exorcising interservice rivalries by giving real powers to joint combatant commanders. Have we? The experience in the Persian Gulf was positive, but anyone who thinks that formal command arrangements can guarantee control of events understands neither history nor the fog and friction of war. All they can do is provide the best possible framework for what must be done, and those in the Civil War were deficient in that respect; ad hoc relationships, not formal organization, were the essence of success in joint operations.

Lincoln, in his second annual message to Congress in 1862, observed: "The dogmas of the quiet past are inadequate to the stormy present....As our case is new, so we must think anew, and act anew. We must disenthral ourselves, and then we shall save our country." 49 Those men who conducted joint operations in the Civil War had disenthralled themselves from military dogma; the occasion brought forth innovation, organization, and ultimately victory on a grand scale.
NOTES
2 Dennis Hart Mahan, An Elementary Treatise on Advanced-Guard, Outpost, and Detachment of Service of Troops (New Orleans: Bloomfield and Steel, 1861).
9 Ibid., p. 188.
10 Ibid., p. 189.
11 The obvious place for fortifications on the Tennessee and Cumberland Rivers was at the Birmingham narrows between Paducah and Eddyville, where the rivers are only three miles apart. However, this site is well within Kentucky and therefore was politically off-limits in 1861. Benjamin Franklin Cooling, Forts Henry and Donelson: Key to the Confederate Heartland (Knoxville: University of Tennessee Press, 1987), p. 46.
12 Cooling, Forts Henry and Donelson, p. 46.
13 Cooling, Forts Henry and Donelson, p. 23–24.
20 Foote, The Civil War, p. 719.
24 Ibid., pp. 739–40; Gragg, Confederate Goliath, pp. 103–04.
30 Gragg, Confederate Goliath, pp. 157–90.
35 A ton of coffee could be purchased in Nassau for $249 and resold in Wilmington for $5,500; the blockade runner could then buy cotton for 1 cents a pound and resell it in Great Britain for $1 a pound. A bottle of gin purchased in Bermuda for $4 could be resold in Wilmington for $150. Ibid., p. 8.
36 Ibid., pp. 11–21.
37 Ibid., pp. 17–21.
38 Ibid., pp. 34–37; Reed, Combined Operations, pp. 331–33.
40 Grant, Personal Memoirs, p. 663; Gragg, Confederate Goliath, pp. 40–42; Reed, Combined Operations, pp. 337–38. For the scientific calculations supporting the idea see U.S. Navy Department, Official Records of the Union and Confederate Navies in the War of the Rebellion, series 1, volume 11 (Washington: Department of the Navy, 1900), pp. 207–14 (hereafter cited as O.R.N.).
General of the Army Omar Nelson Bradley
(1893–1981)
Chief of Staff, U.S. Army
Chairman, Joint Chiefs of Staff

VITA


[In 1949] Congress enacted several laws modifying the 1947 National Security Act, designed to intensify unification. One [law]... established the formal post of Chairman of the Joint Chiefs of Staff, who would serve a two-year term (and be eligible for reappointment to a second term in time of peace) but who would not have a formal “vote” in the JCS.

Probably on Ike’s recommendation, [Secretary of Defense] Johnson then turned to me, even though I had told Ike earlier in the year I did not want the job. I now changed my mind. I agreed to serve in the job one term—two years. The main reason for my change of heart was my deep concern about the state of the military establishment. Owing to the cancellation of the supercarrier, there was a vicious mutiny afoot in the Navy... which could conceivably tear apart the Department of Defense, possibly tempting the Kremlin to capitalize on our military disarray. A firm but fair JCS Chairman, assisted by a neutral Army general (my replacement as Army Chief of Staff), might be the moderating force that could prevent a crippling brawl.

On August 12, Louis Johnson and I went to the White House, where President Truman announced my nomination as Chairman of the Joint Chiefs of Staff. The Senate approved the nomination at once, and at 0900 on August 16, in a modest ceremony at Johnson’s office, I was sworn in. The reaction to my appointment generally was positive. I was still blessed with a “favorable press.” However, to the Navy I was still an enemy.

With the JCS now officially enlarged to four men... the Navy felt that even though I had no official vote, its voice would be further weakened.

—From A General’s Life by Omar N. Bradley and Clay Blair
Dow sizing the defense establishment is putting a tremendous strain on the ability to wage two nearly simultaneous regional conflicts. The force structure proposed in the Bottom-Up Review along with continuing fiscal pressure point to further reductions in combat capability. In the midst of this unprecedented scale-down the roles and missions of the Armed Forces are being scrutinized. Each service, along with the Joint Staff, has rewritten key warfighting doctrine over the last several years. Since total obligation authority is on the line, service doctrine inevitably focuses on how to organize and fight independently. The Armed Forces have yet to come up with a coherent doctrine that can fuse individual service attributes into a coordinated joint warfighting machine. Unity of command in a joint doctrinal framework is the key to an integrated yet simple force that is needed to achieve initial and versatility on the battlefield.

The following discussion uses principles established in component service doctrine to develop a joint command and control structure at the strategic and operational level that emphasizes unity of command. To understand unity of command, it is important to review the evolution of the concept in doctrinal circles, especially in recent years. In 1986 Army Field Manual 100–5, Operations, stated, “for every objective, ensure unity of effort under a responsible commander. This principle ensures that all efforts are focused on a common goal.” This definition concentrates on the objective and recognizes the need for unity of command in realizing unity of effort. The new FM 100–5 defines the principle of war to be “for every objective, seek unity of command and unity of effort.” This new definition puts unity of effort on an equal footing with unity of command. The emphasis is on seeking unity of command, not ensuring unity of effort through unity of command. FM 100–5 still accepts that unity of command “requires a single commander with the requisite authority to direct all forces in pursuit of a unified purpose.” It goes on to stipulate: “Unity of effort... requires coordination and cooperation among all forces—even though they may not necessarily be part of the same command structure—toward a commonly recognized objective. Collateral and main force operations might go on simultaneously, united by intent and purpose if not commanded. ...In combined and interagency operations, unity of command may not be possible, but the requirement for unity of effort becomes paramount.”

This paragraph contains some significant misperceptions. Emphasis has now shifted from ensuring unity of effort under a single commander to permitting “intent and purpose” to replace a single commander. Army doctrine has profoundly shifted in its definition of that principle of war known as unity of command. The final draft of Joint Pub 3–0, Doctrine for Joint Operations, had an identical definition: “For every objective, seek unity of command and unity of effort.” In the final version of the publication (September 1993) the definition was changed to read:

Ensure unity of effort under one responsible commander for every objective. ...Unity of effort, however, requires coordination and cooperation among all forces toward a commonly recognized objective, although they are not necessarily part of the same command structure. ...In multinational and interagency operations, unity of command may not be possible, but unity of effort becomes paramount.

The final version appears to be a compromise in the definition of unity of command and its relation to unity of effort. It is a shift in doctrine but not as profound as that found in FM 100–5. Air Force Manual 1–1, Basic Aerospace Doctrine of the United States Air Force, adopts almost the same definition as the 1986 edition of FM 100–5: “Ensure unity of effort for every objective under one responsible commander.”

In war there are multiple elements of combat, combat support, and combat service support directed at a common objective under a single commander (as shown in figure 1) who ensures that the objective is understood through his intent and mission orders. A commander articulates objectives to subordinates and ensures they understand how these objectives are manipulated in the ART of war.

Figure 1

Major K. Scott Lawrence, USAF, is assigned to the Office of Assistant Secretary of the Air Force for Acquisition. An F–16 pilot, he was the first to fire an operational test shot of the Advanced Medium-Range Air-to-Air Missile.
work together to accomplish the battle plan. A commander’s intent provides the framework for resolving conflicts that arise in the course of battle and steers subordinates toward solutions that meet objectives. In this evolving notion of unity of command unity of effort is achieved by an overarching “intent and purpose” (figure 2). But who resolves differences in an element’s perceptions, intent, and purpose? Who ensures that perceptions do not change as a conflict progresses? What is the main effort? Without unity of command, unity of effort is never ensured—left to chance, hope, and luck. In the fog of war nothing can be exploited by an enemy. According to Air Force Manual 1–1, centralizing air tasking order (ATO) planning and command and control of air operations in the Air Operations Center creates a vulnerability that can be exploited by an enemy. According to Air Force Manual 1–1, “Delegation of control reduces the complexity of the problem an air component commander faces by keeping span of control more in harmony with situational awareness. Moreover, delegation has the advantage of reducing the enemy’s ability to create friction by attacking the organization exercising control.”

ACC must structure command and control, using subordinate commanders to create an optimum span of control over theater air assets. The subordinate’s responsibilities must be drawn to ensure focused objectives, clear responsibilities, and a manageable span of control. The interdependence of targets in the theater deep and the destruction of the theater rear creates interwoven objectives. To ensure unity of effort, ACC should designate a commander with primary responsibility for theater deep battle and overland theater rear battle. This position can be called the strategic air division (AD) commander. It is imperative that ACC designate an air commander with operational level focus and primary responsibility in the theater close battle. This position can be called the operational AD commander as depicted in figure 5.

Targets in the theater deep are at the heart of an enemy’s waging potential. Destroying them can cause an enemy decisionmaker to fail in the conduct of a campaign and can undermine enemy morale and leadership credibility. The targets include air forces, strategic weapons, and strategic reserves; command, control, and communications centers and power and transportation systems; and targets whose destruction has more long-term effects, such as manufacturing systems, sources of raw materials, and critical stockpiles. ACC would have authority to allocate theater deep assets to strategic ADs based upon the-
A strategic AD commander is subordinate to composite wings (CW), theater air defense (TAD) brigades, and theater deep and rear intelligence assets. The strategic AD will task-organize forces to achieve theater deep and rear objectives. A command element such as a composite wing will serve as a strategic AD subordinate command to execute theater deep operations. A TAD brigade will be a strategic AD subordinate command to execute theater rear operations. Mission orders pass sequentially from the JFC to ACC and strategic AD and then on to the CW and TAD brigade. A strategic AD commander with clear area boundaries and objectives ensures great flexibility and coordination.

In a developed theater, land forces tend to be the primary combat forces operating in the theater close area. Theater close battle operations are focused on destruction of the enemy, with the final objective many times being to gain or maintain territory. In this developed scenario, the land component commander (LCC) provides the vision and concept of operations necessary to win the decisive battle. The land commander must fight to the depth of his weapons to properly shape the battle, destroy the enemy, and retain or gain the initiative. Air operations must be integrated with land operations and closely coordinated to ensure the synchronization needed to attain maximum combat power. Confidence in air operations and timing between air strikes and ground maneuver are critical to gain maximum synergy. LCC can then confidently maneuver at the greatest speed, and preserve firepower and critical logistical resources. The interdependence of mission objectives and need for all forces to be closely coordinated to attain maximum combat power makes it prudent to have a single commander over all forces employed in the theater close battle.

LCC divides the theater close battle into subordinate AOs (figure 7). The corps commander uses deep battle to shape the battlefield for his divisions. The extent to which the battlefield is nonlinear is driven by the corps commander’s ability to fight and shape the deep battle while rapidly exploiting openings. Command and control measures, which delineate a commander’s area of responsibility, are critical to coordinate and deconflict deep fires and maneuver between echelons of command. The placement of the corps outer boundary is dependent on mission, enemy, terrain, troops, and time available (METT–T); it must be far enough out to allow the corps commander to shape his close battle. Outer boundary placement is METT–T dependent, although the range of deep fires, intelligence capability, and enemy forces are driving factors in ultimate placement. The corps outer boundary defines a corps restrictive fire control measure, which requires other command echelons to coordinate with corps to fire inside the boundary.

The ability of corps deep attack assets to effectively mass and synthesize will depend on the extent they are integrated into the ground scheme of maneuver. This will be the result of unity of command in the corps deep battle. Unity of effort within the corps AO requires the commander to have operational control over all combat, combat support, and combat service support assets required to accomplish the mission. The corps close battle already has unity of command with divisions dividing areas of responsibility. The majority of deep attack assets that the corps uses to shape the close battle belongs to air forces. Therefore, it is prudent to establish an operational
employ long-range artillery assets under direction of the operational AD. The operational AD would use CWs to execute corps deep operations and elements under the ADA brigade to execute corps rear operations. Mission orders would pass sequentially from JFC to LCC, corps, and operational AD and then to CW, ADA brigade, and deep fire cell. This level of unity of command enhances the synergistic effects between operational fires and the ground scheme of maneuver.

In the initial stages of a conflict, deployed, and dispersed air-land-sea forces in theater. The key to success in future joint operations will be the ability to synergistically prosecute the war throughout the depth of the theater. This ability begins by assuring unity of command at all command echelons, providing explicit clean lines of command and communication, and by focused, coordinated objectives. As the force structure shrinks, component services cannot afford to fight inefficient parallel campaigns. The United States may have had the luxury, due to overwhelming firepower, of employing combat forces less efficiently in past wars; now the move must be made toward more jointness to retain the same effectiveness with fewer forces.

**NOTES**

Often established in a crisis, joint task forces (JTFs) are generally designed to respond to a specific set of circumstances. What happens to JTFs when the crises which originally demanded their formation disappears or is resolved? Emphasis is placed on standing up JTFs; but how does the Department of Defense determine when it is time to stand one down? Are there criteria used to make this decision, or is it a matter of judgment? In addition, this decision can be clouded by competing bureaucratic interests which seek to justify a continuation of the presence long after it is needed. The following case of Joint Task Force-Bravo, Honduras, illustrates this tendency.

U.S. Southern Command (SOUTHCOM) maintains a small American military presence in Honduras at a facility known as Soto Cano Air Base. Joint Task Force-Bravo (JTF-B), directly subordinate to SOUTHCOM, consists of approximately 800 members of the Army and Air Force and U.S. Government civilian personnel. JTF–B has operational control over all forces deployed to Honduras, coordinates regional logistics, supervises engineering projects, maintains a search-and-rescue and medivac helicopter capability, and assists Honduras in counterdrug actions. Since the United States has no base leasing agreement, its military presence is dependent on the express permission of the government of Honduras. SOUTHCOM has had a presence at Soto Cano for over a decade. The original reasons for establishing JTF–B faded with the Cold War, but a lack of policy guidance from Washington has resulted in an American extended presence. Although SOUTHCOM continues to justify JTF–B as a critical hub for U.S. military training in Central America, most of the missions in question could be accomplished without the task force, saving DOD approximately $22 million annually.2

Background History
The U.S. Armed Forces and Honduran military have conducted bilateral training exercises since 1965. By the early 1980s, however, the frequency and size of exercises began to increase in response to the situation in Nicaragua and El Salvador. In Spring 1982, Honduras approached the United States and began negotiations granting access to Honduran naval and air facilities. Congress appropriated $13 million in 1983 to upgrade Palmerola Air Base (later renamed Jose Enrique Soto Cano Air Base by Honduras) in Comayagua. Construction was completed by June 1983, extending the runway to 8,500 feet. That same month the United States established the Regional Military Training Center, a facility operated by Special Forces to train friendly countries in basic counterinsurgency tactics. SOUTHCOM
also created JTF–11, later known as JTF–Alpha, to coordinate show-of-force training deployments on the Nicaraguan border. With congressional approval for a “temporary but indefinite presence,” JTF–Alpha was re-named JTF–Ruben in 1984.

Throughout the 1980s the U.S. presence at Soto Cano served as a valuable staging area for intelligence gathering missions against both the Sandinistas in Nicaragua and the FMLN insurgents in El Salvador. Also, JTF–B continued to coordinate large- and small-scale exercises in Honduras. Most of all, however, the presence was meant to demonstrate America’s commitment to the region and to send a message to the Sandinistas and their Cuban/Soviet supporters. By 1987, the budget for JTF–B had swollen to $25 million and the organization had grown to over 1,000 personnel, all assigned on temporary duty (TDY) ranging from four weeks to six months.4

A Shift in Mission

With peace being negotiated in El Salvador and the election of President Violetta Chamorro in Nicaragua, the original purpose of JTF–B evaporated. Accordingly, elements of the executive branch began to question the continued need for a military presence in Honduras. An interagency Policy Coordinating Committee (PCC) examined the issue in late 1990 but reached no agreement on the fate of the task force. This generated JCS interest in the question, resulting in a flurry of taskers to SOUTHCOM requesting information on JTF–B. Feeling pressure to justify its presence, SOUTHCOM began to consider new missions for JTF–B, fundamentally to alter its nature.

SOUTHCOM decided to make JTF–B the premier counterdrug operation support unit for the region. This seemed a logical choice because of the high volume of narco-trafficking through Central America and the Caribbean. In addition, after seven years of coordinating exercises in Honduras, JTF–B was proficient in hosting units deploying from the United States. By 1990, however, these operations changed from predominately combat-related exercises to more engineering and humanitarian oriented deployments. During the Bush administration, “peacekeeping engagement” was the byword for military operations in the region, and the frequency and scope of deployments increased dramatically. Honduras became a favorite location to train, not only because of the local government’s permissiveness but also because the services of JTF–B reduced costs for deploying units. By 1993 JTF–B was no longer the nucleus for anticommunist activities in Central America; instead it evolved into a regional logistics hub—coordinating training and assisting Honduras in its fight against drug trafficking.

However, modifications to JTF–B missions have not convinced everyone that the presence is still needed. The issue of JTF–B has become an enormous interagency battle, drawing fire from various sources. The General Accounting Office released a report stating that JTF–B has outlived its usefulness. The Department of State continues to argue that the presence serves no real purpose except as a military convenience. Honduran President Roberto Reina has appointed a commission to reevaluate the original protocols negotiated with the United States and examine the “usefulness” of the current arrangement. JCS continues to see the need for the task force but has not provided adequate policy guidance for SOUTHCOM. As a result, the command organized a committee with the task of justifying U.S. presence in Honduras. Thus, instead of an objective evaluation of the need for JTF–B, the issue of a continued presence in Honduras erupted into an interagency debate. In the middle is SOUTHCOM, a command whose future is itself in question, desperately trying to hold onto its assets in Honduras.

Time to Stand Down?

Most of the reasons SOUTHCOM furnishes for maintaining JTF–B are superficial. Added to this, many missions currently assigned to the task force could be accomplished by other means. For example, SOUTHCOM points out that JTF–B contributes millions of dollars annually to the local economy of Comayagua and that the departure of American troops would cripple the fragile economy. In addition, JTF–B employs approximately 700 local Hondurans, many of whom were previously unemployed. It is true that the contribution of JTF–B to the economy is significant, but on closer analysis one finds that the tremendous influx of Chinese investments to the Comayagua Valley have begun to dwarf any contribution made by a continued U.S. military presence.

With regard to missions performed by JTF–B, many are obsolete or can be accomplished without a $22 million dollar effort. The hope that counterdrug support operations would become the primary mission of the task force has proven ineffective. In 1993 JTF–B participated in only fifteen missions and did not significantly support the U.S. Customs Service and Drug Enforcement Administration in the region. Also, the Clinton administration’s emphasis on interdiction instead of eradication has shifted the focus from Central American trafficking to Andean producer-nations. Country teams, specifically military groups, can achieve missions such as logistical coordination in each Central American country as they have in other regions that do not have JTFs to provide such support. Large-scale intelligence collection from Soto Cano is also irrelevant now that democracies firmly in place in both Nicaragua and El Salvador.

The strongest argument for maintaining JTF–B is in support of engineering exercises and humanitarian aid in the region. There is little doubt that the American military has contributed to this impoverished region, gaining worthwhile training experience in the process. But it is doubtful that this training will be discontinued if JTF–B is stood down. This assumption is primarily based on the fact that large-scale training occurs elsewhere in Latin America.
where JTFs are nonexistent. For example, the National Guard has conducted very large exercises in Ecuador without support and coordination from a standing JTF. Some critics argue that JTF–B, by providing logistical and transportation support, denies deploying units of valuable aspects of overseas training. By having units deploy to a bare bones environment, training may be more realistic than with an established JTF nearby. It is true, however, that without JTF–B the cost to National Guard and Reserve units training in the region will increase marginally as the units will have to support themselves during deployment.

SOUTHCOM has eyed the base in Honduras as a potential site to reposition assets as the command draws down in preparation for its departure from Panama in 1999. However, based on several SOUTHCOM studies, “keeping the option open in Honduras” is infeasible. First and foremost, Soto Cano is a small airstrip, hardly able to accommodate more than a few additional helicopters from Panama. Second, given political trends, it is doubtful the Honduran government would permit a sizable increase in the U.S. presence. Finally, maintaining a forward military presence there provides little strategic advantage over simply positioning assets in Florida. It is interesting to note that JTF–B played no role in Operation Just Cause in 1989; thus it would most likely not be used in a future large-scale contingency in Latin America.

JTF–B does not significantly contribute to U.S. national security. It assists deploying units to Honduras and Central America. It coordinates regional logistics and provides some support to counternarcotics operations. But without a vital mission for JTF–B like that of the 1980s, it is hard to justify spending $22 million that could be used elsewhere. It is equally difficult to excuse the tremendous disruption caused when members are pulled from active units to fill lengthy TDY assignments at Soto Cano.

NOTES
2 The current annual budget for JTF–B is approximately $16.5 million. In addition, the services pay approximately $5.5 million in TDY reimbursements for JTF–B members.
The methods and instruments of war evolved over centuries to accommodate or counteract technological change. Armor was developed to protect cavalry and to lend weight and shock to the attack. The introduction of the crossbow resulted in thicker armor. That, in turn, led to innovations such as the English longbow and gunpowder, to pierce armor. The history of war can be characterized as an imaginative use of technology to nullify advantages of mass. The most successful militaries have applied technology and mass to provide striking power, maneuverability, and agility.

The Electronic Battlefield
Until recently technological innovation was largely limited to combat and logistics; that is, to moving troops to the battlefield and sustaining them. In the last century information technology in the form of the telegraph began to impact on the military, forever altering the course of war. The telegraph and subsequent developments enabled commanders thousands of miles away to maintain an electronic battlefield presence and eventually coordinate theater-wide operations. Over the past 150 years information technology has increased in complexity and become indispensable to combat operations—so pervasively that modern militaries are utterly dependent upon it to maintain, deploy, and employ virtually every weapon system in their arsenals.

We have reached a point where technology which supported combat has become a weapon in its own right. Again, under technological pressure, instruments of war are changing and leading to a concomitant need to change methods of war. For the United States these methods are found in joint doctrine. However, as technology changes the instruments of war, imaginative ways to use them in other than a traditional environment are lacking. In other words, information technology is seen as a handmaiden of the instruments of war, not as a tool in itself. It is time for change.

Perhaps the most fundamental change needed is a reevaluation of the nature of war. During Desert Storm, the piecemeal destruction of Iraqi forces was made possible by paralyzing its central nervous system—that is, C4I links. This was a harbinger of the crucial role that information-based warfare (IBW) will play in the future. It also raises some practical questions about war and victory in the 21st century that must be addressed in order to make the necessary sweeping changes in joint doctrine, force structure, and national military strategy for a multipolar, coalition-dependent world. When does war begin? How should it be fought? How will one define victory in the future?

Joint doctrine acknowledges the importance of secure, reliable, robust C4I capabilities but it is mute on nonlethal IBW. For example, a conflict in Europe could involve information-intensive friendly and adversary weapons systems. Just as the U.S.-led coalition took months to construct a C4I picture of Iraqi forces in the Persian Gulf War, and the Israelis to develop a diagram of Syrian forces prior to the Bekaa Valley campaign, a resurgent Russian war machine would have to undertake a similar effort to target NATO. The commercial off-the-shelf (COTS) dependent military environment of the next generation will make this task far simpler due to the availability of future C4I systems on the open market.

Doctrine must be revamped to reflect the fundamental importance of IBW in the conduct of future wars. Also, joint doctrine must recognize that IBW can and probably will occur long before a shot is fired and that success in combat is likely to rely on IBW campaigns. Depending upon an enemy’s level of information dependence, moreover, it may be possible to prevail without a resort to combat. However, the relevance of these precepts to future warfighting is not widely accepted.

Critics point out that not every adversary in potential conflicts (for instance, low-intensity warfare in the Third World) will be as information-dependent as technologically...
advanced nations. This is a legitimate observation; but it overlooks the fact that technologically advanced, information-intensive military organizations are more vulnerable to information warfare simply because they are information-dependent. It is theoretically possible for an enemy to disrupt our information systems so that we cannot fight. An adversary need not be information-dependent to upset our information lifeline. Since information systems will increasingly come from commercial sources, vulnerability analysis by potential enemies will be simple (buy it on the open market and learn how to break it). Thus IBW in a technologically advanced theater such as Europe will be a defense-offense operation (protect your systems and attack the enemy’s), while in a low-intensity conflict environment it will be almost purely defensive (ensure the enemy cannot attack your systems).

Seen from this perspective, the first question posed—when does war begin?—has alarming consequences. If the United States invests heavily in the protection of its information lifeline, how should it regard an attempted probe of its systems for inherent weaknesses? A land force commander would describe this as reconnaissance in force. In an IBW context, these could easily constitute acts of aggression, warranting a military reaction. Responses might range from a quid pro quo to the use of force to discourage further probes. This is a matter on which joint doctrine is silent. Likewise the second question—how should war be fought?—raises interesting issues with respect to force structure investment. If only lethal combat systems are regarded as force structure, then developing IBW-type weapons systems will lag behind. Moreover, since using force requires political approval, and it is improbable that IBW-type attacks (which are nonlethal in nature) would be seen as national security threats, a lethal response is unlikely. In such a case, the United States would be at the mercy of a potential adversary. This would pose a threat roughly equivalent to an enemy conducting unopposed espionage in peacetime.

The last question—how will one define victory in the future?—is especially salient for joint doctrine which registers victories in terms of enemy soldiers killed, aircraft destroyed, and territory occupied. If military action is merely the culmination of extensive information maneuvering prior to actual hostilities, then victory is derived from employing information resources without enemy obstruction. This freedom of action depends on the reliability of friendly information (that is, C4I) resources. Warfare in the next century may be reminiscent of 18th century indirect warfare when forces maneuvered to place their adversaries in untenable positions. Just as an 18th century general sought to win a war without fighting a single battle, so in the 21st century commanders might seek, through information maneuvering, to put enemies in positions where their information resources are useless or, worse, unreliable. If we reach a state where C4I resources cannot be used, or if we can no longer trust the information, then victory as traditionally defined might well be unattainable, despite overwhelming lethal military power.

Information Maneuvering

The purpose of information warfare, like conventional armed combat, is to impose one's will on an enemy. The premise of Western warfare is Clausewitz’s idea of annihilating, where one side seeks to neutralize an adversary’s ability to fight by destroying, or by rendering incapable of further resistance, his military force in the field. Information warfare, however, does not fit the Clausewitzian mold because, as a comparatively nonlethal form of combat, its primary goal is to deny or incapacitate rather than annihilate. Destruction has a place in IBW, but it is a single point on the IBW continuum, representing only one of several possible response options.

What constitutes information maneuvering is still open to debate. Some maneuvers, such as jamming, deception, and destruction, are familiar to electronic warfare practitioners; others may include viruses, feints, reconnaissance, conquest, and infiltration.

Viruses—the bane of microcomputer users—can be considered a "fifth column" in an IBW construct capable of sabotage and electronic "guerrilla" action behind the lines. Possibly, specially tailored "sleepers" viruses could be inserted into an enemy's (or potential adversary’s) information systems and left dormant, perhaps for years. The viruses could be called into action (or awakened) when needed. Nazi Germany undermined its adversaries with human fifth column agents in much the same way prior to World War II. Feints could resemble deception with an IBW twist of leading an enemy to think a given information system (technology or industry) had been targeted. Under the proper circumstances, an enemy could be encouraged to devote valuable resources to protecting its information capability. The real target, of course, would lie elsewhere and might not enjoy the same level of protection. IBW reconnaissance has been pursued in a limited way for years. It consists of electronic warfare orders of battle and intelligence databases used to facilitate operational missions. However, in an IBW construct these would be subsets of a larger effort. In a broad sense, reconnaissance would consist of identifying vital political, military, and economic information elements of power, correlating them to information target sets, identifying information centers of gravity, and defining recommended threat/attack options for the entire conflict spectrum (peace time through total war).

Conquest would be the overt neutralization or denial of an adversary's information assets. Destruction is one form of conquest. But jamming, power supply disruption, or physical capture would also be considered conquest. Differentiating between conquest and infiltration, which is the next maneuver, would depend on whether an enemy was fully aware that its information capability had been neutralized.
Infiltration would be covert neutralization or denial. This would be the maneuver of choice for most information operations, since an enemy, unaware its information had been compromised (that is, *owned* by the other side) would continue to use (trust) it. One has only to allow the mind to wander for a moment to grasp what unobstructed access to enemy logistics, intelligence, command and control, operational, economic, and political information resources could mean at every point on the war continuum. For example: aviation fuel might be requisitioned, but water would arrive; an enemy armored division might be moved to a wrong location to weaken vital defenses; or false intelligence data could be introduced in exactly the right place, ostensibly from a reliable source, to skew an estimate, causing an enemy to react to false stimuli (that is, chase phantoms). Obviously, the possibilities are limitless. Those maneuvers are the most obvious. Most military operations will have a counterpart in the IBW arena. It is precisely this similarity between IBW operations and conventional combat that makes it imperative to develop an IBW employment concept. Information warfare is increasingly viewed as another military instrument, rather than the reverse with armed conflict being regarded as the final stage of information warfare. In sum, the use of force can have a peripheral effect on information warfare by destroying or incapacitating targets, but IBW can alter, interdict, or destroy information and information assets, thereby determining the outcome of military operations.

**Changing the Force Structure**

The Armed Forces, especially in concert with NATO, are well-equipped under current joint doctrine to fight corps-sized engagements in Europe. In light of the foregoing discussion of IBW, however, this force structure may be totally inadequate for the most likely war scenarios. To meet future challenges, joint doctrine and force structure must be modified to be consistent with the new geopolitical realities and congruent with IBW precepts.

First, a change must be made to reassess the importance of the traditional support arms of intelligence and information. At a minimum, these systems must receive the same funding and R&D priorities as weapons systems. This is appropriate for a national security strategy based on a two-year intelligence lead time on adversary rearmament. Given the total reliance of weapons systems on information resources for proper employment, relegating them to secondary or tertiary importance is unacceptable.

Second, in an era of coalitions and information technology, retaining sufficient information among allied and friendly nations is entering a period of extensive economic competition. The world community is entering a period of economic competition among allied and friendly nations, complicated by threats of regional strife in areas where economic interests are limited. America needs credible military capabilities to meet the challenges of regional conflict and deny potential enemies a military advantage, despite reductions in spending and forward deployment. This can be accomplished only by modifying joint doctrine and force structure to capitalize on information technology, retaining sufficient power projection capabilities to insert forces, and attaining superiority in information-based warfare.

Third, force structure must be changed to accommodate smaller force packages with greatly increased lethality to operate without extensive logistical support for a longer period of time. For information systems, this implies modifying current maintenance concepts and designing systems to be maintained at component replacement level. Other factors include the increased pursuant of maintenance spares above current levels and the prepositioning of spares either in theater or the prepackaging of them at CONUS bases for rapid movement. Lastly, IBW vulnerabilities must be addressed and a dual track program implemented to deal with this area in future systems. The first track is defensive: ensure that the vulnerabilities of COTS systems are identified and adequate safeguards implemented. The second is to develop an offensive IBW capability which provides aggressive *quid pro quo* responses to enemy probes and develops an adversary information order of battle to ensure dominance on the battlefield.

The demise of the Soviet empire has not made the world safer—only made the prospect of global nuclear war more remote. The collapse of the bipolar power structure, however, unleashed nationalist, religious, and ethnic forces. The world community is entering a period of extensive economic competition among allied and friendly nations, complicated by threats of regional strife in areas where economic interests are limited. America needs credible military capabilities to meet the challenges of regional conflict and deny potential enemies a military advantage, despite reductions in spending and forward deployment. This can be accomplished only by modifying joint doctrine and force structure to capitalize on information technology, retaining sufficient power projection capabilities to insert forces, and attaining superiority in information-based warfare.

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**Doctrine**

**JOINT PUBS UPDATE**

The following titles have recently been approved as part of the Joint Publication System:

- Joint Pub 0–2, Unified Action Armed Forces, provides basic doctrine on unified action and, with Joint Pub 1, Joint Warfare of the U.S. Armed Forces, serves as the capstone document for all joint doctrine, links joint doctrine to national security strategy and national military strategy, sets out concepts, relationships, and processes for unified action for joint operations; and outlines the nature of joint operations and the comprehensive exercise of command authority in conducting them (August 11, 1994; Joint Staff sponsor and lead agent: J-7).

- Joint Pub 3–07.4, Joint Counterdrug Operations, describes the overall DOD countering effort; emphasizes joint and interagency responsibilities and coordination; and addresses the threat, strategy, planning, organizations, and missions associated with counterdrug operations (August 9, 1994; Joint Staff sponsor: J-3, lead agent: ACOM).

- Joint Pub 5–0, Doctrine for Planning Joint Operations, provides the doctrinal foundation for planning the employment of joint forces; presents the responsibilities, principles, concepts, and integrated national process through which planning for joint operations is accomplished; covers the strategic framework in which joint operation plans are produced; emphasizes plans and processes that provide strategic direction to joint operational planning and that integrate the statutory functions of military departments and services into joint operation planning; focuses on the formal processes that govern the development and execution of operational plans by combatant, subunified, and JTF commanders both in deliberate and crisis action planning; and discusses the role of joint operational planning as a way of measuring warfighting capabilities and force development (August 15, 1994; Joint Staff sponsor and lead agent: J-7).

**Lessons Learned**

**OPERATIONS OTHER THAN WAR**

Since Desert Storm the CJCS execute order has required that lessons learned be reported in a total of 35 NCA-ordered joint operations per Joint Pub 1–03.30. The lessons are documented in Joint Universal Lessons Learned System (JULLS) format as part of a supported CINC’s after action report (AAR), entered in the Joint Center for Lessons Learned (JCLL) database, and vetted for Remedial Action Projects (RAPs) to be resolved at the joint level. Not surprisingly each of the 35 operations falls under the rubric of Military Operations Other Than War (OOTW).

The focus of this column is civil support operations as documented in several representative AARs.

As discussed in Joint Pub 3–0, OOTW cover a range of activities in which the military is used for purposes other than large-scale combat operations associated with war. Such operations usually involve a mix of land, sea, air, space, and special operations forces (active and/or Reserve components) under the commander of a joint task force (JTF) who reports to a supported unified combatant commander. They may occur anywhere, from foreign territory to domestic urban areas as part of military support to the civil authority. OOTW include combating terrorism, nation assistance, noncombatant evacuation operations, peace operations, support to insurgency, and civil support operations. In addition to joint forces and DOD agencies, participants in OOTW can include other Federal agencies, nongovernmental organizations (NGOs), the United Nations, NATO, combined or multinational forces, and state and local authorities.

Civil-military operations comprise worldwide humanitarian assistance operations, including disaster relief, support to displaced persons, and civil assistance. Support to the civil authorities includes domestic actions applicable to disaster-related emergencies and civil defense for attacks directed against the territory of the United States. Included under assistance for civil disturbances is military support to domestic law enforcement agencies, protection of life and property, and prevention of disruptions to governmental functions.

Doctrine covering OOTW is contained in the Joint Pub 3–07 series. The first draft of Joint Pub 3–08, Interagency Coordination During Joint Operations, should be distributed for comment in November 1994. Among the various operational and exercise lessons learned during civil support operations in the period since the Gulf War are:

- Hurricane Iniki (PACOM/17 JULLS)—Disaster response operations conducted prior to and after the hurricane passed across Oahu and Kauai on September 11, 1992. The initial action included activating a Disaster Response Team (DRT) and standing-up a Crisis Action Team (CAT). In response to an execute order from the Director of Military Support and a Presidential declaration of a major disaster, CINC-PAC activated JTF Hawaii and appointed the Commander, U.S. Army Pacific, as JTF commander and Defense Coordinating Officer (DCO). Many lessons concerned interagency procedures, especially regarding the Federal Emergency Management Agency (FEMA) and initial coordination among Federal, state, and local agencies. Recommendations included:
  - Potential JTF staff attend training on implementing the Federal Response Plan.
  - FEMA should facilitate funding transfers including processing mission assignments (MAs) to DOD relief operations and reimbursement.
  - Collocate JTF, Federal, state, and local government agencies, and NGOs headquarters if possible; ensure full exchange of liaison officers (LNOs).
  - Coordinate, publish, and disseminate FEMA support request procedures to Federal and state agencies, other civil activities, and NGOs affiliated with disaster relief operations.
  - Centralize control of airlift operations.
  - Include the Customs Service and Department of Agriculture among Federal agencies for coordination purposes.
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7th Infantry Division, I MEF, and other active component forces included in a major disaster area. Deployed in May the city and county of Los Angeles as a reaction of selected Army National Guard LA was activated following Federalization of civil disturbances in Los Angeles, JTF–COM/36 JULLs)—After the outbreak of establishment of a contingency JTF. It contains a summary and JULLs)—Covering a period of almost two years, the JTF GTMO AAR addresses Haitian migrant operations at JTF–LA/Garden Plot (FORS- ▼

Operation GTMO (ACOM/89 JULLs)—Operation GTMO was the theme of a separate TJW column in a subsequent issue of JFW. This operation presented unusual challenges, such as the need for linguists, integrating Reserve volunteers, rules of engagement to cover security requirements (for example, potential for mass breakouts, hostage taking, or rioting), to problems created by INS working with INS, and handling of INS cases concerning the ability of military medical facilities. In addition, it has detailed JULLs on how the JTF provided medical support with limited resources while addressing the issue of integrating civilian and military operations (also addressing the issue of integrating HIV-positive migrants). It makes recommendations on how to organize military medical personnel (including short-term augmentation by active and Reserve components), obtain adequate supplies, ensure proper documentation of operations, and contain an annex on Posse Comitatus and the differences which occurred in August 1992. The resolution of many problems, especially with FRP/FEMA and the need for governing joint doctrine, has been in the process of being completed. Others, such as access to Reserve component civil affairs experts and the need for clear NCA guidance on an operational end state, remain open. Though there have been significant changes written since, it is required reading for any command that may be tasked as part of a joint force conducting military support for civil authorities during a domestic disaster.

Operation GTMO (ACOM/89 JULLs)—Covering a period of almost two years, the JTF GTMO AAR addresses Haitian migrant operations at NAS Guantanamo through various build ups and draw downs ending in June 1993. At a peak population of 13,392 in May 1992, measurable operations were conducted under the United Nations. JFCL has CENTCOM AAR on JTF Somalia/JTF-Som (81 JULLs) on Provide Relief and Restore Hope/ 256 JULLs and peace operations conducted under the United Nations. The final AAR on UNOSOM II should be forwarded from CENTCOM by October 1994. Though not a joint report, the Army Somalia AAR, which contains findings of the Montgomeroy Board (named for the commander of U.S. Forces in UNOSOM II), is an excellent source. Since the lessons learned from Somalia encompass a wide range of concerns, they will be the theme of a separate TJW column in a subsequent issue of JFW.)
Perhaps the simplest yet most fundamental lesson learned from OOTW is that they support civil authorities and are conducted under a joint organization and commander. This supporting role may present a challenge to commanders and a significant change for those accustomed to unilateral military operations. In domestic operations, the change involves U.S. Atlantic Command (ACOM) as the joint force integrator. Because of a change in the Unified Command Plan, the incorporation of Forces Command (FORSCOM) under ACOM gives unified combatant command responsibility to ACOM that formerly fell under FORSCOM as a specified combatant command. The Secretary of the Army remains executive agent for military support to civil authorities (MSCA) and military assistance for civil disturbances (MACDIS).

Under a CJCS-approved implementation plan ACOM is responsible for preparing assigned forces to provide both MSCA and MACDIS, as directed by the Secretary of the Army, within the 48 contiguous states, District of Columbia, Puerto Rico, and Virgin Islands. With regard to OOTW, ACOM is also responsible for integrating CONUS medical contingency planning, acting as executive agent for the Key Asset Protection Program, providing military support for counterdrug operations within CONUS and geographic areas of responsibility, and providing CONUS forces to support peace and humanitarian assistance operations not already assigned to other combatant commands. As the ACOM Army component, however, FORSCOM has been delegated lead operational authority to plan and execute many functions outlined above, including operational control of JTF 6.

From relief efforts in Rwanda to the Haitian migrant operations, experience in OOTW has increased dramatically since the Persian Gulf experience in OOTW has increased the Haitian migrant operations, execution of the functions outlined above, including authority to plan and execute many operations as well as coalition warfare and force employment at component, JTF, and theater levels. The course exposes participants to both active and retired CONUS component and JTF commanders, and officials of the Departments of Defense and State as well as other civilian leaders. The origins of JFOWC are found in the Army General Officer Warfighting Course which began in 1984 and the Air Force Senior Officer Combat Employment Course which was started the following year. These courses led to the creation of a joint Army-Air Force program in 1986 that was expanded to include officers from the Navy and Marine Corps in 1987. The September 1994 JFOWC was the 22nd course to include general and flag officers of all four services.

**Command and Control Prize**
The Center for Advanced Command Concepts and Technology has announced the creation of the NDU Command and Control Prize to recognize work which significantly improves the field. Papers should describe the results of work substantially performed within two years of submission and that has not been published. Papers must be received no later than April 15, 1995. For details write to the Director, Center for Advanced Command Concepts and Technology, NDU–NSS–RD, National Defense University, Washington, D.C. 20319-6000.

**Joint Essay Contest**
The U.S. Naval Institute published the winning essays in the first annual Colin L. Powell Joint Warfighting Essay Contest in the September 1994 issue of Proceedings. The top prize was awarded to Lt Col Jay L. Lorenzen, USA, for an essay entitled “Marshalling Joint Leadership”; first honorable mention went to CPT Dean T. Katsiyannis, USA, for “Combined Arms, Combined Services”; and second honorable mention went to CPT Powell A. Fraser, USN, for “Reengineering Combat Readiness.” The deadline for entries in the next contest is April 1, 1995. For details call Bert Hubinger, (410) 268–6110; or write U.S. Naval Institute, 118 Maryland Avenue, Annapolis, Maryland 21402–5035.

**Education**

**Joint Warfighting for General/Flag Officers**
The Joint Flag Officer Warfighting Course (JFOWC) is administered by the Commandant, U.S. Army War College; President, Naval War College; President, Marine Corps University; and Commander, Air University, and conducted at Maxwell AFB, Alabama. The two-week course is offered three times a year to prepare major generals and rear admirals for theater-level combat leadership responsibilities. JFOWC provides future CINCs, service component commanders, and JTF commanders with an appreciation of the strategic and operational levels of war. Eighteen officers (six Army, four Navy, two Marine Corps, and six Air Force) are enrolled in each course and study the application of the strategic and operational levels of war. The objectives of JFOWC are to promote understanding of the operational level of war and associated decisionmaking; joint and combined operations as well as coalition warfare; and force employment at component, JTF, and theater levels. The course exposes participants to both active and retired CINCs, component and JTF commanders, and officials of the Departments of Defense and State as well as other civilian leaders.

The origins of JFOWC are found in the Army General Officer Warfighting Course which began in

1984 and the Air Force Senior Officer Combat Employment Course which was started the following year. These courses led to the creation of a joint Army-Air Force program in 1986 that was expanded to include officers from the Navy and Marine Corps in 1987. The September 1994 JFOWC was the 22nd course to include general and flag officers of all four services.
BOOKS


MONOGRAPHS


ARTICLES

Andrew J. Bacevich. “Preserving the Well-Bred Horse,” The National Interest, no. 37 (Fall 1994), pp. 43–49.


Joint task forces (JTFs) have been the response of choice for most contingencies since the Vietnam conflict. Nonetheless the organization and functioning of JTF staffs are among the least understood areas of operational warfighting. JTFs form the crucial link in the operational planning and execution continuum, connecting strategic objectives of the National Command Authorities as well as theater campaign plans of the CJCS to the execution of mission-specific tasks at the sharp end of the bayonet. This bibliography introduces members of the Armed Forces, particularly Joint Specialty Officers (JSOs), to sources on the requirements for JTF staffs. By their nature, JTF staffs deal with emerging crises. Time is always short, plans are often inadequate or nonexistent, and forces are usually just being alerted for deployment. The major demand is properly utilizing JTF personnel in the face of time constraints, insufficient information, and overall uncertainty. At a basic level, each officer has to arrive at JTF headquarters ready to work and able to immediately confront a crisis as the organization adapts to new members. This underscores the importance of being able to call on the expertise and tools required to do the job. JSOs should not fail to understand JTFs nor be prepared to function on that level. JTF staffs remain the most common response not only to combat but to a plethora of crises currently lumped under the rubric “Operations Other Than War.” Responding to such diverse issues requires a much broader range of information than found in individual service doctrine.

JTF staffs exist because single-service assets are rarely able to address crises effectively. Multi-service efforts automatically create problems of confused terminology and lack of familiarity with service-specific procedures and equipment. The reader will note that many of the sources listed below highlight command and control, which is the primary task of JTF staffs. Having access to the right information is crucial. This bibliography is annotated to assist readers in identifying source material to aid them in accomplishing tasks on the JTF level.

**BOOKS**


from existing units and that it suffered from inadequate strategic and tactical mobility as well as forklift-entry capability.


**MONOGRAPHS AND UNPUBLISHED THESES**


Examines whether commanders are better able to exercise command and control over JTFs today than in the past and whether previously identified C3 problems have been fixed.


Robert D. Lewis. Combined Joint Task Force Provide Comfort: What Are We Trying to Do? What Is the Way Ahead? Newport, R.I.: Naval War College, 1992. [DTIC AD A249 846] Identifies national policies which JTFs appear to support and discusses operations that the JTF “should be prepared to undertake.”


A.G. Smart. *Military Support to Domestic Disaster Relief: Doctrine for Operating in the Wake of the Enemy?* Fort Leavenworth, Kans.: U.S. Army Command and General Staff College, 1993. [DTIC AD A274 105] Analyzes disaster relief provided after Hurricane Andrew in 1992 and finds that this type of operation, while not understood, will grow in importance.

Michael N. Smith. *Putting the Commander in Control: The Light Cavalry Regiment’s Utility to the Joint Commander.* Newport, R.I.: Naval War College, 1993. [DTIC AD A264 458] Concludes that an Army light armored cavalry regiment is the best capability available to the JTF commander for gaining and maintaining positive C2 in contingency operations.


**ARTICLES**


William E. DePuy, "For the Joint Specialist: Five Steep Hills to Climb," Parameters, vol. 19, no. 3 (September 1989), pp. 2–12. Underscores the pitfalls of Goldwater-Nichols in advising NCA, honing operational art, generating joint requirements, controlling collateral operations, and synchronizing cross-service support on the tactical level.


Robert B. Killebrew, "Force Projection in Short Wars," Military Review, vol. 73, no. 3 (March 1993), pp. 28–37. Focuses on the importance of time management and public opinion in joint operations and highlights the importance of forcible entry as a joint capability.


Thomas C. Linn, "The Cutting Edge of Unified Actions," Joint Force Quarterly, no. 3 (Winter 1993–94), pp. 34–39. States that since the integrity of units which do the fighting must be preserved, the force is more joint and combined at the top than at the bottom.


Jerry A. Roberts, “Ocean Venture ’93 and the Joint Targeting Coordination Board,” Field Artillery (October 1993), pp. 20–21. Details the functioning of the Joint Targeting Coordination Board (JTCB), breaks down the steps in the joint targeting process, and offers a useful JTCB agenda for JTF joint fires personnel.


Suggested additions to this bibliography should be sent to the following address:
Commandant
Armed Forces Staff College
ATTN: LIB/62
7800 Hampton Boulevard
Norfolk, Virginia 23511–1702

Telephone: (804) 444–5155 / DSN 564–5155
FAX: (804) 444–2053 / DSN 564–2053
Internet: niculag@ndu.edu
Since 1945 conventional wisdom has held that the atomic bomb spared the United States the daunting task of invading the Japanese home islands. This wisdom has been consistently lurid in its portrayal of the nature of the resistance and the casualties that would have been incurred in Operation Downfall. One has always been skeptical of conventional wisdom. How projected Allied casualties tallied with the order of battle has eluded this writer, and one always questioned an implied Japanese effectiveness far beyond that of a better equipped Wehrmacht in France during 1944.

In The Invasion of Japan John Ray Skates squares the circles: the conventional wisdom is fraudulent. Drawing largely upon primary sources and having walked battlefields that were not, Skates provides the lie to orthodox "truths." Set down in this account is the hopelessness of the Japanese high command’s position as it faced dilemmas that confounded their German opposite numbers in dealing with the western theater in 1944: whether to defend Kyushu and thus exhaust the reserves needed for the Kanto Plain or retain forces for Honshu and thereby compromise what little hope there was of denying southern Kyushu to the enemy; whether to deploy on the beaches where American firepower would be greatest or hold forces inland in the certainty that they would never get into battle; how to reconcile the need to disperse airpower in order to preserve it but concentrate it forward for attack purposes in the face of overwhelming U.S. air superiority; and how to plan for the defense of the Kanto Plain with static infantry against a mobile, armored enemy.

Moreover, Skates provides corrective to common mythology in three critical areas. First, for all its numbers the Imperial Army was hopelessly unready to resist invasion: the cohorts raised in 1945 were untrained and wretchedly equipped and the few good divisions were compromised for want of established lines of supply within the home islands. Second, while there was talk of “arming the people” for a last-ditch defense next to nothing had been put in hand by summer 1945: Tokyo, rather than wanting a people’s war, sought to evacuate civilians from threatened areas lest they hamper operations. Third, correctly deducing where landings would take place was of small account given Japan’s inability to cover all beaches adequately.

With these matters known to the American high command, the unfortunate aspect of this book is that it will be invoked to question the decision to use the bomb in August 1945. Thus it is important to remember that it took two bombs, not one, to bring Japan to defeat, and only because the Emperor made decisions that were above and beyond the Supreme War Council. More relevantly, one wonders whether the course of events would have been better served by Operation Downfall than ruin from the air. Defeat in operations on home soil disposes of national alibis. The Invasion of Japan poses a number of questions long overdue.
A NOTE TO READERS AND CONTRIBUTORS

DISTRIBUTION: JFQ is published four times each year for officers of the Armed Forces. One copy is distributed for every two officers on active duty assigned to joint billets and one copy for every four majors/lieutenant commanders and lieutenant colonels/commanders across all the services. Copies are distributed to the field and fleet through respective service channels. Corrections in shipping instructions, quantities received, and addresses for service distribution should be directed to the appropriate activity listed below.

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CONTRIBUTIONS: JFQ welcomes submissions on all aspects of joint and combined warfare from members of the Armed Forces as well as from defense analysts and academic specialists from both this country and abroad, including foreign military personnel. There is no standard length for articles, but contributions of 3,000 to 5,000 words are appropriate. Other submissions, however, to include letters to the editor, items of commentary, and brief essays are invited. Reproductions of supporting material (such as maps and photos) should be submitted with manuscripts citing the source and indicating their availability; do not send originals.

CORRIGENDA

The article on “Joint Doctrine: New Pubs, Old Controversies,” in number 5 (Summer 1994), was submitted by Colonel Michael Luers, USAF, who is on the faculty of the U.S. Army War College. Our sincere apologies for misspelling his name.

The list of honors awarded in the 1994 CJCS Strategy Essay Competition which appeared in issue number 5 misidentified the institutional affiliation of one contestant. The co-winning essay by Colonel Gerard A. St. Amand, USA ("Schizophrenic Sanctioning: A Failed U.S. Policy Toward China"), was an entry of the National War College.

—The Editor
The true speed of war is . . . the unremitting energy which wastes no time.

—Alfred Thomas Mahan
Strategic Priorities

Building a New Defense

Service Identity

Joint Culture

Civilian Control

of the Military

Information-B

Warfare

Joint Operation

in the Civil War

U.S. security and the Asia-Pacific region

plus

interservice education and training,

joint doctrinal development,

battle for the Marianas,

and more in the Spring 95 issue of JFQ