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1998

Strategic Assessment

Engaging Power for Peace



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Strategic Assessment 1998

Engaging Power for Peace

NATIONAL DEFENSE UNIVERSITY

INSTITUTE FOR NATIONAL STRATEGIC STUDIES

NATIONAL DEFENSE UNIVERSITY

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Digital imagery on pages ii and iii courtesy of NASA/Goddard Space Flight Center,
Earth Sciences Directorate

Printed in the United States of America

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP,
Washington, DC 20402-9328

Preface

By LIEUTENANT GENERAL RICHARD A. CHILCOAT, U.S. ARMY

President, National Defense University

Over the past few years the Department of Defense has been intensifying its study of the global security situation, U.S. force posture, and future defense requirements. The National Defense University contributes to this dialogue through *Strategic Assessment*, an annual publication which applies the expertise of this institution through the leadership of its interdisciplinary research arm, the Institute for National Strategic Studies, with the assistance of specialists from elsewhere in government and academe. Offering such analyses, in both general and particular areas of interest to the national security community, is an important aspect of the NDU mission. This volume examines various approaches that the United States might adopt to shape the strategic environment of the future.

The current environment is characterized by instability and change. The U.S. Government needs to apply the full range of options at its disposal to achieve national goals and ensure the peace and stability required to preserve our rights to "life, liberty, and the pursuit of happiness." But such options must be studied and conceptualized for years (and in some cases, decades) in advance to take advantage of the opportunities presented by a changing global environment.

The recent Quadrennial Defense Review (QDR) recommended a series of defense posture changes. This volume reviews these recommendations and takes the next analytical step, to propose what is entailed by such changes. *Strategic Assessment 1998: Engaging Power for Peace* should prove useful beyond the defense establishment, to all readers with an interest in national security affairs. We emphasize that this report is not a statement of official policy, nor does it represent the views of the Department of Defense or the Joint Chiefs of Staff. Rather than to state policy, the role of National Defense University is to stimulate discussion and research among both policymakers and analysts.

Strategic Assessment 1998 is neither a statement nor a critique of U.S. government policy. The opinions, conclusions, and recommendations, either expressed or implied, are solely those of the contributors. They do not necessarily reflect the views of the National Defense University, the Department of Defense, or any other agency of the U.S. Government.

Research and writing for *Strategic Assessment 1998* was completed in late 1997 and revised to include developments through the end of March 1998.

Foreword

By HANS BINNENDIJK and DAVID C. GOMPERT

This is the fourth volume in the annual *Strategic Assessment* series produced by the Institute for National Strategic Studies at the National Defense University, and undertaken to contribute to the national effort to understand more clearly the nature of, and the U.S. role in, the new international system. This volume complements the *Strategic Forum* series (issue papers on key national security topics), *Joint Force Quarterly* (a professional military journal published for the Chairman of the Joint Chiefs), and other titles issued by INSS. While *Strategic Assessment* is not an official government publication, we trust that it will inform and influence policymakers and academics alike.

Each previous volume has had a specific theme. *Strategic Assessment 1995: U.S. Security Challenges in Transition* described a new international system which held much promise and new security concerns for the United States. Some of the first volume's conclusions were:

- The world is dividing into market democracies, transitional states, and troubled states. Market democracies form the core of the U.S. international strength. Transitional states will determine the nature of the international system. Troubled states generate many new security concerns.
- The most likely conflicts in the emerging system are the least dangerous to U.S. security.
- Proliferation of weapons of mass destruction is increasingly a current rather than a future concern.
- The U.S. domestic focus is limiting our national security capabilities.
- Information technology is displacing heavy industry as the source of national power.
- International organizations are assuming an important legitimizing role, despite their limited capabilities.
- Globalization is creating transitional threats as well as benefits.
- To deal with this complex new world, the United States needs to set national security priorities—ensure peace among the major powers, engage selectively in regional conflicts, respond to transnational threats, and assist failed states.

Strategic Assessment 1996: Instruments of U.S. Power reviewed 15 different types of means of exercising U.S. power (ranging from the diplomat in the field to the nuclear weapon in its silo) and analyzed their capabilities and relevance in the post-Cold War era. Despite real budget reductions of more than one-third over the previous decade, both U.S. defense and international affairs instruments were rapidly adapted to meet many of the new challenges identified in the volume published last year. But the budget cuts were concentrated in areas like defense procurement and security assistance, which, if not reversed, could cause lasting damage to our national interests. Some of the specific conclusions of this second volume were:

- U.S. military forces are currently far more capable, better equipped, and better trained than those of any conceivable adversary. The U.S. military stands at a crossroads in deciding how much of this capable force it wants to trade in for the kind of stand-off precision warfare inherent in the systems-of-systems approach to future warfare.
- U.S. military capabilities are increasingly being used for peacetime engagement and peace operations in ways that shape the new strategic environment. These are important functions that tend to affect the operations and personnel tempo of a small number of units.
- U.S. alliances are shifting to become the cornerstone around which ad hoc coalitions can be formed. But the U.S. ability to share its information dominance with allies is not well developed and could create problems.

- The United States needs to consider reorganizing its diplomatic structure.
- The United States has been very creative in finding alternative ways to fund international security requirements: seeking foreign contributions for U.S. initiatives, using old accounts for new purposes, and drawing on international organizations for things like weapons inspections.
- There is an enhanced role for the private sector in national security affairs. Examples include non-governmental organizations in peace operations, the news media, and efforts at Track II diplomacy.
- Closer interagency coordination is needed to make maximum use of the resources and instruments of national power.

Strategic Assessment 1997: Flashpoints and Force Structure categorized key strategic focal points as major powers, regional contingencies, troubled states, and transitions problems. The volume concluded that the "two nearly simultaneous Major Regional Contingencies" concept had become a less useful primary planning scenario than in 1993. The study suggested a broader basis for the Quadrennial Defense Review (QDR), and then assessed three alternative force structures. Some specific conclusions drawn were:

- The United States faces what might be called a strategic lull, but it is nonetheless confronted with a more complex and diverse set of smaller threats. It must both deal with those threats and take advantage of the strategic lull to exploit the revolution in military affairs.
- Russia will be preoccupied with internal economic and political turmoil. Its conventional forces have deteriorated rapidly and present no threat, but nuclearization of Russia's defense policy should raise concerns.
- China's leadership is focused on domestic politics, but the cultivation of nationalism, new energy needs, and rapid economic growth make it a potential theater competitor.
- While both North Korea and Iraq remain dangerous, their conventional military capabilities have declined substantially relative to that of the United States. That makes more likely their use of weapons of mass destruction, should conflict start.
- Radical Islam will remain a potentially destabilizing factor throughout the Middle East and North Africa during the next decade.

With regard to force structure alternatives, *Strategic Assessment 1997* analyzed the following:

- A recapitalization force model to emphasize procurement and modernization, but at the cost of modest force structure reductions.
- An accelerated RMA force model which aggressively implements the system-of-systems, but at the cost of major force structure reductions.
- A full spectrum force model which maintains force structure and slowly integrates RMA technology, but at the cost of a larger defense budget.

No alternative was recommended, but it was clear from the threat analysis that the full spectrum force model was preferable if the budget financing could be found.

This background was used to prepare *Strategic Assessment 1998: Engaging Power for Peace*. Many of the conclusions drawn in earlier volumes in this series found resonance in the report of the Quadrennial Defense Review, signed by Secretary of Defense William Cohen in May of 1997. The QDR looked at three military challenges facing the United States: shaping the strategic environment, responding to aggression, and preparing now for an uncertain future. It recommended a force structure somewhere between the recapitalization and full spectrum force models laid out in last year's assessment. This year's volume is organized under the rubrics of shaping, responding, and preparing, in order to amplify and extend the QDR conclusions.

Acknowledgments

Responsibility for any errors found in this document rests wholly with the editors. Credit for all insights belongs to the able team of analysts who contributed the various chapters. The principal authors include:

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Thanks are also due to many military officers, civilian officials, and outside analysts who provided thoughtful comments on early drafts of this volume. Special thanks go to James Zackrison, who served as managing editor during the initial stages of this project; Ron Nazzaro, who conducted background research and produced the graphics; Patrick Clawson and Ellin Sarot for their editorial input and review; members of the INSS staff for their assistance, including James Swihart, Walter Vanderbeek, and James Brusstar; Jerry McGinn, research assistant at The RAND Corporation; Erwin Godoy, INSS research assistant; and William Rawley, Kathy Goldynia, Deborah Rhode, and other members of the Typography and Design Division at the U.S. Government Printing Office. Finally, the editorial staff of the Publication Directorate within INSS under the supervision of Robert Silano proofed the final version of the volume and saw it through the final stages of production.

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Key Findings

● The United States now enjoys a secure and promising position in the world, because of its economic, technological, and military strengths. The other most successful nations are its closest friends; its few enemies are comparatively weak, isolated, and swimming against the current of the information age. That current—globalization—is both integrating and extending the core of free-market democracies, thus favoring U.S. interests and winning converts to the norms of state behavior.

● Great uncertainties still exist: the future of China and other large transition states; the role of U.S. core partners, especially the nations of Europe and Japan; the spread of dangerous technologies, particularly weapons of mass destruction (WMD); the extent of state failures, like those of central Africa and the Balkans; the reach of terrorism, international crime, and other non-state threats; and the security of economic resources. Because of its capabilities, the United States has considerable influence, and a crucial stake, on how these uncertainties are resolved.

● In the best plausible case, an expanded core or commonwealth of peaceful democracies could encompass most of the planet—with U.S. partners shouldering an increased share of the burden of defending common interests and norms. China would reform and integrate into the core, rogue states and nonstates would be defanged, state failures would be averted, and energy and infrastructure would be secure. In the worst case, U.S. friends could be free riders instead of responsible partners, China's reforms would founder, state failures would multiply, and rogues armed with WMD and nonstate actors would threaten the energy supplies and infrastructure of the core—

leaving the United States superior but beleaguered. Well-armed enemies would be tempted to threaten the interests of the United States, using the fear of high casualties and possible attacks on the state itself to degrade America's ability to project power and national will.

● To improve the odds of reaching the desirable future, the United States should pursue four key interests to affect the design and use of its military capabilities:

- Recast *core* alliances as more balanced partnerships
- Encourage the reform and integration of *transition states* into the core
- Weaken or coopt *rogues*
- Reduce the effects, incidences, and causes of *state failures*.

● Based on the Quadrennial Defense Review (QDR), the United States should:

- *Shape* its core partnerships and the progress of transition states toward inclusion in the core
- *Respond* to rogues posing asymmetric threats in major theater wars (MTWs), and to small-scale contingencies (SSCs) caused by state failures
- *Prepare* for a less desirable future.

● U.S. shaping strategy should be one of *presence plus . . . engagement*. An interactive approach is needed to recast core partnerships, encourage yet caution transition states, and increase strategic and operational flexibility. What U.S. forces do will come to matter as much as how many are permanently based where. The involvement of U.S. forces with those of core partners and transition states should stress practical strengths—power projection, information dominance, strike capability, and excellence in defense management—not numbers or U.S. supremacy.

● The purposes of U.S. military engagement vary from one region to another. The main rationale in Europe (via NATO) and East Asia (especially Japan) should be to improve the military effectiveness and responsibility sharing of core partnerships (e.g., staging to less secure adjacent areas; expanding contact; conducting combined operations with China, Russia, and other transition states; fostering defense reform; and signaling that Americans are not deployed to threaten friends). U.S. forces in the greater Middle East should demonstrate the capacity to project overwhelming strike power and deter sudden aggression. Elsewhere—in Latin America, the former Soviet Union, and Africa—the objective of engagement is mainly to foster defense and political reform. In every region, engagement can improve cooperation against nonstate threats.

● U.S. forces are well-honed to respond to rogues in MTWs. As rogues in turn respond with asymmetric threats, or as SSCs persist, confidence in the adequacy of U.S. forces will drop unless they adapt. The QDR report correctly highlighted these two near-term concerns.

● The most severe asymmetric threats of the next 10 years are weapons of mass destruction, selective advanced weapons (e.g., surface-to-air missiles and sea mines), and information warfare (IW). Of these, WMD are the most dangerous because they can erode U.S. ability, will, and credibility to project power to protect national interests and international security. To counter such threats, the United States should:

- Underscore the possibility of nuclear retaliation for nuclear, biological, and chemical attacks
- Deploy theater missile defense, passive defense, and counterforce
- Reduce reliance on vulnerable forward bases, force flows, and troop concentrations
- Improve intelligence on the status of WMD programs and location of stockpiles and weapons.

● Small-scale contingencies present starkly different operational challenges than major theater wars. They require restrained, small-unit operations to prevent war. Because they are usually multinational, the United States should improve

coalition preparations, especially in NATO. Because SSCs are seldom purely military operations, the United States should improve its civil-military coordination and capacity to provide and restore the civil infrastructure. SSCs place severe strains on the forces used, especially if those forces are also expected to be ready for MTWs. Thus, the United States should consider such options as spreading the responsibility for SSCs across more of the total force, segmenting and specializing forces for SSCs and MTWs, or developing some hybrid capability of these extremes.

● U.S. forces must also be prepared for a less desirable future. Three potential developments could pose serious and different military problems. The United States should consider these factors over the long term (10–20 years):

- Adversaries could be much *larger* (e.g., major transition states turned hostile)
- Adversaries like today's rogues, or new non-state actors, could present *nastier* dangers (e.g., an arsenal of asymmetric threats)
- Conditions in which U.S. forces operate (MTWs or SSCs) could be *messier* (e.g., urban, jungle, or politically ambiguous).

● The United States is unclear but not clueless about the future. Globalization will continue, with important consequences: worldwide interests will still need protection; technology will spread relentlessly; transition states that abandon reform and integration will have economic, technological, and military handicaps; states with no place in the global economy could fail and spawn nonstate threats (e.g., in Africa and parts of Eurasia). In light of such "clues," the United States should:

- *Prepare* for the need to project power against nastier, WMD-armed rogues and to conduct operations in messier conditions
- *Plan* for long-range WMD, terrorist, and IW threats to the U.S. homeland
- *Watch* for signs that a large new adversary is emerging, in which case ample time should exist to "scale up" U.S. capabilities.

The United States needs greater military contributions from, and improved capabilities with, its core partners.

The Global Environment

History's most violent century is ending under conditions of general peace, cooperation, and progress. The integration of the world economy and spread of democracy have combined to create a strong sense of common interest among the most advanced powers. There is a growing respect for the norms of responsible international behavior. The successful free-enterprise democracies serve as a beacon for those states emerging from communism and other forms of authoritarianism.

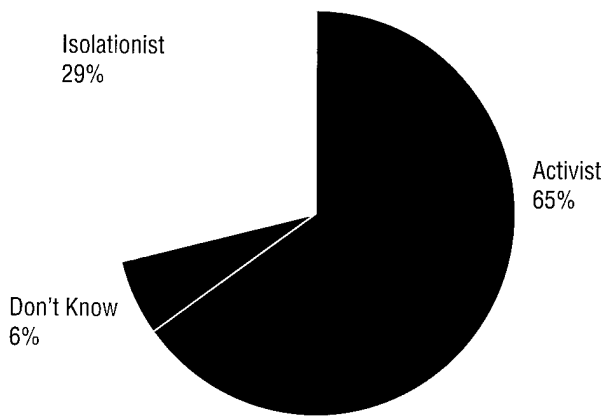
This global security environment is favorable to the United States: to its interests, ideals, and friends. The Nation's survival and territory are not threatened; its way of life is secure. As a result, the U.S. population now concerns itself mainly with the quality of life. Thanks to a growing involvement in the world economy, success in information technology, and the streamlining of industry and government, the United States is experiencing economic resurgence and sustained growth. This has helped eliminate the Federal budget deficit and enabled the country to afford its current defense budget.

The other great economic powers, the European Union (EU) and Japan, despite occasional friction, are close and trusted allies and friends of the United States. Together, the three have built a democratic, free-market core, which is now spreading throughout the Americas, Europe, and Asia. Consequently, an expanding area of the globe is increasingly peaceful and prosperous. The flow of goods, capital, and know-how throughout this area is growing and being freed from barriers and threats of interruption.

Just as the current security environment is positive, so are most (but not all) trends promising. There is no sign that great-power rivalry will displace comity as the essence of U.S.-European or U.S.-Japanese relations, despite the collapse of the Soviet Union. The three largest states outside this core—China, India, and Russia—have embarked on a transition of economic reform and integration. They know that cooperation with the leading core democracies is key to national prospects. By contrast, rogue regimes that reject the norms of the core must rely on oppression to survive and therefore face a bleak future.

The enemies of the United States are thus few, isolated, and relatively weak. No global challenger or hostile alliance is on the

Foreign Policy Preferences of the American Public



SOURCE: Chicago Council on Foreign Relations, 1995

horizon. America's ability to maintain robust military capabilities is not in doubt, thanks to its technology, the quality of its personnel, and the scale of its defense effort.

These favorable conditions and trends do not mean the United States should retire from its international responsibilities or further reduce defense outlays (down by 40 percent since the end of the Cold War). On the contrary, U.S. military strength and international engagement are essential in preserving and shaping conditions favorable to U.S. interests—and well worth the cost. The U.S. public accepts this fact and is therefore willing to support a defense budget of roughly \$250 billion, as well as continued commitments abroad. Warnings of a revival of U.S. isolationism underestimate the good sense of its citizens, most of whom appreciate that the Nation cannot be indifferent to an outside world on which its prosperity increasingly depends. While hesitant about intervening militarily where national interests are not clearly at stake, the American public has nonetheless been willing to support the use of U.S. forces in defense of important norms, provided other core states share in the risk.

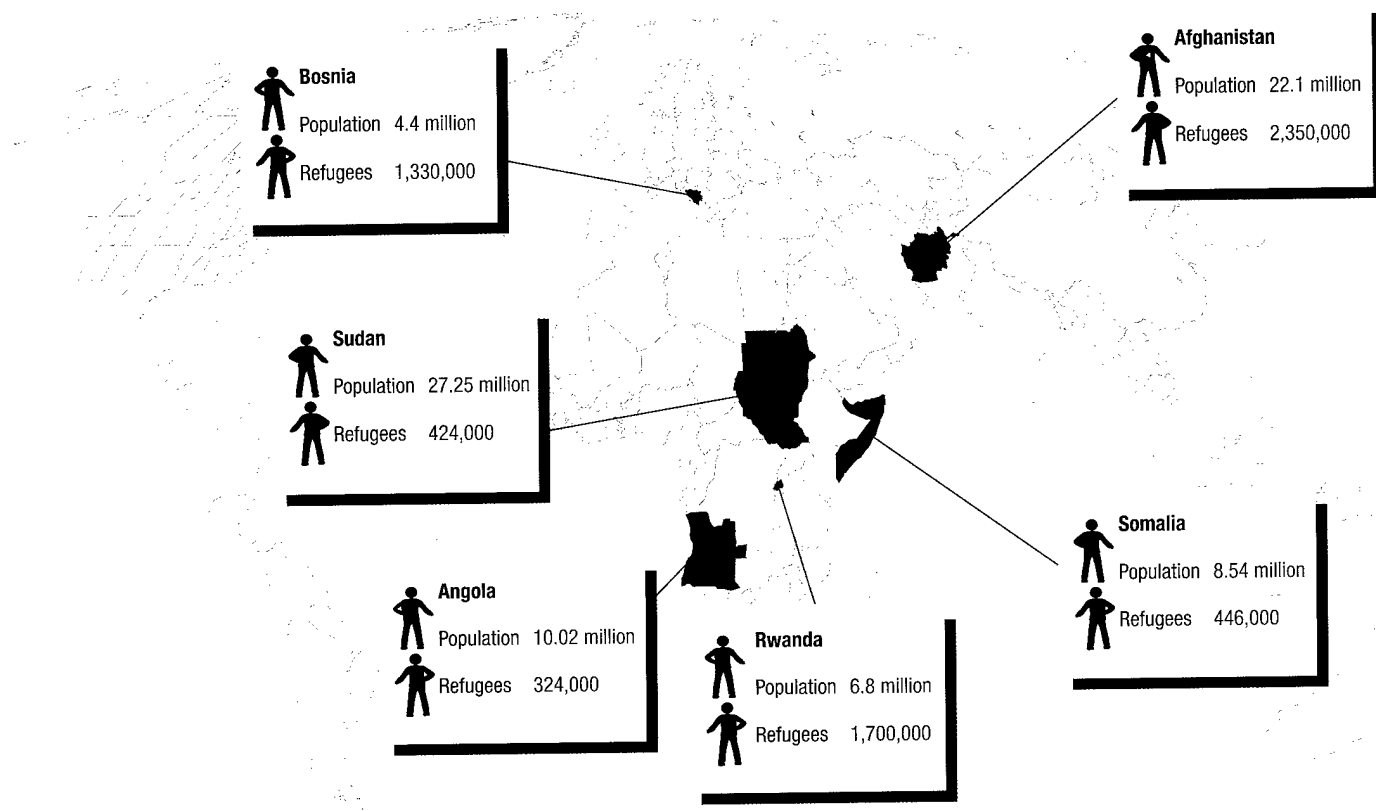
The defense effort and international role of the United States are warranted not only to sustain today's conditions, but also to prepare for a potentially bright but quite possibly hazardous future. The United States can shape the international security

environment but cannot control it and would be ill advised to try. In time, new adversaries could appear on the scene, possibly even large transition states "gone bad," perhaps in league with rogue states. The United States can slow but not reverse the spread of technologies that could make potential adversaries more dangerous, including the means to make and deliver weapons of mass destruction (WMD), cheap high-technology weapons, and the know-how to disrupt information networks. Predatory states could threaten their neighbors or escalate their struggles against the democratic core. Energy supplies on which the world economy depends could fall under hostile control or otherwise become inaccessible because of turmoil in the Middle East and former Soviet Union. Fanatical or criminal groups, operating transnationally, could proliferate, feasting on weak and failing states and striking practically anywhere, with only the signature they chose to leave. The U.S. society, territory, and infrastructure could be threatened directly by state and non-state actors with the reach, cause, and nerve to try.

For all the encouraging developments of recent years—victories over communism, apartheid, and despots—such perils must be recognized. So great is the uncertainty surrounding these dangers that it is impossible to say whether U.S. interests will be more or less secure in 10 years than today. Because of its strong position, the United States can affect its security environment, making it less likely to face a more dangerous future if it remains strong and engaged.

But the United States should also be motivated by an affirmative goal for the century to come. In essence, it seeks an expansive community of responsible democracies, bound together by the free flow of goods, resources, and knowledge, encompassing all the world's great powers, and safe from rogues with hostile ideas and dangerous technologies. Whether such a vision is realistic depends on the skillful use of U.S. influence.

Selected Failing States



SOURCE: United Nations and International Committee of the Red Cross, 1996

For all its strength, the United States seeks the respect of other countries, not hegemony over them. While it possesses a unique set of capabilities, the United States is not determined to be superior to others. Power is not its purpose; defending its primacy is not its strategy. The United States has a major equity in the effectiveness of international institutions. It needs partnerships with others of means who share the same goals and are prepared to accept more responsibility.

U.S. Interests

The security strategy of the United States in this new era ought to promote and protect its growing equity in a promising, changing world, aiming toward the prosperous and secure community of responsible democracies just described. This equity

takes different forms, depending on the stage of progress of the other world actors:

- The first group consists of *core partners*—successful democracies that can join the United States in shouldering the burdens of the core's security and expansion. This group has less than one-fifth of the world's population but four-fifths of its economic capacity.

- The fate of the second group, *transition states*, will determine how much farther the core will grow and therefore whether the future will be fundamentally more or less secure. This group accounts for most of the world's population.

- The third group, *rogues* (state and nonstate), rejects the ideals and, given the means and the chance, would attack the interests of the United States and its core partners. Rogue states are especially eager to acquire WMD and other dangerous technologies.

● The fourth group, *failing states*, is typically ravaged by upheaval and war. While relatively few and small, these states could impose huge humanitarian demands on the United States and its partners.

Economic Security

U.S. security and prosperity have benefited greatly from the success of its Cold-War allies—free-enterprise democracies in Western Europe and Northeast Asia. The United States and these core partners have common concerns, including access to the one vital resource that lies mainly beyond their control, petroleum, and safety from WMD and other unconventional threats to their societies and economies. These concerns give the United States an interest in adapting the alliances it built with Europe and Japan originally to block Soviet expansion.

Within the framework of those alliances, the United States wants its partners to accept greater responsibility for the security of core interests. Divergent security policies, especially in the context of global commercial competition, could tear apart the community of leading economic powers upon which the global economy and the advancement of other U.S. interests depend. As well, a perception in the United States that wealthy allies are not bearing a fair share of the risks and costs of common

security could undermine cohesion, as could a perception by U.S. allies that the United States wants followers, not partners. U.S. unilateralism and lack of fair allied burden sharing could become a vicious circle. The political health of the core is thus crucial to its economic health and its security.

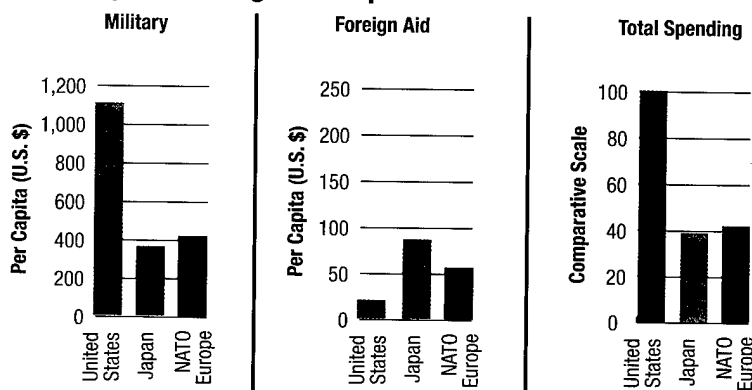
Core Enlargement

The core is now expanding, in part because of its economic and political attractiveness and in part because of the heavy flow of private investment into value-added industry in emerging nations. The globalization of both production and markets, enabled by information technology and fostering economic and political reform, is working its way (somewhat unevenly) through Eastern Europe, Latin America, and Southeast Asia. As it does, it is improving living standards, political legitimacy, stability, and security in regions previously among the world's most troubled. Most of the states of these three regions are poised to join the core. From Chile and Argentina to the Czech Republic, Hungary, and Poland, to Malaysia and Thailand, the roots of reform have grown sturdy, and acceptance of core norms has solidified. The United States has an interest in making these gains irreversible and, in time, getting these emerging nations also to accept greater international responsibilities—that is, to become new core partners.

Of course, the U.S. interest in enlarging the core is especially great with regard to the largest transition states, above all China, but India and Russia, too. The Chinese and Indian economies will rank third and fourth in the world by the year 2000. All three have nuclear weapons, which in Russia's case number in the thousands and are vulnerable to weakened state control. While they are vastly different—China is already a major trading power, India is a democracy, and Russia is the main remnant of a failed superpower—the United States welcomes the success and integration of all three.

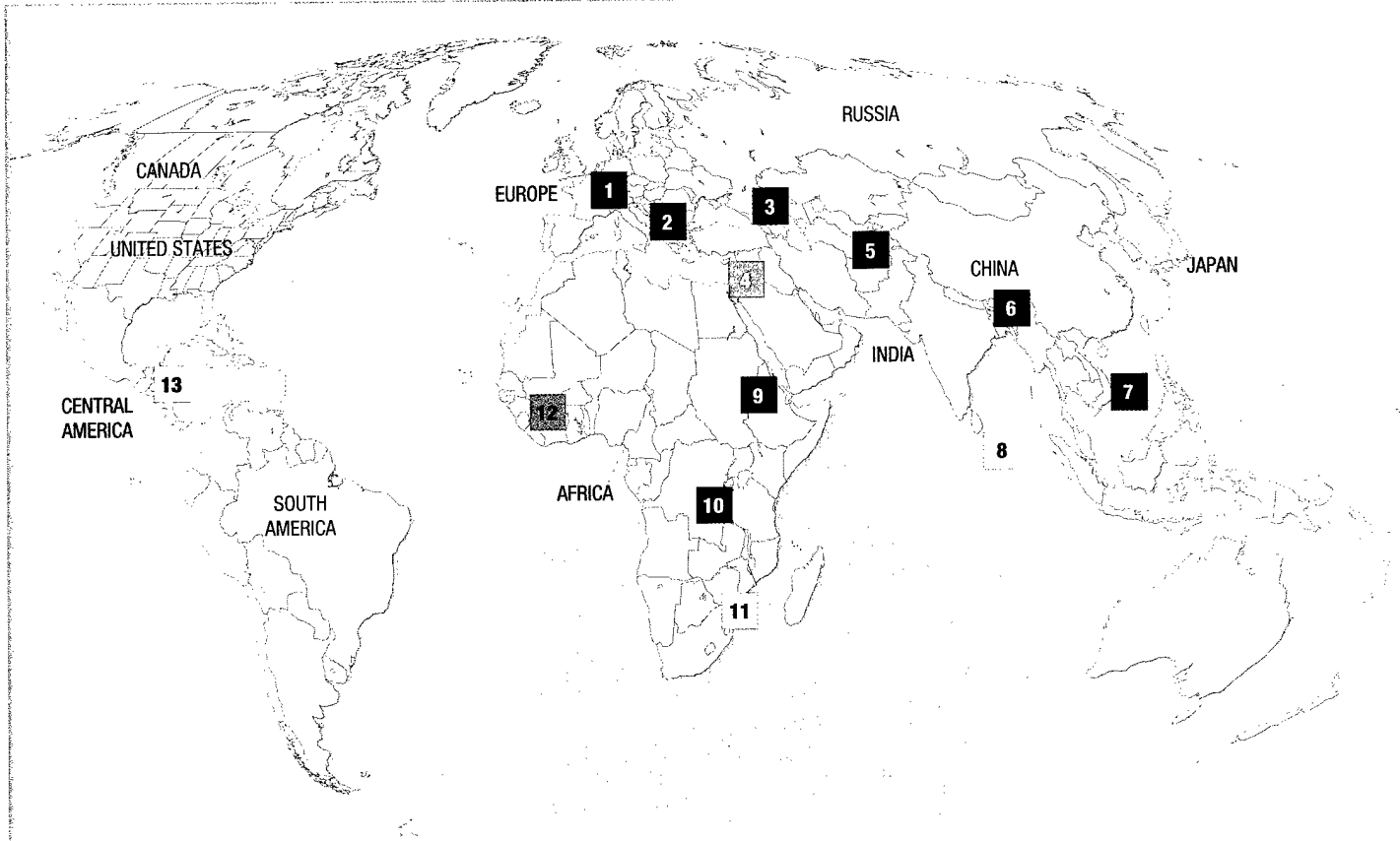
At the same time, the United States cannot assume, much less assure, the transition of these three states, let alone of the

Core Military and Foreign Aid Expenditures



SOURCE: U.S. Arms Control and Disarmament Agency, *World Military and Social Expenditures*, 1996

Survey of the Global Refugee Situation



- 1 Asylum in Europe:** About 5 million people have sought asylum in Europe since the early 1980s and more are making their way into countries in the central and eastern parts of the continent.
- 2 War in the former Yugoslavia:** More than 3.7 million people have been displaced or affected by the war and are receiving assistance from the United Nations.
- 3 Conflicts in the Caucasus:** Continuing political and communal conflicts have caused the displacement of more than 1.5 million people.
- 4 The Palestinian question:** The future of about 2.8 million people is one of the most complex issues in the Middle East.
- 5 Reconstruction in Afghanistan:** Lasting peace and additional reconstruction are needed to enable the return of about 2.5 million refugees in Pakistan and Iran.
- 6 Repatriation to Myanmar:** By the end of 1996, the remaining 50,000 of the 250,000 people who fled to Bangladesh in 1991 and 1992 were repatriated to Myanmar.
- 7 Vietnamese boat people:** About 40,000 refugees remain in camps throughout Southeast Asia.
- 8 Displaced Sri Lankans:** More than 75,000 Sri Lankan Tamil refugees remain in India, and at least 600,000 people in the north of the island have been displaced because of the war between government and rebel forces.
- 9 Relief and repatriation in the Horn of Africa:** The United Nations assists in the repatriation of about 1.6 million Eritrean refugees in the Horn of Africa who fled to the Sudan more than 30 years ago.
- 10 Rwanda and Burundi:** Political crisis in Rwanda and Burundi has created one of the largest concentrations of displaced people in the world, and efforts are being made to repatriate more than 2 million Rwandans.
- 11 Reintegration in Mozambique:** Between 1992 and 1996, 1.7 million refugees returned from other countries in southern Africa and are trying to support themselves and rebuild their own communities.
- 12 West African Refugees:** Nearly a million refugees have been created by the conflicts in Liberia and Sierra Leone, and thousands more are displaced within these countries.
- 13 Guatemalan repatriation:** About 20,000 Guatemalans returned to their homes between 1984 and 1996.

SOURCE: United Nations High Commissioner for Refugees, 1997

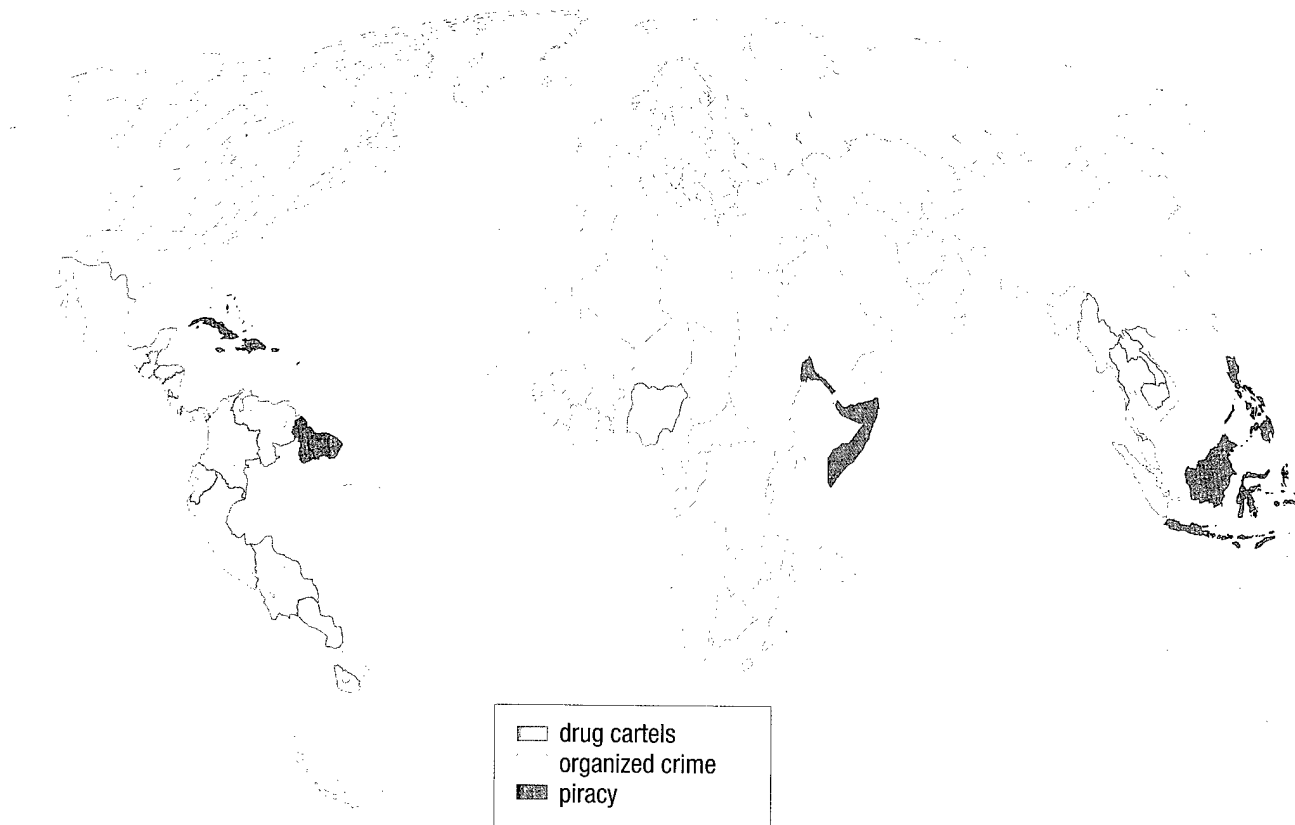
rest of Eurasia and the Middle East. So it must be prepared to discourage any aggressive tendencies exhibited by states, even the largest, that reject reform and international norms. This broad interest includes ensuring that the use of China's growing power does not upset stability in East Asia, containing the spread of dangerous materials and technologies if disorder

weakens Russia, and safeguarding oil supplies in a turbulent Middle East.

Protecting the Core

Rogue states are dwindling in number and are weakened by flawed economic policies, isolation, and illegitimacy. Globalization and the spread of information technology are gradually encircling them. As

Nonstate Rogues: Selected Problem Areas



SOURCE: Department of Defense



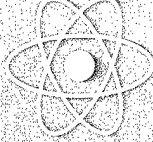





the core grows and prospers, rogue states will be forced to choose between reform (thus progress) and oppression as the way to deal with domestic discontent. They can be brutal, resilient, extremist, desperate—and dangerous. To maintain their grip on power, coerce their neighbors, and carry on their battle against the United States and its partners, these states might threaten to use any means of destruction they can acquire, including nuclear, biological, and chemical (NBC) weapons of mass destruction, cheap high-tech weapons, and information warfare (IW). If Iran, Iraq, North Korea, Libya, or Serbia, for example, displays menacing behavior, the United States will have to protect itself, its interests, and its friends.

Because rogue states can threaten the security of the core, the United States has an interest in rallying its partners and key transition states, including China and Russia, to isolate these states and hasten their

demise. This will not come easily. The recent past provides many instances of Russia, China, and even U.S. allies trafficking in dangerous technologies with the likes of Iran—a proven sponsor of terrorism that hardly conceals its aim of acquiring nuclear weapons. Rogues can be counted on to exploit any differences between the United States and its partners; thus, a united front, at least among the United States and its NATO allies, is imperative.

At the same time, the United States cannot exclude the possibility that even the worst regimes can change, or be changed. Zaire's Mobutu fled at the first sign of serious internal opposition, abetted by the country's neighbors, his failing health, and the withdrawal of Western backing. From time to time, reform seems a possibility in Serbia; and some U.S. partners argue that

Rogue States and Weapons of Mass Destruction

	 Chemical Program	 Biological Program	 Nuclear Program
North Korea 	X	X	X Limited
Iran 	X	X	X
Iraq 	X	X	X Limited
Syria 	X	X	None
Libya 	X	X	X Limited

SOURCE: Department of Defense, *Proliferation Threat and Response*, 1996

the Iranian and Cuban regimes could be moderated if engaged. When there is concrete evidence that a rogue state is ending its hostile ways, the United States can afford to offer encouragement without lowering its guard. In the meantime, however, a rogue state's behavior must be policed and its grip on power loosened.

Rogues need not be states. Separatists, militant fundamentalists, drug cartels, and other criminal and paramilitary groups can obtain the means to attack society and governments—means that might include WMD, information warfare, and more conventional weapons targeted on innocent

people. Compared to national governments, these shadowy actors are hard to track, punish, and deter, especially if they take the form of networks utilizing the latest communications technology. Moreover, the core's growing economic integration, connectivity, and reliance on a common infrastructure are creating vulnerabilities that are difficult to gauge, let alone prevent. Being elusive, fanatical, and cunning, rogue groups determined to strike directly at U.S. territory or citizens could become a serious national security problem. The United States has an interest in controlling and defeating such transnational threats, especially if they involve chemical or biological weapons. Sometimes, this will entail a role for U.S. military forces, and sometimes not. In any case, given the character of these threats, the United States needs the cooperation of its core partners and transition states alike.

The Failed State

Worldwide, millions of humans cannot count on their own states to govern and protect them, or in some cases even let them live in peace. The recent chaos in Central Africa gruesomely shows what can happen when states collapse or turn against their citizens. Birth rates are high and economic growth low or negative among these countries, with many people crowding into megacities that can provide for them no better than could the land they left. When order and infrastructure crumble, prolonged suffering is often punctuated by large-scale humanitarian crises. When, in addition, tribal violence erupts, massacres can ensue, either despite or at the hand of the failing regimes.

The consequences of these spiraling human crises are not always confined to the victims' agonies, as when refugees flood across borders, destabilizing entire regions. Terrorism, international crime, drug trade, ecological ruin, disease, and other transnational dangers can be caused and spewed by these conditions. The aggregate effect of such situations could entail major risks and costs for the core states. Of course, if state failure were to occur in

one of the large transition states such as Russia, or in a heavily armed rogue state such as North Korea, the consequences could include the loss of control over WMD and rampaging rabble from disintegrating armies.

The interest of the United States and its partners in preventing these sorts of effects suggests a need to address the economic and political conditions that breed state failure—a task mainly for U.S. foreign and aid policies. But the refusal of many regimes to reform and to seek productive employment for their people hinders the value of external help. Corporations in search of safe and profitable investments treat failing states with extreme caution, so there will be a number of states that find no niche in the world economy. The United States must expect more situations such as these in Somalia, Rwanda, Liberia, Sierra Leone, and Zaire.

Because it can neither ignore nor handle this problem by itself, the United States has an interest in improving multilateral options to stop and relieve mass suffering and to contain other effects of state failure. This interest is sometimes argued on economic or security grounds, namely that the United States and its partners will one day face serious material consequences if they permit the deterioration of a significant part of the world, where population growth is outpacing productive potential and where states either fail or assault their people. In any case, the credibility of the great

democracies suffers when genocide and other mass suffering go unchecked. Thus, the United States has an interest not only in the health, security, and expansion of the core but also in its ability to act out of moral integrity and political responsibility.

Norms

The interest of the United States and its partners in limiting the damage from failing states highlights the fact that the U.S. stake in the world cannot be reduced to purely physical interests. The core democracies observe and champion a set of norms that flow from their ideals and buttress their interests. Promotion of these norms does not mean the imposition of "Western" values on other nations and cultures, but rather a growing acceptance of basic standards of decent behavior by legitimate governments.

Broadly stated, the norms of the core include:

- *Those that bolster international peace:* nonaggression, the right of collective self-defense, the laws of war, arms control, peaceful settlement of disputes, antiterrorism covenants, respect for the authority of the UN Security Council, and respect for other instruments and institutions that affect directly whether and how conflicts occur.

- *Those that govern the functioning of the international economy:* freedom of commerce, law of the sea, access to resources, noninterference with the flow of information, environmental protection, the rules of open multilateral trading, and cooperation in addressing transnational problems.

- *Those that bear on the treatment of people by states:* human rights, the rule of law, representative and accountable government, individual liberties, freedom of the press, and other tenets of civil societies and states.

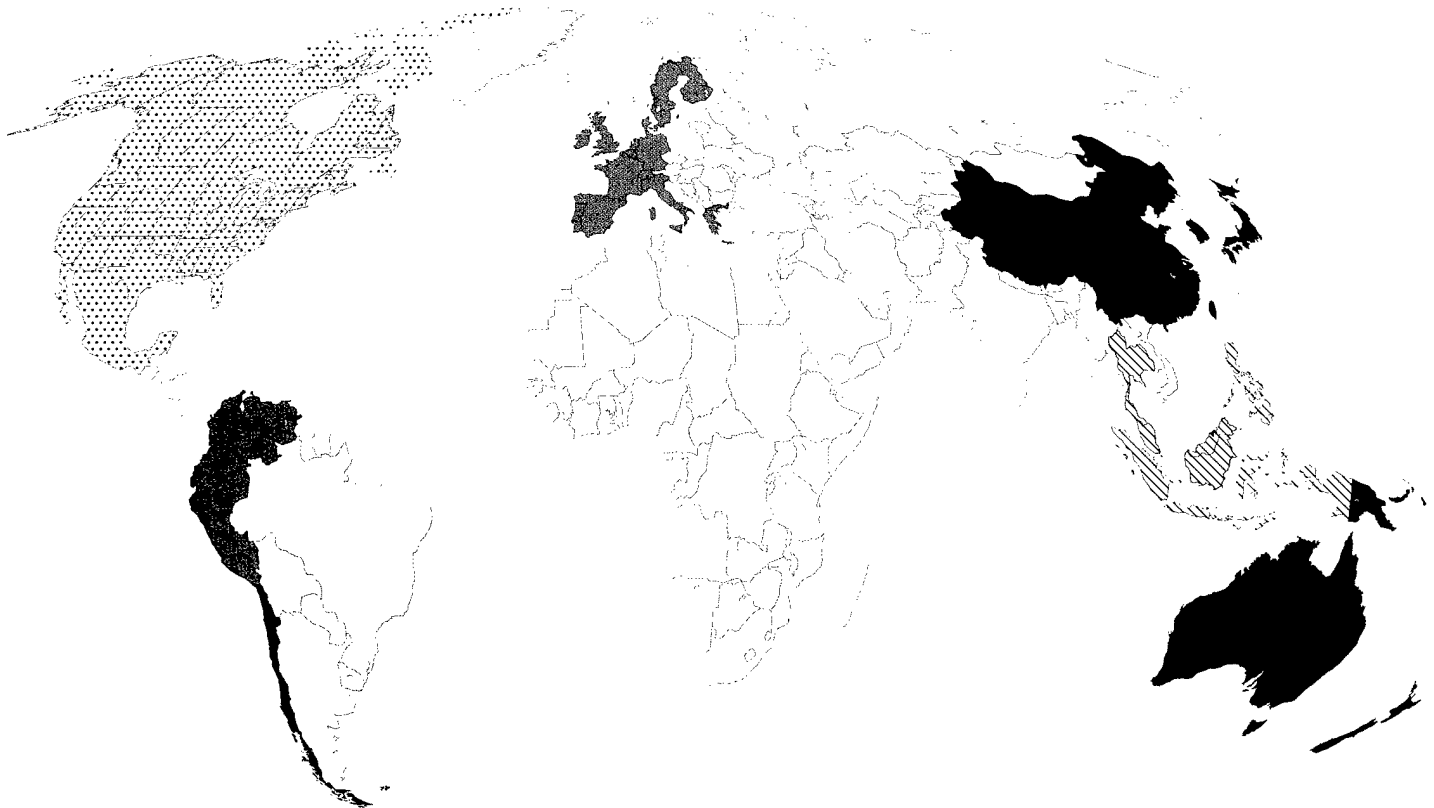
All three classes of norms affect the international security environment. The first applies directly to state behavior in peace and war. The second can help ensure that economic activity is a force for peace and not war. The third addresses underlying conditions that can cause or reduce instability and conflict.

Core States: Economic Output (regional comparisons of output and growth)

	1985 Output Billions (U.S. \$)	1995 Output Billions (U.S. \$)	10-Year Growth Billions (U.S. \$)	Population Millions
Western Europe	4,230	6,565	2,335	417
North America	4,791	7,473	2,682	290
East Asia	4,267	7,603	3,336	250
Core total	13,288	21,641	8,353	957
World total	17,951	28,202	10,251	5,757
Core share of world total	74%	77%	81%	17%


SOURCE: International Monetary Fund, *World Economic Outlook*, 1996


Major International Economic Organizations



 **North American Free Trade Area (NAFTA)**—Canada, Mexico, and the United States


 **Mercado Comun del Cono Sur (MERCOSUR)**—Argentina, Brazil, Paraguay, and Uruguay


 **Andean Community**—Colombia, Ecuador, Peru, and Venezuela

 **European Union (EU)**—Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, and United Kingdom

 **Association of Southeast Asian Nations (ASEAN)**—Brunei, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam

 **Asian Pacific Economic Community (APEC)**—Australia, Brunei, Canada, Chile, China, Indonesia, Japan, Malaysia, Mexico, New Zealand, Papua New Guinea, Philippines, Singapore, South Korea, Taiwan, Thailand and the United States

 member of both **APEC** and **ASEAN**

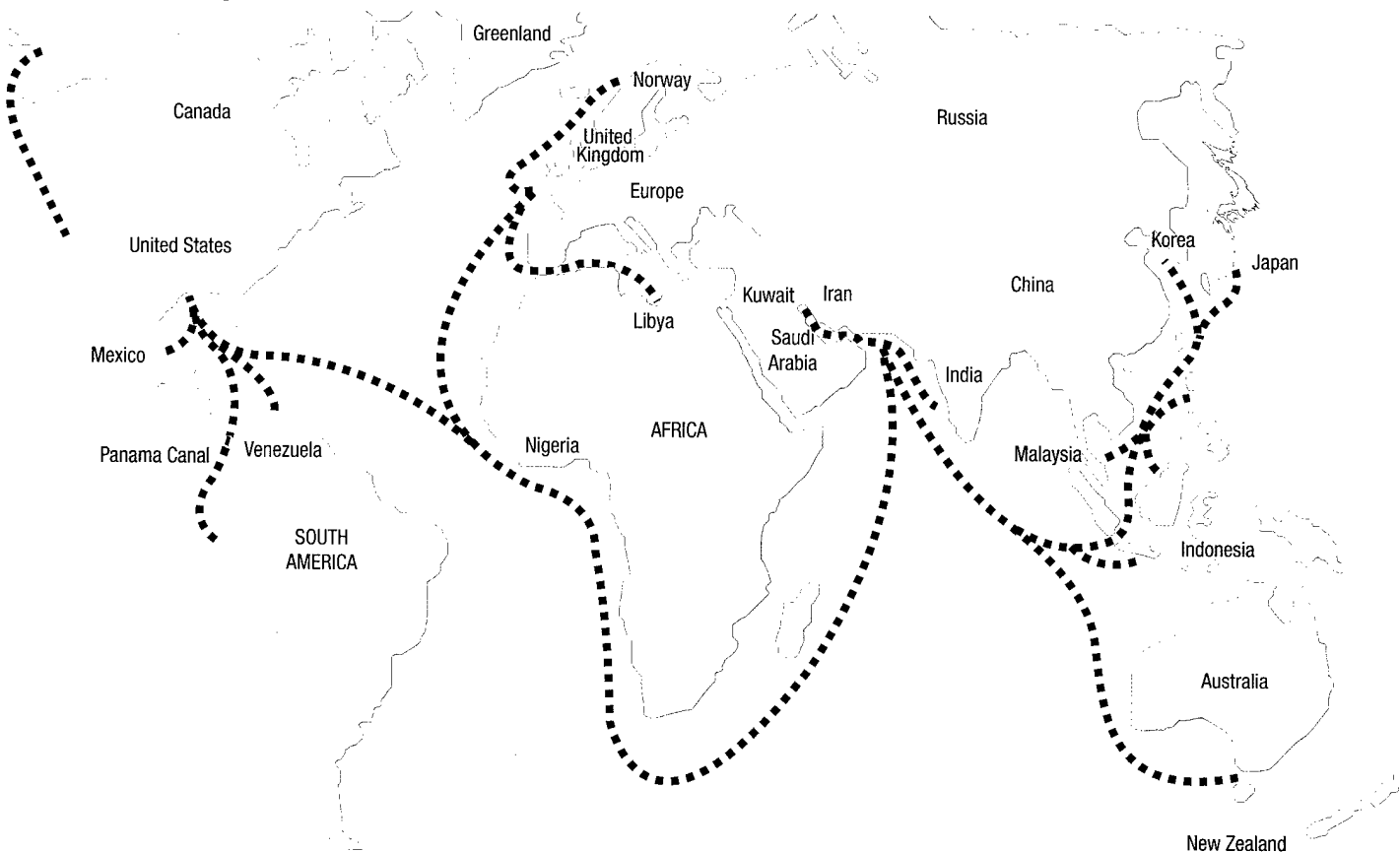
 member of both **APEC** and **NAFTA**

While deviations remain all too frequent, and sometimes flagrant—Saddam Hussein has flouted all three categories—these norms are in fact increasingly honored and enforced. The collapse of communism, the expansion of the core, and the democratization of many developing nations open up the possibility of near-universal acceptance. At the same time, these norms are demanding more of states, constraining their freedom of action, and intruding into their sovereignty. While the rules governing international security are

well established (if not always observed), those concerning the international economy are being developed as that economy becomes integrated. Those affecting internal politics and human rights are the most sensitive and difficult to guarantee.

Generally speaking, these norms support the ideals of the core democracies and reflect the progress of those societies no less than does their enrichment. The United States therefore has an interest in

Major Oil Shipping Routes



SOURCE: Central Intelligence Agency

sharing with its partners the responsibilities and sacrifices not only of abiding by the norms but also of enforcing them against rogue states and of helping peoples whose states fail.

States in transition are still ambivalent about these norms. In their ideological days, Russians and Chinese saw some of the norms as serving Western, and thus adversary, interests. The United States has a stake in gaining acceptance of the norms by transition states, as part of the wider process of reform and integration. This is, of course, especially critical for the large transition states—China, Russia, and India—which are less likely to challenge U.S. interests as they come to accept as their own the principles that currently guide the core nations.

Rogue states reject many of these norms, in deed if not in word. Iran's support of terrorism, North Korea's illicit quest for chemical and biological weapons,

and Iraq's assaults on its Kurdish and Shi-ite minorities, for example, place these states outside not only the core but also the broader international community. If they are allowed to operate with impunity, the norms could be generally eroded.

When states fail, norms are often trampled, as has happened repeatedly in sub-Saharan Africa. The United States, its partners, and others may choose to provide relief and protection of human beings in such circumstances. Such responsibility cannot be accepted lightly, since it can lead to the use of U.S. forces in circumstances, hostile or not, where vital U.S. interests are not at risk. At a minimum, the leading democracies must appreciate that any tolerance of genocide—which they have all sworn is intolerable—will affect the core's integrity and credibility, however difficult it may be to stop.

U.S. norms and U.S. interests are linked. Whether using its forces in war, in operations short of war, or in shaping the perceptions and behavior of others in peacetime, the United States is most effective when guided by a combination of interest and principle. The use of deadly force to uphold these norms is rarely required, though in peacekeeping and other operations short of war the United States might have to take up arms to reinforce the norms.

Where the United States perceives that it *must* use force because vital interests are at risk, it must preserve the option to do so unilaterally, if need be, and therefore should maintain the independent capacity to do so. But where the United States might *choose* to engage its forces—such as enforcing norms despite the absence of a direct threat to national interests—it will want, perhaps even need, to do so multilaterally and therefore should concentrate on building a coalition military capacity to do so.

Arms control has figured importantly in U.S. national security policy at least since the early days of the nuclear age and the Cold War. Although arms control has been used to promote international political understanding, its success has commonly flowed *from* rapprochement rather than produced it, as evidenced by the waning years of East-West confrontation. Still, arms control can help diminish military

threats and build confidence, thus improving the security environment, as the recent START II and chemical weapons treaties are intended to do. But it is only prudent to admit that arms control has not stopped those determined to acquire WMD from doing so. While the United States remains a champion of the norms and pursuit of arms control, it remains to be seen whether major agreements like those that accompanied the end of the Cold War will play a role in the new security environment.

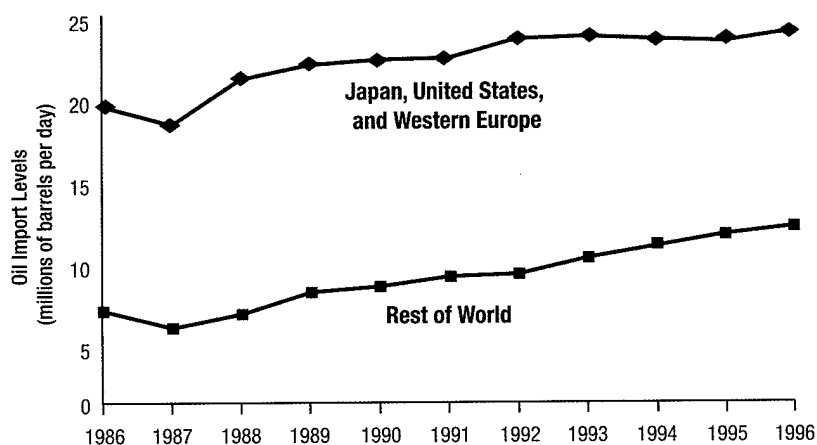
Conditions and Trends

Core States

For much of the 20th century, Western Europe and Northeast Asia were two of the world's most explosive regions. They are now among the most prosperous, stable, and secure. With important exceptions—Korea and Taiwan—the core is generally free from the threat of territorial aggression and from the enmity of a competing bloc. Moreover, nearly a decade after the disappearance of the Soviet threat, and despite the fierce economic competition of their firms for world markets, the United States and the other leading economic powers continue to be friends and to collaborate on shared interests. This unity is encouraged, though not guaranteed, by the merging of the economies of the leading democracies, resulting from growing trade and investment, the free flow of ideas, and the integration of financial markets. It is reinforced by a commonality of values and norms that has been unaffected by the end of the Cold War.

At the same time, there is an understandable tendency on the part of the leading partners of the United States to exercise increasing independence in world and regional affairs, owing to their economic success and the absence of a mortal threat that only the United States can counter. This tendency is accentuated in Europe by significant, if at times halting, progress toward EU-based security collaboration to accompany economic union. In Eastern Asia, Japan and its neighbors are approaching the matter of greater Japanese security responsibilities more cautiously. In general, the United States is searching for a balance

Growing Western Dependence on Petroleum Imports



SOURCE: British Petroleum, *BP Statistical Review of World Energy*, 1997



Refugees on the move

between asserting its political leadership in its partners' regions and shifting more of the burden and, necessarily, more independence in their direction. Those partners, in turn, welcome greater independence while wanting the United States to stay in their regions and displaying ambivalence about accepting more responsibility. The U.S. force posture in Europe and Eastern Asia will both affect and be affected by its new relationships with old friends.

The experience of NATO in Bosnia points toward a general solution emerging in Europe: Europeans will take on more responsibility to respond to security dangers, albeit within their alliance with the United States and with significant U.S. involvement. In Eastern Asia, the keystone remains the U.S.-Japanese security relationship, which is being reoriented from protection of Japan to bolstering broader regional security.

The expansion of the core is as important as the recasting of ties among its charter members. As noted earlier, a group of

nations—from Europe's new democracies to the democratizing states of Latin America and Eastern Asia—has progressed and integrated to the point it is essentially part of the core, politically and economically. In some cases (e.g., Poland, Hungary, and the Czech Republic), the nations are becoming formal allies; in other cases, South Korea (already an ally) and Taiwan, they play significant roles in the global economy.

The emergence of these new partners is fundamentally reshaping the security environment by enlarging the expanse of interests the United States might feel compelled to defend, and also by propagating outward from the core the conditions of prosperity, stability, and legitimate government undergirding peace. While external threats to the core are not on the order of the old Soviet threat to the West, a *de facto* security perimeter is pressing beyond the Cold War frontier—with potentially new demands on U.S. military capabilities. At the same time, an ever-growing circle of societies and states is living and acting in ways that engender international security. What remains to be seen is whether this circle is also willing to share in the responsibility for preserving international security commensurate with its success.

Transition States

Globalization of production, markets, capital, know-how, and reform might or might not reach all parts of the globe over the next 20 years or so. The forces behind these phenomena are mainly private and not managed, propelled, nor even fully understood by states—not even the U.S. Government. This process has considerable momentum in regions adjacent to the established core: Eastern Europe, Latin America, and Southeast Asia. But it would be an error simply to extrapolate this trend, at the same rapid pace, throughout all of Eurasia, including China, Russia, and India.

China is the most important transition state, by virtue of its size, aspirations, untapped human potential, prosperous expatriate community (some 150 million strong), and location in the world's most vibrant region. The overarching goals of the Chinese leadership are political stability and economic progress. These goals explain their

commitment to aggressive economic reform, their drive to integrate China into the world economy as its largest source of labor-intensive production, and even their grudging acceptance of the need for (gradual) political reform—democracy “within 50 years,” in the words of Jiang Zemin. But China’s growing power and resolve to reunify Taiwan with the mainland will increase the likelihood of friction, or outright conflict, with the United States, especially if the Chinese become convinced that the aim of U.S. regional presence and global strategy is to block China’s rise. Moreover, the gradual growth of Chinese power-projection capabilities will unsettle regional security and demand U.S. attention, even if no hostile Chinese intentions are evident.

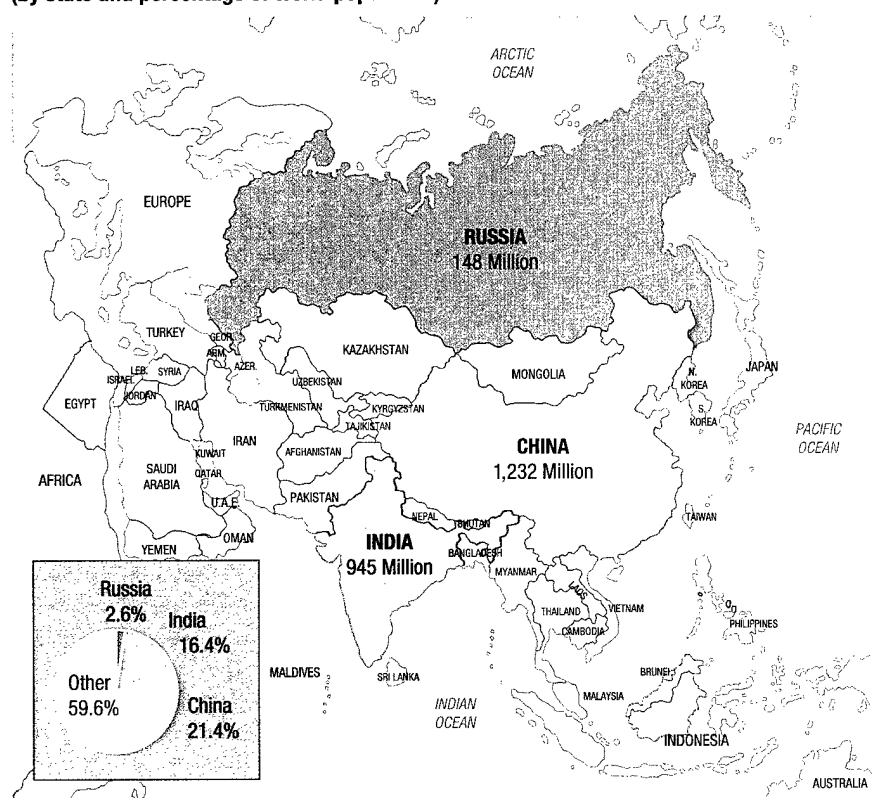
India, already democratic, has recently begun to institute economic reforms and to invite foreign direct investment. Having been friendly with but not dependent on the Soviet Union, India has not suffered with the end of the Cold War. On the contrary, India’s advantages over Pakistan are

growing, and Indian hegemony in South Asia has become realistic if not a reality. Sino-Indian relations are currently quiescent, which serves China’s interest in focusing its attention on national unification with Hong Kong and Taiwan. But the growing economic and strategic power of India and China—neighbors with old feuds, as well as nuclear weapons—could be a source of serious future instability that the United States will find hard to ignore but just as hard to influence.

Russia’s transition has been as difficult as could be expected for a people who have never known economic or political freedom. Whether Russia can follow the path cut by Poland and other former Soviet satellites is clouded by the dangers of self-isolation, organized crime, corruption, and disintegration, as well as the seductiveness of authoritarianism. Russia is unlikely to emerge as a major threat to the core: the free-fall of industrial production, the lack of domestic investment, inhospitable conditions for value-added enterprise, and the country’s deteriorating human capital point toward a continued contraction, not a rebound, of Russian power. Apart from the danger Russia could present to its weaker neighbors in the “near abroad”—themselves at best nations in transition—the greatest problem for the United States and its partners is that Russia could become a source of dangerous technologies for rogues. The trends are worrisome: arms and dangerous technologies are among the few Russian-made products that others will buy—especially rogues who often have nowhere else to shop.

A number of other states are especially important because of their geographical proximity to the core: Ukraine, the Baltics, the Balkans, states of North Africa, and much of Latin America. The key to their future lies in their relationship with the advanced democracies—investment, trade, and technology transfer—and their own determination to get through the often-painful process of reform. While the outlook for this class of states is generally bright, the failure of even a few to complete the transition—Algeria and Turkey, for example—could cause such transnational problems as migration and drugs for the core.

Large Transition States (by state and percentage of world population)



SOURCE: World Bank, *World Development Indicators*, 1997

Rogue States

The information revolution and the integration of the world economy could, in time, sweep over most rogue states. As their people learn what is happening outside and inside their countries, it is becoming difficult for all but the most brutal of these regimes to cling to power. North Korea's Stalinist regime may be near the end of the line, perhaps foreshadowing what is in store for others who resist the trend toward openness and integration. Iran, Iraq, and Cuba are suffering economically, though the regimes that rule them are clearly more resilient than the East European communists who were jettisoned by their subjects the moment Soviet protection was withdrawn.

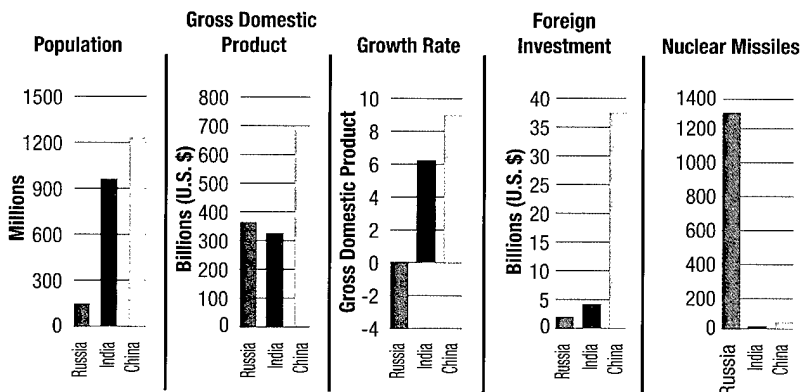
Cuba illustrates the despot's dilemma: either reform, and risk losing economic and political control; or reject reform, and face a grim and potentially explosive future. Ideology is used to maintain power in Iran and could breed new radical rogues (hence the concern about Algeria). At the same time, the strongmen of Iraq, Syria, and Serbia have no genuine ideology and instead rely on ruthless politics, palace cliques, and the manipulation of information to remain in power. How long they can hang on is a crucial question. Even if economically weakened and politically isolated—or perhaps because they are weakened and isolated—they can be vicious, desperate, and reckless. While their ranks might shrink, a few very dangerous outlaw states could last indefinitely.

For this reason, the most disturbing trend in today's security environment is the growing access of embattled rogue states to technologies and weapons that could be used—perhaps in desperation—against their neighbors, the core, and possibly the United States. North Korean ballistic missiles and WMD pose an increased threat to South Korea, Japan, and American troops, even as many North Koreans near starvation. The danger posed by such states could be compounded as the core's economy and infrastructure become more integrated and interconnected, making them vulnerable to acts that shock markets, sever circuits, and disable nodes, whether physically or electronically.

The diffusion of technology is one of the defining trends in world economics, politics, and security at this turn of the century. For the most part, the spread of technology improves the global economy, enables less developed states to emerge, and benefits the United States and its partners. This is especially true of information technology, which has the added benefit of fostering the exchange of ideas and thus democracy. The risk is that rogues will acquire the tools and techniques that can disrupt the information networks of the U.S. and the global economy. In any case, as the core economy integrates and expands, it is hard and getting harder to restrict the diffusion of these technologies.

The most acute problem of technology diffusion is the growing availability of the knowledge and materials to make WMD, as well as delivery systems. Stemming the spread of nuclear weapons is both more crucial and more straightforward than limiting access to other WMD technology. Biological and chemical weapons are easier to assemble and might be considered less risky than nuclear weapons to possess and use. In general, nonproliferation conventions, while worth having, are porous, especially where determined rogue states are involved. The only prudent assumption is that rogues will acquire and threaten to use WMD as the surest perceived way of neutralizing and deterring superior U.S. might.

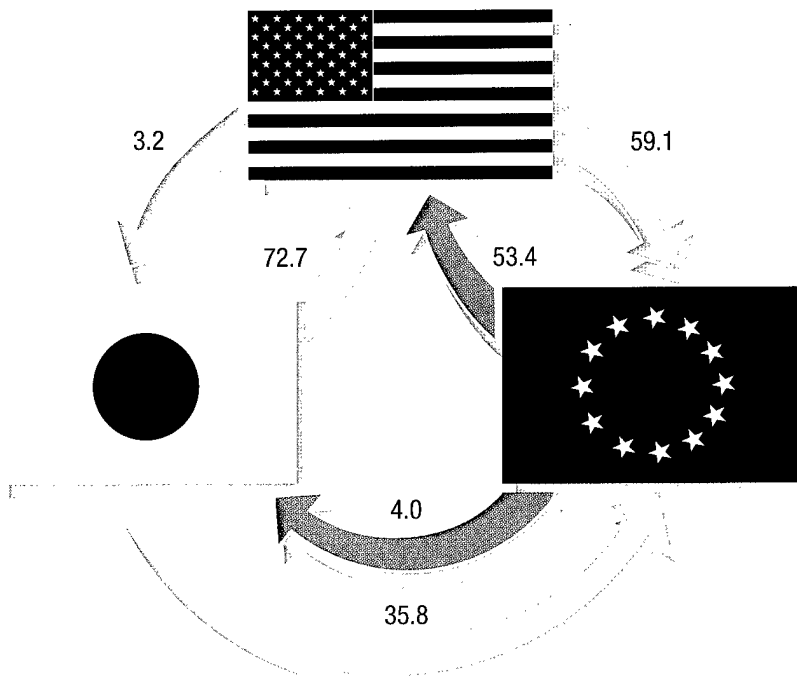
Key National Indicators



SOURCE: Economist Intelligence Unit, 1996, and International Institute for Strategic Studies, *The Military Balance 1997-98*

Flow of Investment: United States, European Union, and Japan (1990-93)

Billion (U.S. \$)



SOURCE: Organization of Economic Cooperation and Development, *International Direct Investment Handbook*, 1996

Thus, the general trend is toward increased destructive power in the hands of fringe regimes that can strike asymmetrically at the powerful democracies they oppose. The pace set by the United States in inventing and applying new technology to strengthen international security will be fast. But the pace at which this technology spreads will also be fast, especially as the world economy integrates.

Not only rogue states but also rogue groups other than states can create havoc for international security by acquiring devices of mass destruction or terror and information "weapons." Nonstate terrorists and criminal organizations pose especially pernicious transnational threats because they cannot easily be held accountable to international norms. Unlike rogue states, they face no problem of domestic dissent—no pressure to reform. These threats could increase as information networks enable such groups to increase their reach and efficiency without becoming easier to find and extinguish. Thus, while rogue states

are experiencing heightened challenges in the information age, abroad and at home, potentially destructive nonstate actors are on the rise.

Failing States

It is possible to imagine two widely divergent alternative futures concerning the number and impact of failed states—both consistent with present conditions. In the best case, only a handful of sub-Saharan states and none outside Africa will fail in the way that Somalia, Haiti, Bosnia, Cambodia, and others failed. This scenario requires the assumption that nearly all regimes and elites throughout Africa and elsewhere eschew corruption, adopt economic reforms, find a niche in the world economy, and, with the help of the core democracies, invest in their human capital and infrastructure. In the alternative scenario, most of Africa, along with some heavily populated nations elsewhere, could fail to take these steps and slip into the familiar pattern of crumbling infrastructure, declining living standards, anarchy, and tribal violence, which scares away potential investors and makes external aid futile.

Imagine the problems posed for the United States and its core partners if states the size of, say, Pakistan, Indonesia, and Nigeria, sank into chaos. Not only would the security and stability of their regions be threatened by chaos, but also severe transnational threats (e.g., drugs, criminal organizations, paramilitary forces, and migrations) could rise, persist, and menace the international system as a whole. The difference in the consequences of these two scenarios for U.S. and global security underscores the importance of inducing as many states as possible to embark on the reforms and integration that could save them from failure.

Well short of the worst-case scenario, the failure of states can have significant implications regarding the demands U.S. forces might be called upon to meet. An increase in large-scale humanitarian crises, especially involving genocide, would leave the United States and its partners—especially its European allies—little choice but

Core State Technology Expenditure versus Combined GNP of All African Nations

Billions (U.S. \$)

Core Research and Development Expenditure 1995	387
Combined GNP of African Nations	380

SOURCE: Organization of Economic Cooperation and Development, 1996

to organize coalition capabilities to intervene on the side of humanity and order. Because such demands are most likely to appear beyond the pale of vital U.S. interests, public support cannot be assured, though it could be more easily marshaled if U.S. partners were prepared to take their share of the responsibility.

Whether in defusing tribal war or battling 21st century pirates, U.S. forces could be involved in demanding and dangerous operations, even if not "war" in the classical sense. This prospect must be taken into account in designing, building, and managing those forces for the near and long term.

Potential Futures

The new security environment is far too fluid to believe that the future can be predicted by extrapolating trends or calculating point outcomes based on a Newtonian interaction of international forces. At best, an entire "space" of possible futures can be imagined in which to doublecheck whether U.S. capabilities and policies can cope with such conditions. With this in mind, it is illuminating to bracket the range of plausible futures.

In the best case, the core economy would continue its steady integration and growth. America's partners would accept increased international responsibilities. Enlargement would not slow but instead gain speed, extending from Southeast Asia into South Asia, from Eastern Europe into the former Soviet Union, and from Europe into the Middle East. China's growing economic and military power would be used responsibly and thus contribute to Asian stability and global security, as China comes to value its stake in the core and acts increasingly as a partner. Instead of failing,

African states would embark on reform and economic growth, finding a place in the world economy. Technologies would continue to spread throughout that integrated economy, but the number of rogue and revisionist states that might misuse these technologies would decline sharply. The expansion of the core and wide sharing of responsibility for international security would present a near-global united front against transnational terrorists and criminals. Norms would prevail, so widely accepted that they rarely would need to be enforced, but with the strengthened core able to enforce them if need be.

In the worst case—at least a very bad one—the expansion of the democratic core might stall. Rivalry and dissension among the United States, the European Union, and Japan could fracture their security alliances and sap their shared prosperity. Emerging nations and new democracies, including the large transition states, might lapse into stagnation, authoritarianism, and ethnic conflict. Lacking the support of its erstwhile partners, the United States would be less able to dissuade China from becoming a hostile, revisionist power, dominating or at least destabilizing Asia. China's enormous energy needs could lead to close ties with Iran and other rogue states, in turn giving them a new lease on life, access to dangerous technology, and greater ability to threaten U.S. interests.

A desperate Russia, its reform having stalled, might participate in this unfriendly constellation via the sale of its WMD technologies. Hope would be lost for the transition of scores of other states, and a growing number of failing states would produce human suffering on a biblical scale, with the democracies too preoccupied and too divided to respond. In the absence of international cooperation, predatory nonstate actors could proliferate, with access to weapons of mass destruction and information warfare and incentives to use these technologies to challenge U.S. interests and neutralize U.S. forces. All three classes of norms, described earlier, would be unenforceable and collapse.

In both cases, the United States possesses unmatched technological, military, and political power. But in the best case, the world's other powers are friends that share responsibilities, whereas in the worst case, the United States is nominally "superior" but beleaguered. In both cases the United States has and needs the ability to project power to protect its global interests. But in the best case its interests are secure and its ability to protect them is great, whereas in the worst case its interests are insecure and its ability to protect them is degraded. In the best case the U.S. homeland is essentially a sanctuary from international violence; in the worst case, it is a target.

This exercise in best and worst scenario spinning illustrates that the gap between polar but plausible outcomes is vast—and the implications for U.S. interests profound. It underscores the importance of an active, skillful engagement of U.S. power, including military forces, whether in influencing the security environment or in response to emergencies.

U.S. Military Power

The complex interplay of U.S. interests and norms on one hand, and international conditions and trends on the other, as presented in this chapter, will determine the choice, use, and role of U.S. forces. *Strategic Assessment 1998* examines how U.S. military power, as prescribed by the recent *Quadrennial Defense Review* (QDR), can:

- *Shape* an even more favorable international security environment
- *Respond* to operational demands in today's world
- *Prepare* for whatever the future holds.

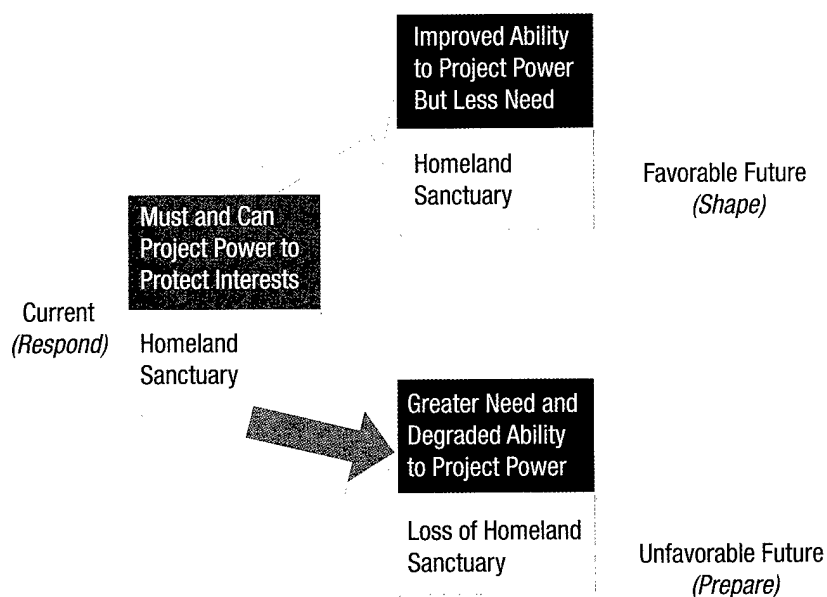
In this volume, the timeframe for the *shape* and *respond* perspectives is 10 years (to 2008), and for the *prepare* perspective, 20 years (to 2018).

Shaping the international security environment means, quite simply, advancing and safeguarding U.S. interests without having to fight—the essence of successful national security strategy. While the strategy also includes crucial foreign and international economic policies, which are not elaborated, U.S. forces and other defense resources play a key role. In addition to being used in military contingencies, they can help:

- Deter potential aggressors and encourage all states to resolve their differences peacefully
- Promote a climate of international confidence, trust, and cooperation
- Improve coalitions by encouraging U.S. partners to accept greater responsibility for international security
- Limit the threat from hostile and potentially hostile states
- Promote political and military reform among transition states.

Chapters two through eight examine how U.S. forces and other defense resources can achieve such results across regions. They will spell out U.S. interests, regional trends bearing on those interests, and regional defense postures that can shape those trends. These chapters will confront the challenge of how to take advantage of U.S. military capacity to influence world politics in a positive direction without appearing hegemonic in goals or methods.

Implications for Basic U.S. Military Requirements



The ability to respond to operational military contingencies is the sine qua non of U.S. defense policy. Even successful shaping strategies will not eliminate the need to be prepared to use U.S. forces in large conflicts or, more likely, small-scale operations. In turn, shortcomings in operational capabilities not only pose risks to U.S. interests and forces, but also devalue those forces in shaping the attitudes and behavior of partners, transition states, and adversaries. The U.S. stake in the world in the new era imposes a wide range of possible operational demands, in contrast to the Cold War, when containing Soviet power was the overriding interest and defined a relatively straightforward (though by no means easy) test for determining the requirements for U.S. forces. The new era imposes not only a wide range of demands but also a broad band of uncertainty which surrounds each possible demand. Gone are the days when it was acceptable to plan on one or two war scenarios: U.S. forces must be adequate for many contingencies, and contingencies within contingencies.

As the interests described earlier suggest, U.S. forces might have to respond to wars in the conventional sense, to other contingencies, to adversaries using unconventional and asymmetric threats, and to unconventional adversaries. Chapters nine, ten, and eleven explore how the U.S. military would cope with such a welter of military demands. Chapter nine analyzes U.S. strategy for the use of deadly force in "major theater wars"; chapter ten examines the demands of peace operations and other "small-scale contingencies"; chapter eleven anticipates how adversaries might attempt to outflank U.S. military superiority and how, in turn, the United States should respond. Chapter twelve considers U.S. nuclear posture and policy in the new era, and chapter thirteen analyzes threats from non-state actors and how they can be countered.

Chapters fourteen, fifteen, and sixteen explore how trends or shifts in strategic conditions could affect the requirements for and nature of U.S. military power to the year 2018. *Preparing for the dangers and demands of the more distant future* is not something that can wait. The forces chosen today will be in use well into the 21st century, so they must be designed for the future insofar as its contours can be grasped. Since that grasp is unavoidably a weak one—the flux and uncertainty of today make precise forecasting of the future little more than a lottery—the forces built for today and planned for tomorrow should be adaptable by design, at least to reduce the cost and potentially dangerous delay in order to make them suitable for different conditions. Chapter seventeen summarizes the key ideas of the volume regarding the roles U.S. forces play in protecting America's stake in the world.

The recent reviews conducted by the Department of Defense and the National Defense Panel are meant to be the beginning, not the end, of a journey to transform U.S. military capabilities for the next century. In that context, *Strategic Assessment 1998* is intended to inform the debate and add to the knowledge that will guide us on that journey.

Instruments for Shaping

Upheavals of the late 20th century—the information revolution and the related collapse of communism—have released forces of change that have benefited the United States. Now, capitalizing on its economic and technological resurgence, its open political system, and its military strength, the United States can influence further change in a direction fruitful for itself and for others that embrace political and economic freedom. When required to use military power, the United States must do so effectively and judiciously. The Armed Forces, when engaged abroad in peacetime, can exert a positive influence on other states and thus on the international security environment.

Flexible Power

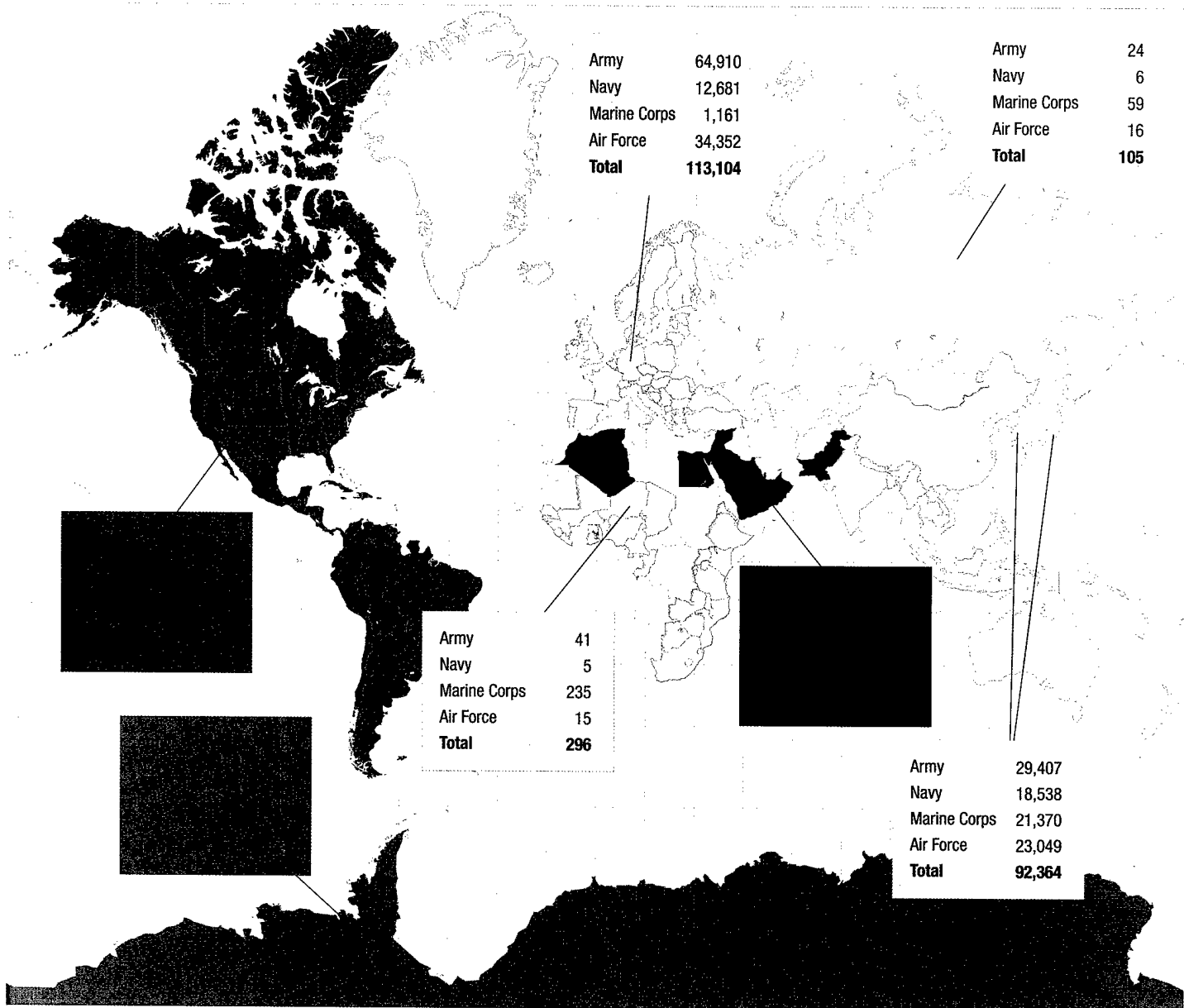
While conditions and trends are currently favorable to the United States, uncertainties abound in the international environment. Will the allies of the United States become true partners or instead free riders? Will the large transition states complete their reforms and integration, or will China turn hostile and Russia begin to unravel? Will rogue states be swept away by forces of political and economic freedom, or will

they become more dangerous because of their access to the technology spreading through the global economy? Will the number and severity of failing states diminish or grow, as states are either drawn into or left out of the global economy?

The answers are of course profoundly important for U.S. interests, including the goal of an expansive, secure, responsible commonwealth of free-enterprise democracies. If the answers turn out well, the goal is achievable. If they turn out badly, the international security environment will be significantly worse than today's. So the stakes are very high for the United States to use its strong position to shape the environment—not only the perception and behavior of rogues but of core partners and transition states as well.

The *shaping* and *responding* (e.g., operational) functions of forces must be in harmony. Peacetime deployments must support U.S. plans for reacting to contingencies. If as well the United States is purposeful in tailoring those deployments to improve the international security environment, it is less likely to be faced with the need to use force yet more likely to succeed if it must. For instance, had all U.S. forces been removed

U.S. Military Personnel by Area (June 1997)



NOTE: Excludes the temporary deployment of U.S. military personnel in the Persian Gulf and other regions of the world.

SOURCE: Department of Defense

from Europe after the collapse of the Soviet Union, NATO's successful peacekeeping in Bosnia might have been precluded and war might today rage throughout southeastern Europe. To avert future Bosnias, the United States must continue to adapt its military engagement in Europe to the changing political landscape there and to NATO's changing purposes.

During the Cold War, the functions of U.S. forces in *shaping* and *responding* were inseparable, though simpler concepts—deterrence and defense—sufficed in those simpler, static times. The forward defense posture that was then maintained to reassure allies, increase American influence, and give the Kremlin pause, was also right, if deterrence failed, to mount a defense against Soviet aggression. The United States placed large forces at contested

points along the East-West frontier (the inter-German and inter-Korean borders, the Mediterranean, Southeast Asia, and the Indian Ocean) where the danger was greatest. Because the United States could not project enough power fast enough to thwart Soviet power wherever it was massed, deterrence came from the combination of forward presence and, if that were breached, the threat of nuclear weapons.

In contrast, the United States now has superior conventional military means over every foreseeable adversary. It can project sufficient power worldwide to protect its interests. In a fluid age, with the United States increasingly integrated into the global economy, such reach and flexibility are indispensable. The United States cannot predict who will be tomorrow's adversaries, which of its far-flung interests might need protection, and thus where it may need to dispatch its forces. It lacks the sharply drawn defense perimeter it had when East confronted West. Today's core already extends beyond the free world of Cold War years and is still expanding.

Southeast Asia is a good illustration of the demands of the new era. Whether that region was of vital interest during the Cold War became a source of bitter national debate. Today, despite their current financial woes, Singapore, Malaysia, Thailand, Indonesia, and the Philippines are considered important parts of the world economy; their surrounding waters increasingly are essential trade routes. Would the United States use force to defend these countries or

waters? Perhaps. Does it need the capability to protect its interests if threatened in this emerging region? Yes. Yet neither regional politics nor the U.S. defense budget permits permanent basing in that region of the forces that might one day be called on to respond to contingencies there. Nor, thanks to the U.S. ability to project power, is it militarily critical to keep forces there. Of course, reliance on flexibility must be, and is, accompanied by U.S. intelligence capabilities that can detect potential crises, keep threats under surveillance, and discern subtle trends.

Generally speaking—there are important exceptions—the *military* logic of stationing fixed forward forces is less compelling in the late 1990s than in the past and could become even less so tomorrow. Today's uncertainty about the location of threats grows sharply as one peers into the future. In response, U.S. forces are built for rapid deployment. New technologies and joint warfare doctrine permit U.S. forces to pack, or call in, greater punch per unit. As these forces are made more lethal, they become leaner and still more mobile, reducing the purely military necessity for U.S. dependence on large-scale forward presence.

From Presence to Engagement

While global economics has replaced global confrontation as the justification for a robust international role for the United States, the need remains as great as ever. The engagement of U.S. forces abroad is part and parcel of that role. As the world watches for signs that the United States may drift toward isolationism, as it did between the two world wars, peacetime deployment of its military forces is read as a litmus test of its intentions. The involvement of U.S. forces in key regions—Europe, Eastern Asia, and the greater Middle East—is essential to preserving U.S. influence with its core partners, having a voice in regional institutions, and maintaining power balances. The end of U.S. military engagement could trigger competition for power in Eastern Asia, coercion of oil-producing states by regional bullies in the Middle East, and unraveling of European cohesion. Fortunately, the prevailing view

The Quadrennial Defense Review (QDR) on Shaping

"In addition to other instruments of national power, such as diplomacy and economic trade and investment, [U.S. forces] have an essential role to play in shaping the international security environment in ways that promote and protect U.S. interests. Our defense efforts help to promote regional stability, prevent or reduce conflicts and threats, and deter aggression and coercion on a day-to-day basis in many key regions of the world. To do so, the Defense Department employs a wide variety of means, including: forces permanently stationed abroad; forces rotationally deployed overseas; forces deployed temporarily for exercises, combined training; military-to-military interactions; and programs such as defense cooperation, security assistance, IMET [International Military Education and Training program], and international arms cooperation."

in the United States is that international retreat would be imprudent and that any shifts in where and how U.S. forces are engaged should be incremental.

But the desire for continuity cannot obscure the need for change. The primary rationale for U.S. military engagement abroad is shifting—the defense of South Korea being the main exception—from protecting allies against invasion to building new partnerships within the core and encouraging transition countries to join it. This rationale justifies large permanent concentrations of U.S. forces in Western Europe and Northeast Asia, where the United States has its strongest friends (NATO and Japan) and can engage the biggest transition states (Russia and China), even though these regions are not the most threatened. In the greater Middle East, where the most severe threats exist, the United States can operate smaller forces, thanks to its ability to project power. Thus, there is by design a generally looser fit in U.S. plans for responding to military contingencies and the location of a permanent U.S. presence overseas.

Although U.S. troops no longer need to defend Western Europe, where more than 100,000 remain based, they can stage from there to defend any of Eastern Europe's new democracies, protect the vital oil supplies of the Persian Gulf, or restore peace in the southern Balkans, areas where no large U.S. forces are permanently based. Of course, if it had to do so, the United States could respond to most plausible military contingencies in and around Europe with forces dispatched from U.S. soil. But

such forces could not foster cooperation with NATO allies, interact with transition states, and avert future Bosnias. Staging from Europe increases the likelihood that U.S. troops would have the forces of its European partners alongside, operating in a well-prepared coalition.

Similarly, although the direct threat to Japan has faded, U.S. forces stationed there play a wide role in regional security, both because they can stage from there and because they can work with their Japanese counterparts. The case for maintaining U.S. forces in Japan is therefore based on the need not only to anchor an enduring core relationship but also to respond to potential military contingencies in the region with the support of this key partner.

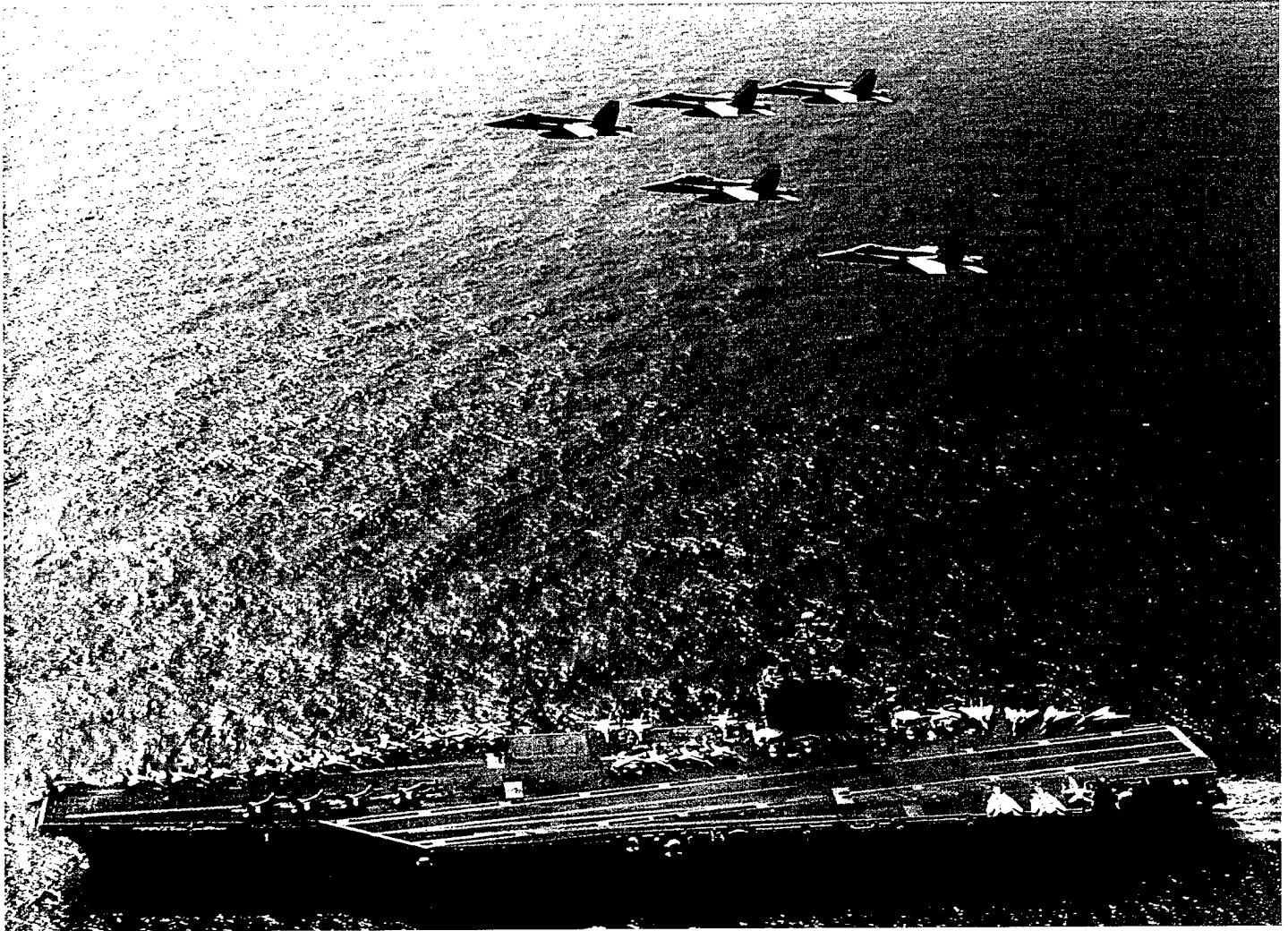
With the end of the Cold War, the purpose and function of U.S. forces abroad have moved *beyond deterrence* to *shaping a world in flux*, with deterrence but one aspect of a more dynamic strategy. Stationary presence, implying fixed forces facing a predictable threat along immutable lines, is no longer a sufficient concept. To *shape*, U.S. forces need to *engage*. A world too fluid for future military contingencies to be pinpointed is also fluid enough to offer the United States opportunities to affect international politics. With the core of free-market democracies expanding, once-threatened allies becoming capable partners, and over half the world, including China, India, and Russia, in transition, the engagement of U.S. forces includes permanent overseas stationing but increasingly depends on how those forces operate.

Shape and Respond

A key challenge of the late 1990s is to harmonize the crisis-response and environment-shaping functions of U.S. forces. Sizable forces should in any case be deployed internationally for operational reasons; no military logic would confine them to U.S. territory while they are welcome elsewhere. Even with advances in mobility and lethality, U.S. forces staging from Europe, East Asia, or elsewhere can intervene more quickly than U.S.-based forces in nearby contingencies, thus strengthening deterrence. Logistics and C⁴ISR infrastructures must also be widely distributed to enable

Credibility: Still Important, but a Different Calculus

The demonstrable ability to project superior forces must be accompanied by credibility. In the Cold War, the key to credibility was the physical presence of U.S. troops in the presumed paths of Soviet aggression. Now it depends more on when and how that military power is used than on where it is garrisoned—as the Gulf War, Bosnia peace-keeping mission, and Taiwan Strait crisis show. Cold War allies might have worried about whether the United States would be willing to risk a global nuclear war, unless U.S. forces were literally on the front line. Allies and adversaries today have less reason to doubt that the United States would send its forces against inferior enemies, provided its interests are important enough to warrant the expected casualties



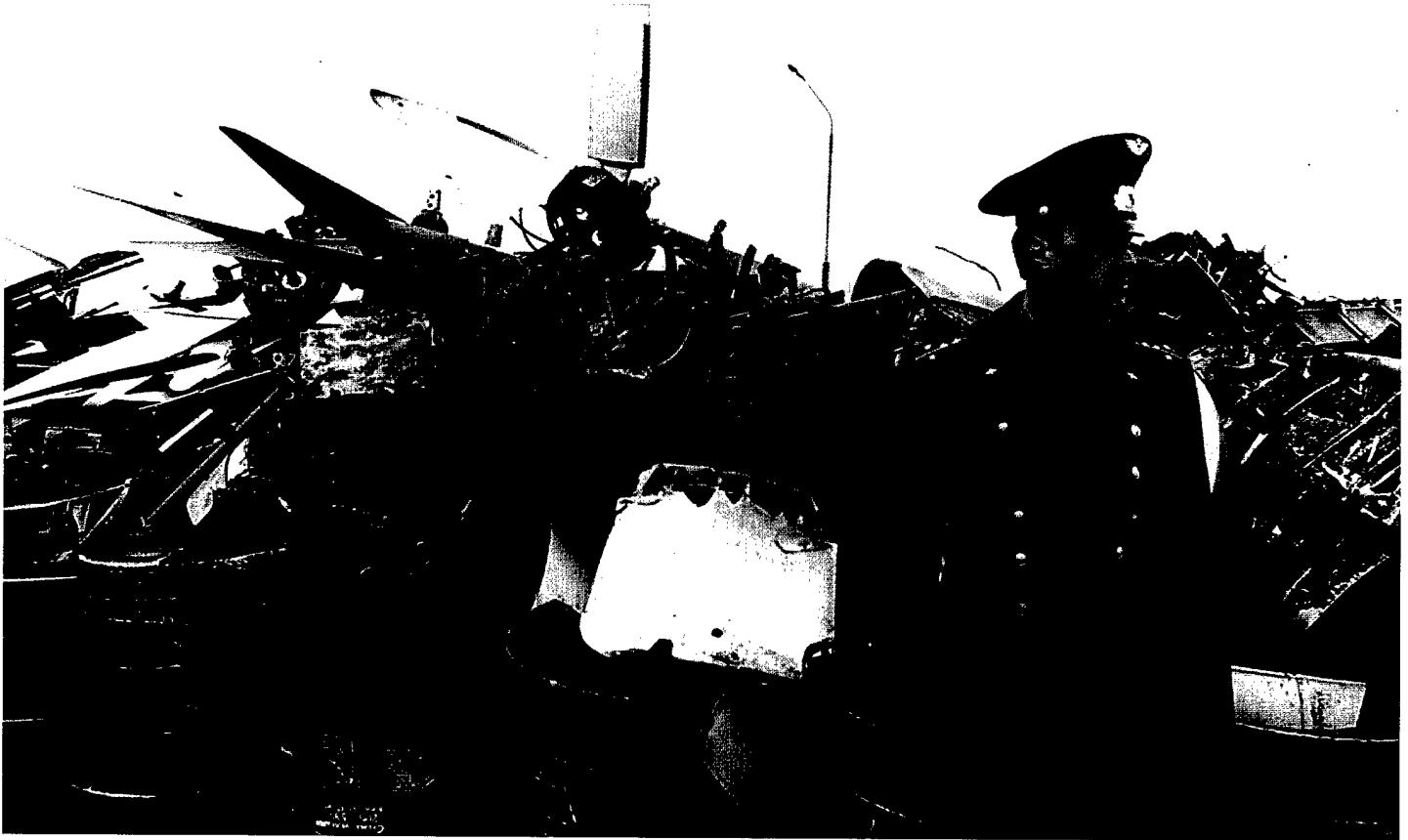
USS Nimitz, Persian Gulf

U.S. combat forces to respond to crises worldwide. Consequently, the United States can maintain and even improve its ability to shape the international security environment in a manner consistent with its military operational requirements, without relying exclusively on fixed stationing.

If stationary defense no longer represents the essence of U.S. military power, as it did during the Cold War, what does? The ability of the United States to project robust joint forces virtually anywhere and to maneuver and strike decisively, with the benefit of information dominance, is now the defining U.S. capability. It is backed up by an able national defense establishment, characterized by strong civilian authority, responsive military professionalism, efficient allocation of resources, and effective

personnel policies. Combined, these essential operational and institutional capabilities can, if skillfully stressed, play a central role in U.S. strategy to shape the international security environment.

To understand how these U.S. capabilities can shape that environment, the place to begin is by analyzing the environment, globally and regionally and how U.S. military power can affect it. The forces of the United States currently stationed overseas reflect where its vital interests are clearest, its troops most welcome, and its most capable coalition partners located, but not necessarily where the most acute dangers are, apart from Korea. In contrast, U.S. forces are not stationed in two unstable and potentially dangerous regions—the former Soviet Union and Africa—where they would not be especially welcome



Russian bomber destruction

and where the U.S. people would not be keen to have them based. Finally, in what is now the most insecure region of all, the greater Middle East, the United States maintains some forces but only a fraction of those it might use in a major crisis there. This is not to suggest that there ought to be some grand realignment of U.S. peacetime military presence and activities; the current overall pattern remains the right one. But it does suggest a need to refine U.S. environment-shaping strategies for key regions.

General Framework

Goals

Overall, international change has favored and should continue to favor U.S. interests and ideals. Therefore, the United States should not assume the classic stance of a status-quo power. Nor should its goal be to defend "unipolarity," since doing so could cast the United States in the futile role of trying to stymie the rise of other

powers, such as China. Indeed, if U.S. efforts to shape the world with its power are seen as heavy handed or hegemonic, the backlash would not only frustrate those efforts but also damage the standing of the United States despite its power.

Rather, the United States should use its opportunity and means to help build a prosperous, secure, and responsible commonwealth of nations, committed to political and economic freedom, encompassing most of the planet. As suggested in chapter one, the U.S. stake in the world can be described as four key interests:

- The vitality and security of the democratic, free-market *core*
- The integration of *transition* states into that core
- The defeat or marginalization of *rogue* states and groups that threaten the core's interests and values
- Limiting the damage from *failing* states.

The U.S. stake also includes norms of responsible state behavior that reinforce

these interests and represent what this Nation stands for—norms that are shared by U.S. partners, offered to the transition states, rejected by rogue states, and the basis of multilateral action to help peoples whose states fail.

These global interests are evident in the objectives of U.S. environment-shaping strategies in the world's regions:

- In Europe, the goal is to draw U.S. friends—some still in transition—into a new partnership, based on a recast Atlantic alliance, in order to consolidate security in Europe and project security elsewhere.

- In the greater Middle East (including Southwest Asia), it is to avert conflict in a region fraught with instability, rogues, terrorist

networks, weapons of mass destruction (WMD), and dangers to the oil supplies on which the world economy depends.

- In East Asia, it is to defuse the remaining Cold War confrontation in Korea, build a new partnership with Japan, and encourage the transformation, integration, and responsible behavior of a more powerful China.

- In the former Soviet Union, it is to foster reform and integration of the new independent states, while protecting against the potentially dangerous consequences of a failure of transition in Russia.

- In the Western Hemisphere, it is to bring the region firmly into the core and, more broadly, to strengthen reform by engaging Latin American military establishments in a partnership of increasingly shared interests within and beyond the region. Reducing the threat from nonstate actors is a major concern for all the states in the hemisphere.

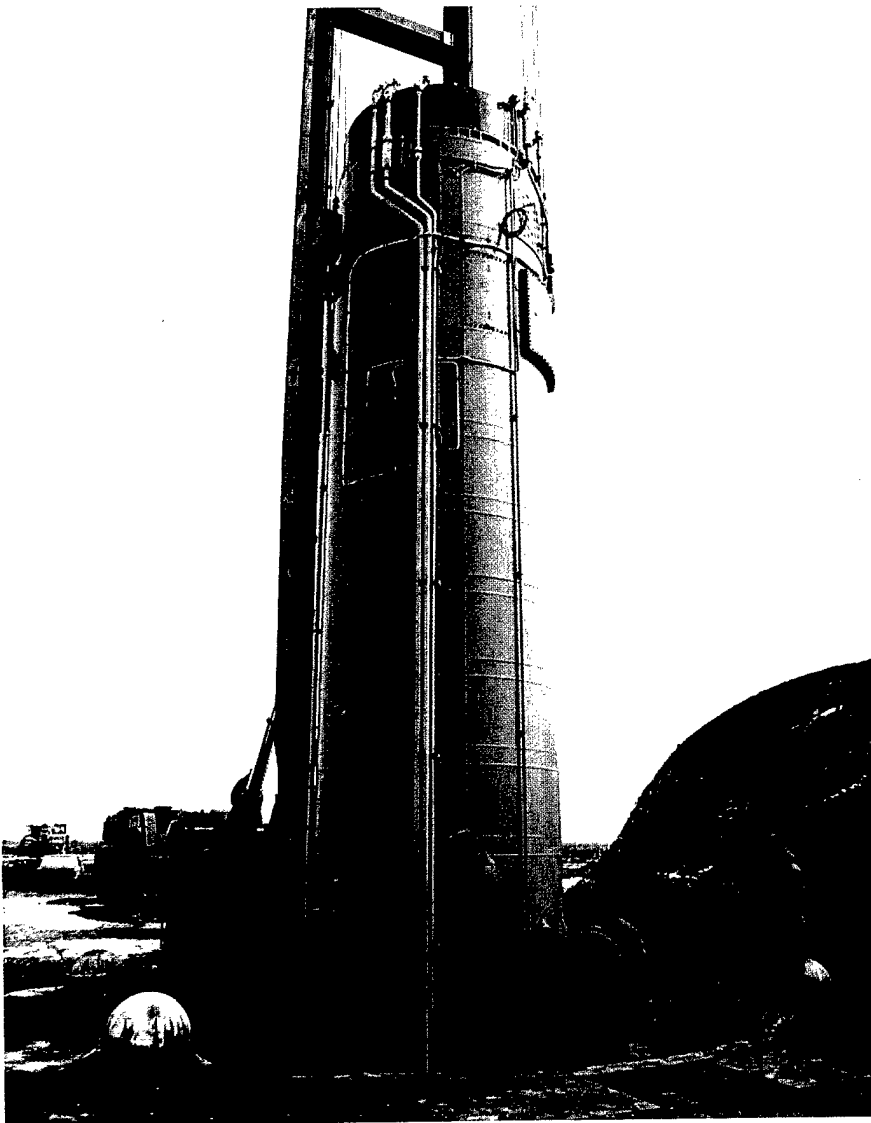
- In Africa, it is to work with core partners and responsible African states to prevent state failure, promote reform and transition where possible, and enhance multilateral means to come to the aid of human beings when such failures occur.

Ways

The United States can advance its interests and norms in many ways. For example, promoting free trade can improve the health of the core, avoid rivalry among the three great economic powers, draw in emerging nations, including China and India, and help ease the abject poverty that can cause states to fail. Similarly, peacetime international engagement of U.S. military forces, as part of a larger strategy, can affect attitudes, conditions, and trends in many ways. Here are some examples:

- Iran, Iraq, Libya, and other rogues might find it easy to coerce their neighbors, especially moderate Arab states, were it not for the awareness that the United States will not stand for it. The demonstration of U.S. military power in the greater Middle East heightens that awareness, thereby encouraging would-be victims to resist coercion while causing rogues to contemplate the risks of their recklessness.

Dismantling Russian missile



- The ability of the United States to chart new directions for its alliances in Europe and Northeast Asia depends on an active role for U.S. forces in planning, exercises, and operations side-by-side with its partners' forces. That involvement can help induce partners to accept greater international security duties in ways that complement U.S. responsibilities.

- Intraregional initiatives, like the European Union (EU), the Gulf Cooperation Council (GCC), and the ASEAN Regional Forum (ARF), will develop with both confidence and an interest in cooperating with the United States, if its force posture conveys that U.S. engagement in regional security is neither less nor more than what the countries of those regions want.

- Proliferation of nuclear, biological, and chemical (NBC) weapons would accelerate if every nation that perceived a threat from these weapons were to acquire them in order to fend for itself. By giving confidence to friends and allies, through the engagement of its conventional and, where relevant, nuclear forces, the United States can slow the spread of weapons of mass destruction.

- Reform of the military establishments of former Warsaw Pact countries, a crucial element of the larger process of political transformation, can be facilitated by their peacetime exposure to the operational and institutional qualities of U.S. forces and military personnel.

Such examples suggest that U.S. forces can shape the international environment in five basic ways:

- Deterring conflict
- Promoting international confidence and cooperation
- Improving coalitions with partners
- Limiting the strategies and capabilities of real and potential adversaries
- Promoting defense reform.

Deterring Conflict

During the Cold War, avoiding conflict essentially meant deterring the Soviet Union and its proxies from trying to expand communism's dominion. Today, it still includes that sort of deterrence—convincing would-be aggressors that the risks

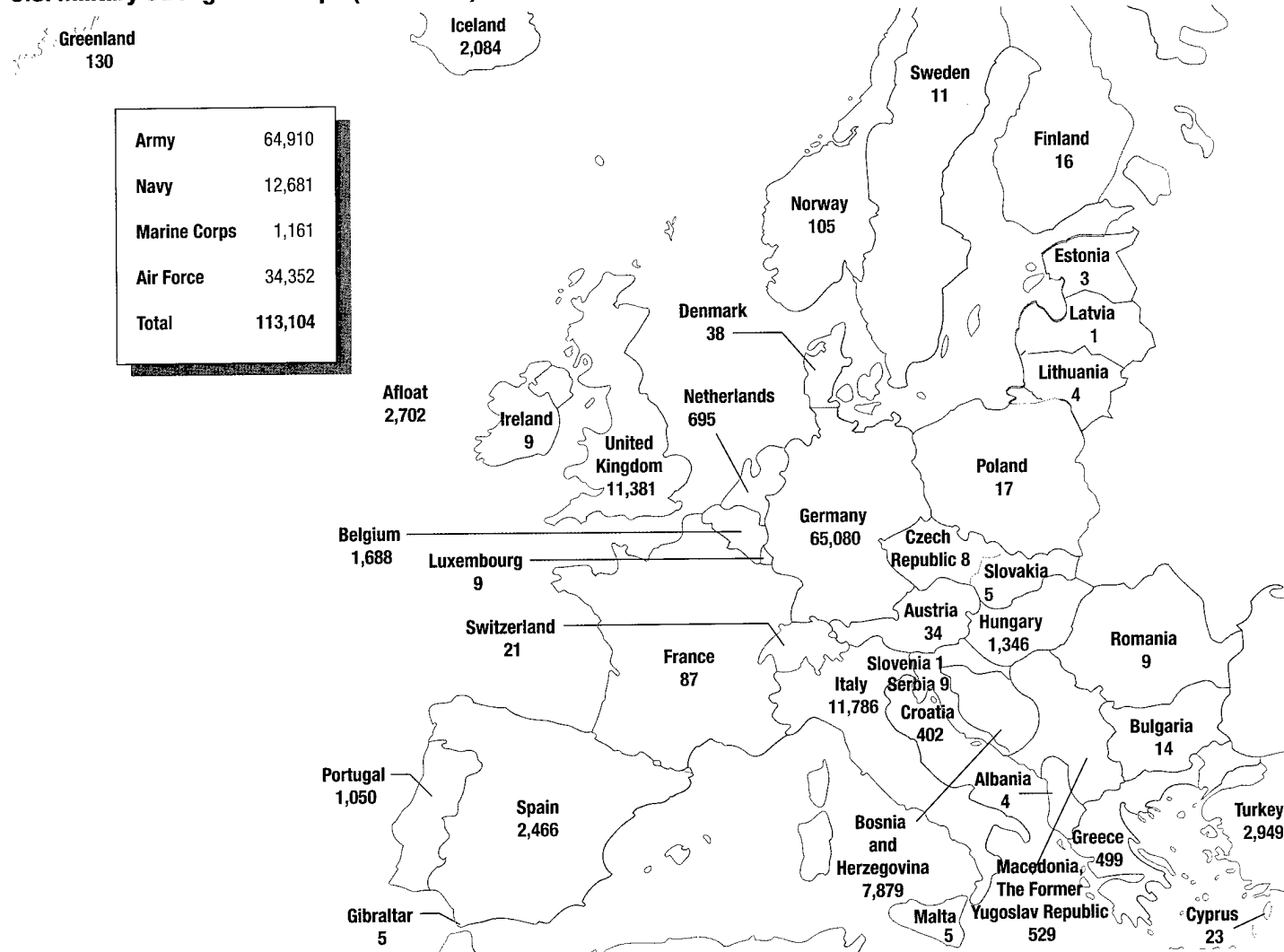
of threatening U.S. interests outweigh possible gains—but it does not end there. It also means using U.S. power to dampen instabilities, cool tempers, win acceptance of norms against aggression, and discourage the violent settlement of disputes.

The formula for deterrence is not complicated. U.S. forces engaged abroad remind rogue states that aggressive behavior can produce a punishing U.S. response. Iraq, Libya, and Serbia have experienced it, and others surely have taken note. Although basing large U.S. forces everywhere conflict could occur is no longer feasible or necessary, they can be deployed in a way that permits the prompt arrival of enough force to convince a rogue that aggression would precipitate war with the United States. Designing forces for rapid deployment—lean, highly mobile, and able to summon heavy remote firepower—is essential to the new security environment.

Avoiding conflict with the large transition states faces the United States with a delicate and more complex challenge—and, given their size, a profoundly important one. The United States is attempting to persuade and help these states to complete their transformation. It does not wish them to perceive U.S. power as aimed at them. In the cases of China and Russia, the United States is careful not to suggest that its forces in Eastern Asia and Europe, respectively, threaten their national security or are part of a strategy of containment. This sensitivity largely explains why the United States does not intend to station significant forces on the soil of new members of NATO, close to Russia, as well as U.S. caution regarding intervention in Russia's "near abroad." It also explains U.S. assurances to Beijing that the United States and Japan are not aligned against China.

But the U.S. force posture should also convey a message to transition states that threatening, rather than joining, the core could lead to confrontation with stronger forces. The need to send this dual message argues for having U.S. forces interact with their Chinese and Russian counterparts, as they are working with Russian forces in NATO's Bosnia operations. The U.S. intent

U.S. Military Strength in Europe (June 1997)



SOURCE: Department of Defense

is cooperation, yet its forces' qualities will not escape the notice of their counterparts. Engagement can strengthen deterrence without being provocative, which is particularly important vis-à-vis China.

Promoting Cooperation

Bolstering confidence was not complicated during the Cold War: America's allies knew that any attempt to coerce or attack them would immediately involve the United States. Although this still holds for a few cases today—South Korea, Kuwait, Saudi Arabia—most U.S. partners no longer have reason to feel threatened by direct aggression. The awareness of available

U.S. forces can help convince Japan, Germany, France, the United Kingdom, and other key friends that the United States remains steadfast in its interest in their security and in the stability of their regions. Such confidence helps the United States persuade those partners that they need not pursue other security arrangements, such as a European alliance based on the EU outside NATO.

Does instilling confidence still require the fixed stationing of large combat forces on the soil of secure allies? The United States has no such presence in the United Kingdom, Israel, or Canada, yet in British, Israeli, or Canadian minds the durability of their special relationships is unquestioned.

Why does this not apply to Germany and Japan, where the largest concentrations of U.S. forces abroad are? Are these two countries still different today because of the damage they did to world security half a century ago? In a sense, yes—not because either is a shaky democracy or cannot be trusted, but because both are now major economic-political powers that, owing to the continuing role of the United States in their security, have eschewed nuclear weapons. Although the United States wants Germany and Japan to be viewed and treated as ordinary countries, each accepting a greater, fairer share of the responsibilities of international security, it does not wish to disturb a formula that works.

Confidence within the core today has less to do with territorial security than with the safety and smooth functioning of international markets, transportation links, energy grids, information networks, and other systems that make up the anatomy of the global economy. Because these systems are transnational, they are inherently vulnerable to threats from rogue states, modern "pirates," and sinister non-state actors. The argument in some circles that the United States has no business using its forces unless

vital interests are at stake ignores the fact that any unraveling of the world economy from lost confidence could be devastating. Military capabilities alone cannot guarantee economic security; but international engagement of U.S. forces, supported by intelligence systems to detect dangers, discourages attacks and bolsters confidence.

The formula for imparting confidence to friends has included deployment of nuclear weapons in Europe—thousands of them during the Cold War, a few hundred now. Although these weapons were once considered crucial to deter attack by massive Soviet forces a stone's throw from West Germany, the question is whether they still are needed today, in radically different and more secure circumstances. The presence of U.S. nuclear weapons in Germany, under dual-key controls, satisfies nearly all Germans that their state does not need its own nuclear weapons. Yet the formerly prominent role of U.S. nuclear weapons around the world is greatly diminished. Chapter twelve addresses the future of U.S. nuclear weapons in shaping the security environment, given the proliferation of nuclear and also biological and chemical weapons.

International Cooperation in Europe

LEGEND

- = member
- = observer
- ▶ = associate member
- ◆ = associate partner
- ◊ = invited to negotiate NATO accession
- = membership suspended

Organization for Security and Cooperation in Europe (OSCE)

Partnership for Peace (PfP)

Euro-Atlantic Partnership Council (EAPC)

Western European Union (WEU)

European Union (EU)

North Atlantic Treaty Organization (NATO)

	Belgium	Denmark	France	Germany	Greece	Italy	Luxembourg	Netherlands	Portugal	Spain	United Kingdom	Iceland	Norway	Turkey	Republic of Ireland	Austria	Finland	Sweden	Bulgaria	Czech Republic
OSCE	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
PfP	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EAPC	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
WEU	■	●	■	■	■	■	■	■	■	■	■	▶	▶	▶	●	●	●	●	◆	◆
EU	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
NATO	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

The United States has declined to be the world's sheriff. Its friends need to bear international security responsibilities commensurate with their wealth and their equity in the core's health, security, and norms. If they assume that the United States will support both their burdens and its own, they may not rise to the task. Yet if they lose confidence in the resolve or capacity of the United States, the effect may be much the same. This situation requires that the United States engage its partners in creating a new core security coalition, retaining their confidence while disabusing them of complacency.

It is not enough for coalition forces to satisfy the politics of equitable burden-sharing, they must also be militarily effective. U.S. forces in Europe, under the NATO flag, are critical to preparing with allied forces for effective combined defense of common interests, within or outside Europe. European skeptics wonder whether the U.S. interest in building a new military coalition means that the United States wants to provide the leadership, command and control, strike power, and mobility while its European allies provide the ground troops—and thus the casualties. Such a division of labor would be neither militarily nor politically sensible. Instead, the allies should improve the mobility, technology, and joint doctrine of their own land, air, and naval forces, so that they and U.S. forces might operate seamlessly.

The prospects for increased allied contributions to global security are best in Europe, although U.S. forces in Japan and Korea also can encourage improved, complementary allied capabilities. Without raising worries about Japan's independent offensive capabilities or overstepping its legal and political self-restraints, Japanese forces could contribute more to both regional security and peace operations within the U.S.-Japan security agreement.

◆	■	■	■	■	Estonia
◆	■	■	■	■	Hungary
◆	■	■	■	■	Latvia
◆	■	■	■	■	Lithuania
◆	■	■	■	■	Poland
◆	■	■	■	■	Romania
◆	■	■	■	■	Slovakia
■	■	■	■	■	Canada
■	■	■	■	■	United States
	■	■	■	■	Albania
	■	■	■	■	Armenia
	■	■	■	■	Azerbaijan
	■	■	■	■	Belarus
	■	■	■	■	Macedonia
	■	■	■	■	Georgia
	■	■	■	■	Kazakhstan
	■	■	■	■	Kyrgyzstan
	■	■	■	■	Moldova
	■	■	■	■	Russia
	■	■	■	■	Slovenia
	■	■	■	■	Turkmenistan
	■	■	■	■	Ukraine
	■	■	■	■	Uzbekistan
			■		Malta
	■	■	■	■	Tajikistan
	■				Bosnia-Herzegovina
	■				Croatia
	■				Cyprus
	■				Holy See
	■				Liechtenstein
	■				Monaco
					San Marino
	■	■			Switzerland
				●	FRY
	■				Andorra

All friends of the United States—large and small—European, Asian, hemispheric, should be able to collaborate with the United States in peacekeeping and other military operations short of war, as discussed in chapter ten. Whether through the UN, NATO, other regional institutions or bilaterally, the United States can use its forces in peacetime to enhance the ability of the forces of core and transition countries to join in multilateral operations. When no U.S. vital interests are at risk, public resistance to the involvement of U.S. troops can be allayed if the United States is acting as part of a competent multilateral effort.

Yet the United States cannot simply assume that its partners will build suitable forces, or that they will be made available merely because the U.S. believes a particular crisis merits a multilateral response. Nor

can the United States pare its own combat forces in the mere hope that its allies will make up the difference. To increase the likelihood of joint action, the United States will need to fashion with its partners common strategies toward common security problems, including how to deal with key rogues, WMD proliferation, and potentially failing states. In parallel, the United States and its principal partners should engage in contingency planning, force planning, interoperability programs, and combined exercises, in an effort both to enhance confidence in its partners' serious intent and to improve operational effectiveness.

Limiting Threats

As chapter eleven explains, adversaries may try to outmaneuver the United States by exploiting its vulnerabilities or changing the mode of conflict to de-emphasize their own deficiencies. U.S. forces can

Syrian in NBC gear



constrain such asymmetric threats by convincing adversaries that attempting to gain an edge is fruitless and risky. To take a key example (addressed in chapter twelve), rogues seeking weapons of mass destruction must be made to believe that, in any event, the United States can still project power while protecting its forces (such as with theater missile defense). The peacetime engagement of U.S. forces also can help convince at least "rational" rogues that using such weapons will bring devastating (possibly nuclear) retaliation. If the use of these weapons comes to be seen as prohibitively risky, rogues may be less inclined to acquire them.

Tailoring the U.S. force posture so it does not provoke unnecessarily a threat greater than might otherwise exist requires walking a fine line, especially with the large transition states. China, for example, needs to know that an attempt to unite Taiwan with the mainland by force would risk war with the United States. Yet were the U.S. force posture in East Asia to appear threatening to China, irrespective of Chinese behavior, the People's Liberation Army (PLA) might escalate investment in its power-projection capabilities and in strategic nuclear forces that could be targeted on U.S. territory. The end result could be a diminished U.S. ability to help Taiwan defend itself.

Similarly, although Russia now lacks the means to field conventional forces capable of threatening U.S. interests, were it to regard U.S. forces in Europe, Eastern Asia, and the greater Middle East as a threat to Russia, it might further increase its reliance on nuclear, and perhaps chemical and biological, weapons. The engagement of U.S. forces in peacetime inevitably sends a message to the large transition countries. Simply stated, the United States wants to make clear that its forces would be threatening only if these countries threaten U.S. interests, U.S. friends, or regional and global security.

Reforming Defense

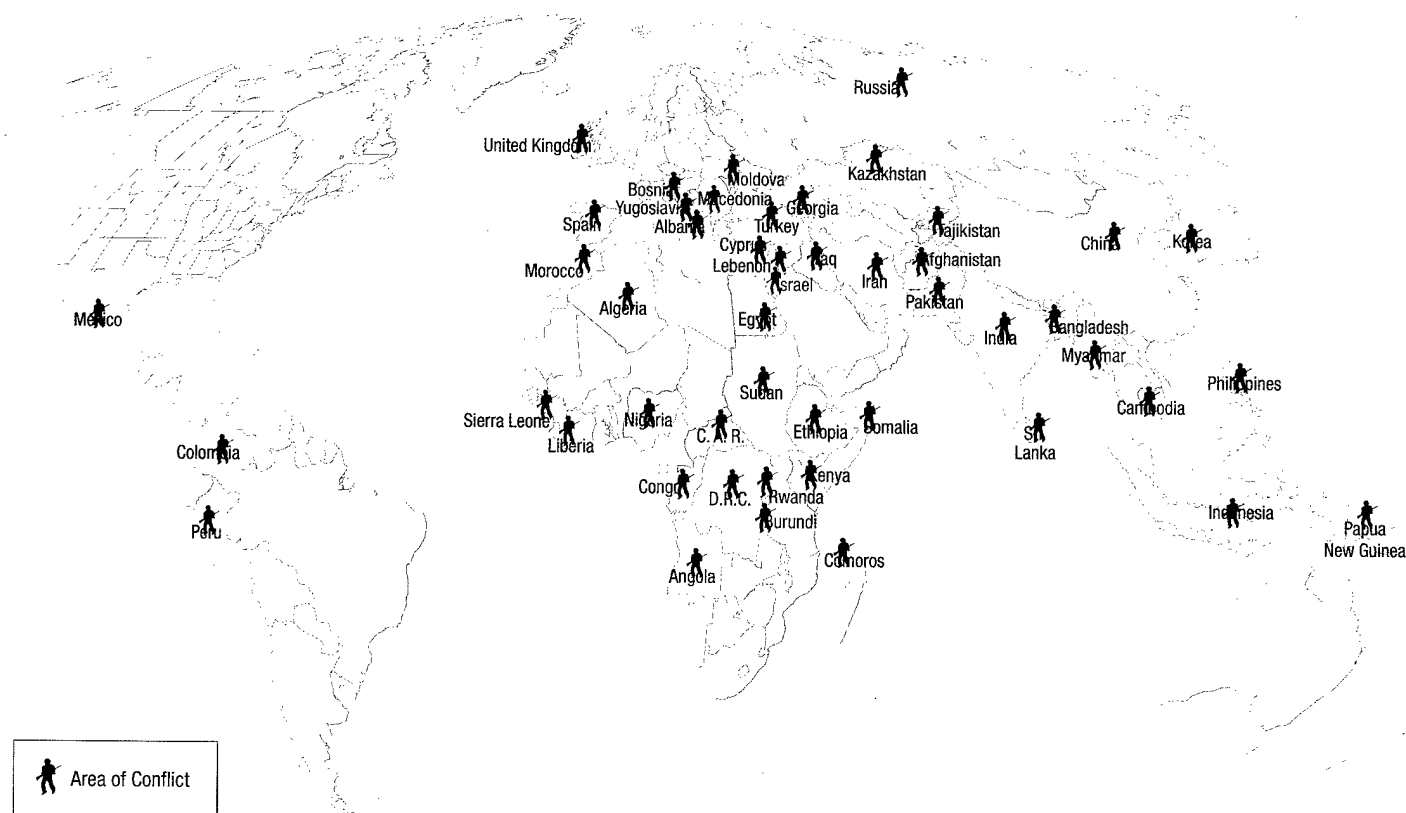
Efforts to reform defense establishments have been a U.S. priority since the end of the Cold War, when the opportunity first appeared to help new democracies transform their economies and politics. Because in the old communist states the

military establishments were entrenched, pampered, inbred, and bloated, reforming them, however crucial, has been frustratingly slow. While unreformed militaries can act as a brake on larger processes of transformation, reformed militaries are more likely to honor international norms and cooperate with counterparts in the core. The need for defense reform may be clearest among the former Warsaw Pact nations, yet reform is desirable among all formerly authoritarian states, whether in Latin America, East Asia, the Middle East, or Africa.

While reform has many facets, its *sine qua non* is civilian control of the military. Without that, democratization can be derailed by "old-guard" officers, to whom change is anathema. No other defense reforms can be implemented until civilian authorities have the confidence, clout, and information to set direction and ensure that it is followed. Once an officer corps is ready to answer to elected leaders, it can help implement other reforms: restructuring forces in line with legitimate national defense needs; improving quality by, if necessary, reducing the size of forces; instituting efficient and accountable management of resources; creating personnel systems that reward only merit; and staying out of politics altogether.

U.S. forces embody the professionalism, accountability, and efficiency other defense establishments can emulate to benefit their own countries, their neighbors, and the United States itself. The more deeply U.S. forces are engaged in helping stimulate and mold reform in the militaries of transition states, the more likely these states are to become capable coalition partners as their transition proceeds. Yet only a few transition states—mainly, the former Warsaw Pact members—admit to the need for reform. Others consider such "internal" matters to be off-limits to U.S. efforts. Paradoxically, the greater a nation's need to reform its military establishment and strengthen civilian control, the less forthcoming it may be in seeking help. In Latin America, for example, political leaders sometimes are not confident enough to demand reform, including

Current or Potential Conflicts in the Post-Cold War World



SOURCE: International Institute for Strategic Studies, *The World Military Balance 1997-98*

U.S. help, if their militaries resist. The engagement of U.S. forces with their counterparts, sensitively and without condescension, can strengthen reform-minded military officers and political leaders, thus improving the climate for basic reform.

Means

With these as the purposes, how can U.S. forces—built and maintained to *respond* to both major theater wars (MTW) and smaller scale contingencies (SSC)—*shape* the international security environment? Where should they be deployed? How and with whom should they operate in peacetime? How can their capabilities be showcased both to impress and reassure, to appear threatening to some states but not to others? What mix of permanent basing, rotational deployment, maneuvers, and other training, coalition operations, distributed

infrastructure, C⁴ISR networks, and personnel exchanges would serve U.S. purposes in shaping the environment, while also supporting its military strategy and plans for responding to actual contingencies?

To succeed over the long haul, strategies for shaping environment should emphasize key U.S. military strengths and reflect U.S. strategy for responding to operational demands. The goal is to remind others of essential U.S. qualities and that the United States can and will bring them to bear if need be. During the Cold War, the United States sought to demonstrate that Soviet aggression would automatically collide with U.S. power—conventional, and if necessary nuclear. Large, fixed forces posted along the East-West divide were central to this military and political strategy. In contrast, during the 19th century, Great Britain made certain that the rest of the world knew it had the means to control the seas, protect its empire, and intervene



Troops boarding C-141 Starlifter

to ensure a balance of power on the European continent. British strategy depended on naval supremacy and crack expeditionary forces, not on a large-scale fixed presence in Europe or elsewhere. In both cases, success was achieved peacefully, because the capabilities to prevail if tested were known to exist. War-fighting and strategies for shaping the environment were integrated—as those of the United States in the post-Cold War era must be.

As mentioned earlier, the U.S. capability to *respond* to a full spectrum of operational military demands centers on several key features of combat power.

Power Projection Capacity

Much of the total U.S. defense program is dedicated to the capabilities to deliver military power wherever required, specifically depending on four things:

- Sufficient lift capacity

- Combat units designed, equipped, and trained to deploy quickly and to fight where needed, irrespective of distance, geography, and conditions
- Logistics systems to sustain operations without limiting or burdening them
- Doctrines, skills, training, planning, and management for deploying huge sophisticated forces.

Information Technology

As the world leader in information technology, the United States has an edge in:

- Incorporating it into military systems
- Integrating and operating complex systems
- Collecting, processing, and using information to control its forces and dominate the battle.

Superiority in information technology enhances the other defining aspects of U.S. combat power, and its superior intelligence systems provide enough warning to

enable the United States to avert or respond to crises in a timely manner without having to station forces everywhere conflict might occur.

Joint Doctrine

From the battlefield to the corridors of the Pentagon, from strategy and programs to operational command and execution, the value of jointness among the several services has been proved. In effect, each component of the adversary's forces is up against the combined potential of all U.S. force components. This advantage will be even more pronounced in the future, as individual sensors, platforms, and weapons are melded into a "system of systems," with ground, sea, air, and space dimensions.

Lethality

The ability of U.S. forces to maneuver into position and strike deep, with precision, often from platforms beyond enemy range, permits the projection of power into hostile battlefields. It multiplies the power of forces on the battlefield and enables U.S. units to overpower and destroy large units, leaving an enemy defenseless. Strike power

depends on having an abundant arsenal of accurate weapons distributed among an array of delivery platforms and, of course, on having C⁴ISR to orchestrate their use.

Robust Forces

Although the United States does not maintain the world's largest military, its forces, when concentrated, are sufficiently imposing in size, quality, and readiness to achieve victory quickly. With technology added to this large force structure, U.S. strength is compounded. Given the complex demands on U.S. military personnel and the growing role of knowledge technologies, the quality of personnel, already a distinct edge, will be even more important in the future.

A Model Establishment

The reality as well as the image of U.S. military strength is bolstered by the effective management of the U.S. defense establishment. Other countries—core and transition—recognize the virtues of political accountability and of the transparency and efficiency with which the Department of Defense allocates resources and makes procurement decisions. They are impressed, too, by the professionalism of the U.S. military, its unquestionable subordination to civilian management, and its ability to recruit, motivate, and retain high-quality people. Because other states may wish to adopt such a model, these attributes of effective defense management, although not combat capabilities, have a role in U.S. strategy for shaping the international environment.

These defining aspects—five operational, one institutional—are relevant not only during wars and other military contingencies, but every day. When other states think about U.S. military power, these are the strengths the United States wants them to ponder. The current peacetime deployments of U.S. forces provide ample opportunities to engage and demonstrate these capabilities. Sizable forces are permanently stationed abroad, mainly in Europe and Northeast Asia. Other forces have been deployed to and may remain in crisis-prone regions, particularly the Persian Gulf and the Indian Ocean. Naval, air, and ground units routinely operate internationally to train, maintain readiness, and exercise with allied

Figure 1: Different Shaping Effects for Different Regions

	Europe	East Asia	Middle East	NIS	Latin America	Africa
Deterrence			T		T	
Promote confidence and trust	R	F	R	R		F
Improve coalitions	C	C	C		T	C
Limit threats		R	R	T		
Promote reform	T	T	T	T	T	T

C Core partners **R** Rogue states **T** Transition states **F** Failing states

very important
 important
 not important

Figure 2: Different Aspects of U.S. Power

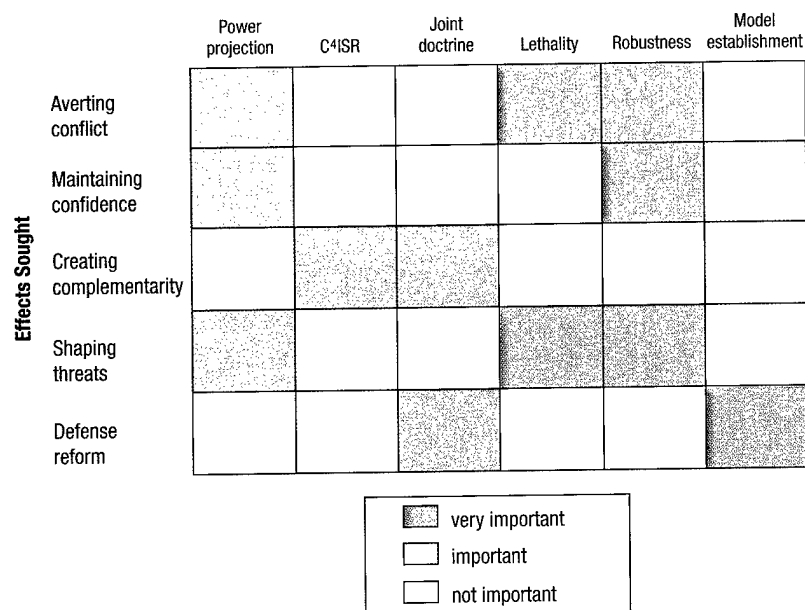
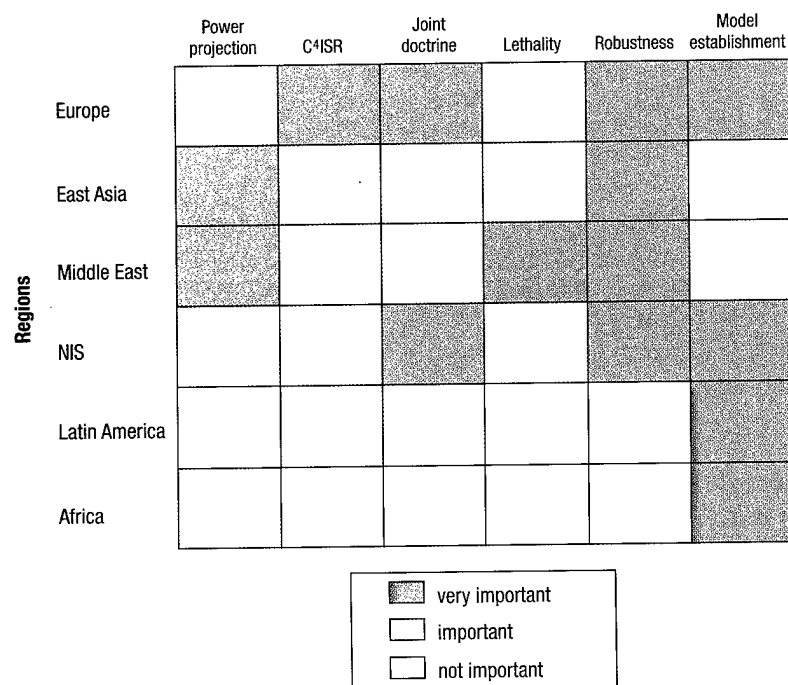


Figure 3: U.S. Capabilities Accentuated by Region



forces. The United States can share with other states and their armed forces the principles, methods, and systems that undergird sound defense management and military professionalism. Joint planning and military intelligence offer insights into how the United States sees the world and operates in it. Military-to-military contact, including exchanges and visits, can create personal rapport, understanding, and even lasting ties.

The next six chapters examine, region by region, U.S. interests, conditions, and trends bearing on those interests, and on the Nation's defense capabilities and activities that may advance and protect them without recourse to deadly force. Each regional strategy represents the nexus between U.S. foreign policy and military strategy. The goal is an overall strategy for shaping the international environment under American leadership that is as sound, coherent, and successful as that of Great Britain in the 19th century and of the United States in the second half of the 20th century.

Weaving the Strands

A strategy for shaping the security environment requires consideration of how several key aspects of U.S. power can be applied to produce desirable effects among *core*, *transition*, *rogue*, and *failing* states in each region. Although the challenges involved are complex and cannot be reduced to simple display, the representations on this page and the following page illustrate how environment-shaping strategies can be constructed:

- Different effects are sought vis-à-vis different types of states (figure 1)
- Different aspects of U.S. power produce different effects (figure 2)
- Consequently, different aspects of U.S. power should be stressed in different regions (figure 3).

These notional strategies correspond well to the current patterns of U.S. overseas force deployments and related activities: the concentration of forces in Europe and East Asia; the need to stress robust power projection in the Middle East; and cooperative initiatives in the NIS, Latin America, and Africa. They indicate the importance of engaging U.S. forces and other

defense resources in support of reform and transition which nations in every region have undertaken. Finally, they are careful not to flex U.S. military muscle where it is unnecessary and could be counterproductive, as in the NIS, Africa, and Latin America. Overall, these perspectives emphasize the importance of a dynamic approach in

which the U.S. military interacts with core and transition states, thus providing the theme: *beyond presence, to engagement*.

The chapters that follow detail strategies by region and make the case for an interactive approach. The flux in post-Cold War international politics—especially the emergence of core partners and uncertainties surrounding the large transition states—suggests that this approach is imperative.

Shaping Strategies for Space

The region of space has extensive economic, political, and military implications for U.S. national security. The principles that apply to the use of space include the following:

- Maintain the exploration and use of outer space by all country for peaceful purposes
- Reject any limits to the rights to acquire data from space
- Affirm that space systems are state property
- Assert that purposeful interference on the ability of any countries to access its space property is an infringement of sovereign rights
- Reject claims to space sovereignty by any state
- Affirm the unimpeded right of passage and operation in and through space.

Strategies for shaping the security environment in outer space include the following:

- Avert conflict. Global or virtual presence in space requires placing monitoring devices in space rather than on the ground, to provide a continuous, non-intrusive presence worldwide. This enhances the ability to easily and cost-efficiently monitor treaty compliance, troop and equipment movement, WMD development, testing, and deployment, while denying enemies the ability to achieve strategic surprise.
- Enhance confidence and cohesion within the core. The primary area of cooperation is the shared early warning of ballistic or theater missile launches. A secondary area includes the sharing of imagery, weather data, and ensuring communications interoperability. By engaging with countries that have no space forces, the United States can cooperate and maintain a global presence despite the absence of terrestrial forces deployed. Agreements within the core of allies designed to permit the denial of space capabilities to future potential adversaries, coupled with the effective demonstration and application of space power, could go a long way in curbing international and regional adventurism.
- Create complementary military capabilities. Global partnership and cooperation are necessary for the future of space capability development through joint ventures between states and commercial entities. Promoting access to space among core partners ensures increased interoperability, further reducing demands on U.S. systems worldwide.
- Shape the strategies and capabilities of real and potential adversaries. The ability to monitor events in near real time provides a significant advantage over conventional means of monitoring. Promoting the expansion of commercial systems increases the economic dependence on space, limiting the ability of rogue states to deny the use of space to a single state by spreading responsibility for the security of everyone's space assets.

The region of space is integral to the core states' efforts to attain security and maintain military, civil, and economic interests. Protecting this asset is vital. While adversaries accelerate efforts to attain the capability to interrupt or destroy space systems, the United States can exert shaping forces on their strategies by ensuring that an increasing proportion of the world community is interdependent on space capabilities. This increases the safety and security of U.S. forces, thus enhancing national security interests.

CHAPTER THREE

Asia



The health and security of the core of market democracies are inseparable from those of the Asia-Pacific region. Despite the present economic difficulties, early in the 21st century the center of global economic activity may shift to this region. Japan already is the world's second largest economy and a leading source of the investment capital and managerial expertise that sustain the global economy. Since the late 1980s, China's economy has grown at an average rate of 10 percent a year and may become the world's largest economy as well as its largest market. Strategically, the region's population, resources, and command of sealanes make close ties a vital core interest. The United States and Europe cannot sustain themselves without access to the Asia-Pacific region, just as the

Asia-Pacific states cannot sustain themselves without access to the United States and Europe.

Most states in this region are undergoing transition. Although almost all accept the economic values of the core, some regional leaders continue to resist, in certain cases even reject, its democratic political values. Of all the transition states, China is the most significant, because it will eventually develop a degree of comprehensive national strength sufficient to challenge the values of the core, should it choose to do so. Present signs are encouraging, but there is no certainty that these transition states will embrace core values and norms.

As a leader in the Asia-Pacific region, the United States has a fundamental interest in shaping an environment in which the states of the region will be encouraged to complete their respective transitions and become firmly integrated into the core. If the United States and its partners fail to meet this challenge, or if the Asia-Pacific region becomes unstable, core interests will be damaged.



Marines on Okinawa

U.S. Interests

Japan as Equal Partner

The health of the core could be greatly enhanced if Japan were to play a political and security role more appropriate than at present to both its economic strength and regional and global interests. More important, Japan could take greater responsibility for the defense of the core by providing support and a staging area and by undertaking some defensive operations in the event of crisis or conflict in Northeast Asia.

Concerns raised by memories of Japan's imperial past can be offset if Japanese activities develop within the framework of a strong alliance with the United States and firm commitment to core norms and values. Tokyo's willingness to assume the responsibilities of an active partner, particularly greater responsibility for its own defense, would substantially increase support for the alliance within the United States, while also contributing to Japan's standing as a core state.

Relations among members of the core are much less developed in Asia than in Europe, where history and strategic necessity mandated and facilitated cooperation and integration. Core solidarity and cohesion would benefit were the cooperation, integration, and trust between Washington and Tokyo to move closer to the levels that exist between the United States and its European allies.

Korean Reunification

Because the interests of three core states—the United States, Japan, and the Republic of Korea (ROK)—and two key transition states—China and Russia—intersect on the Korean peninsula, developments there have a significant effect on efforts to expand and defend the core.

The Democratic People's Republic of Korea (DPRK) is a rogue state that may be failing. Although its nuclear weapons program now appears to be under control, the possibility of chemical and biological programs, a potential missile threat, and the constant threat of regime instability or collapse remain causes for concern. Another possibility is that not only an asymmetric military threat but also a major conventional conflict would disrupt the stability of the region and threaten the economic gains achieved by the other regional powers.

Continued deterrence is obviously essential, but in the longer term the core states also have an interest in establishing a way that the peninsula can be unified gradually and incrementally. The sudden collapse of North Korea would produce great economic and political disruption, with conflict as a possible byproduct. It is therefore in everyone's interest, including China and Russia, to minimize this likelihood. Cooperation, or at least coordination of policies and actions, would enhance core solidarity and simultaneously present an opportunity to cement relations among the core and provide the two transition states with the greatest capacity to affect core interests.

China as Full Member of the Core

Within the next 20 years or so, China has the greatest potential to challenge U.S. and core interests in the region by economic, political, and military means. Its potential for such a challenge already exceeds that of Russia. The ultimate direction of China's transition is therefore very important.

The task for the United States is to use its formidable array of economic, political, and military instruments to persuade Beijing that cooperative and friendly relations are more in its interest than overt competition and conflict. Washington and the other members of the core, especially Japan, are challenged to persuade China that its interests are best served by organizing its international activities to comport with core values and norms.

Enhanced Ties with ASEAN

The nine states of the Association of Southeast Asian Nations (ASEAN) are primarily transition states whose integration into the core is essential for continued regional stability. Taken together, ASEAN economies are among the most dynamic in the world. Annual trade by the organization's members with core states amounts to \$286 billion and continues to grow. In the future, the importance of such trade with the core can only increase.

These nine transition states are also of crucial geostrategic importance for three reasons. First, the ASEAN states adjoin or straddle sea lines of communication (SLOC) with Northeast Asia, the Indian Ocean, and the Persian Gulf. Trade and the need to respond to crises require that the SLOC be readily accessible to core states. The victory over Iraq in the Persian Gulf War was facilitated by the ability to stage through Southeast Asia.

Second, Southeast Asia has long had an ambiguous relationship with China. Traditionally, Chinese strategists have defined Southeast Asia as a strategic buffer zone in which China should be the dominant external influence. Political leaders in the subregion have been sensitive to this demand, often accommodating China when the absence of a countervailing power has enabled Beijing to press its preferences credibly. Core relations with ASEAN, therefore, bear directly on both its present health and security and its ability to expand and consolidate.

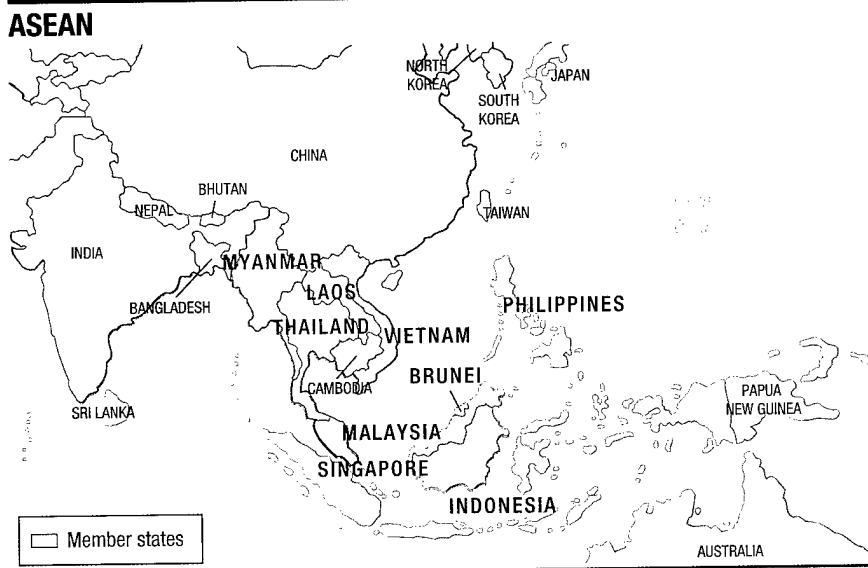
Finally, the states in ASEAN are rapidly building modern military establishments. Most have moved beyond the need to deal with internal threats and are building modern forces better suited to reinforcing their respective quests for the new international interests that attend economic prosperity. The health and security of the core would be enhanced were these new capabilities exercised within the framework of core values and norms.

Current Trends

Japan's Growing Role

The issue of Japan's role as a "normal state" has occupied its political leadership for more than a decade. Although the bursting of the "Bubble Economy" in the early 1990s took the edge off the willingness of various elites to grapple with new regional and global roles, this theme remains visible in present political discourse.

The April 1996 Joint Declaration on Security focused the U.S.-Japanese alliance away from the defense of Japan and toward cooperation in maintaining regional security. Subsequent revision of the Guidelines



for U.S.-Japan Defense Cooperation, which established principles for cooperation in crisis situations, can be seen as a significant step toward a greater political and military role for Tokyo in regional affairs. Its regional role and influence will almost certainly continue to grow, but a combination of internal and external factors may cause change to come extremely slowly.

Of the two, internal factors are more important. Since the end of the Cold War, economic difficulties, official corruption, doubts

(now largely compensated for) about U.S. constancy, and a perception of the potential challenge of rising Chinese power have combined to force a change in the content and structure of Japanese politics.

In 1996, the Socialist Party formed a coalition government under Prime Minister Murayama, their first accession to power since 1948. But the price of a majority vote was renunciation of the party's long-held opposition to the U.S.-Japan Security Treaty and acceptance of the legitimacy of the Japanese Defense Forces. In 1997, the Socialists were relegated to a secondary role in the coalition, and their influence seems likely to decline further in the future.

Over the next few years, this evolution toward a new political center in Japan will continue, and issues related to Japan's role in the U.S.-Japan alliance will be an essential issue. Indeed, issues of "role in the world" will probably emerge as a key element of the debate. If, as seems likely, present domestic political trends continue and if successive Japanese governments can demonstrate that the expanded alliance truly increases Japan's security, the strength of domestic political leaders who support an expanded role for Japan in regional political and security affairs will grow.

External constraints on Japan's role in core security, on the other hand, may diminish. At present, mindful as they are of Japan's imperial past as well as Tokyo's consistent refusal to deal with it, regional states (especially China and the ROK) remain wary of any increase in Japan's military or security roles.

This opposition, however, is by no means solid or united. Protestations notwithstanding, both Beijing and Seoul understand that even an expanded alliance serves their interests by enhancing stability and by keeping Japan firmly tied to core values and norms. The states of Southeast Asia are concerned less about a more active Japan than about the emergence of Chinese military power, and, accordingly, they see the alliance as a means of countering Beijing's regional influence. Despite the braking effect of historical memory, the trend points toward acceptance of a more active engagement by Japan in the security affairs of the region.

Major U.S. Forces in Japan (March 1997)

Yokota Air Base

- COMUSJAPAN Headquarters
- Logistics/transport hub
- 374th Airlift Wing

Yokosuka Naval Base

- USS *Independence* battle group
- 9 surface combatants (cruisers, destroyers, and frigates)
- 7th Fleet flagship (USS *Blue Ridge*)
- Major ship-repair facilities

Atsugi Naval Air Facility

- Carrier Air Wing 5 (USS *Independence* air wing)
- Light Helicopter Antisubmarine Squadron 51

Camp Zama

- U.S. Army, Japan Headquarters/9th Theater Army Area Command (TAACOM)
- I (U.S.) Corps (Forward) Liaison Detachment
- 17th Area Support Group (ASG)
- Army Medical Department Activity Japan (MEDDACJAPAN)

Sasebo Naval Base

- Amphibious Ready Group (ARG) Bravo (4 ships)
- 2 minesweepers

Misawa Air Base (northern Japan)

- 35th Fighter Wing (36 F-16 aircraft)
- Fleet Electronic Reconnaissance Detachment (2 ES-3 aircraft)
- Deployed maritime patrol squadron (Navy; 7 P-3C aircraft)

Iwakuni Marine Corps Air Station

- Marine Air Group 12 (EA-6B aircraft and F/A-18 aircraft)

Okinawa

- III Marine Expeditionary Force (3rd Marine Division, less detachments)
- Marine Aircraft Group 36 with CH-53 and CH-46 helicopters, and KC-130 aircraft

Kadena Air Base (Okinawa)

- 18th Wing (54 F-15 aircraft, E-3 AWACS, KC-135 tankers)
- 353rd Special Operations Group (SOG)

Torii Station (Okinawa)

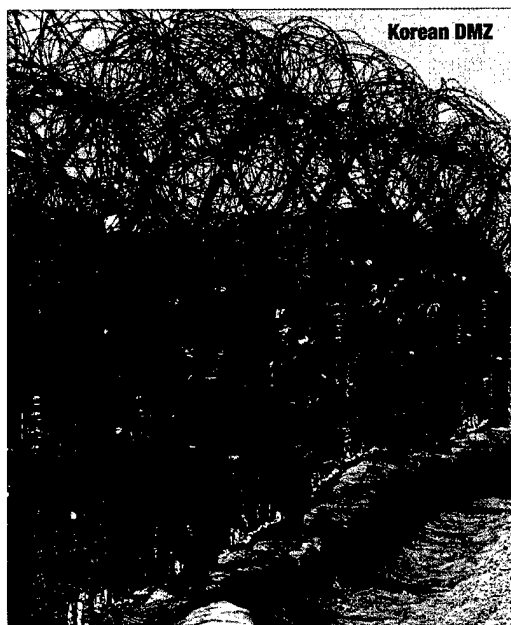
- 1st Battalion, 1st Special Forces Group
- 10th Area Support Group (ASG)

Japanese Host Nation Support:

Direct support = \$3.2 billion

Indirect support = \$1.3 billion

SOURCE: Department of Defense and *Report on Allied Contributions to the National Defense*, 1997



Instability on the Korean Peninsula

The DPRK is a rogue state that is evidently also failing. This combination means that conflict is a constant possibility and that the peninsula may be entering a period in which the risk of an unintended war exists due to a collapse in the North. If deterrence continues to work, however, the decline of the DPRK points to decreased likelihood of a Korean conflict. The challenge for the United States is to use deterrence as a shield under which other countervailing trends can develop.

Several external and internal factors support this assessment. The four major powers of the region share vital interests:

- Avoiding a new Korean War
- Maintaining stability on the peninsula
- Fostering continued economic growth
- Preventing the proliferation of weapons of mass destruction (WMD)
- Preventing the peninsula from being ruled by a hostile government.

The policies of those four powers appear to work, if only coincidentally, to limit the likelihood of conflict. For example, Russia has served notice that it will no longer aid Pyongyang in the event of conflict.

China has used its influence to help control North Korea's nuclear weapons program and has encouraged the United States to approach Pyongyang diplomatically. China also provides to North Korea a reported one-third of its small foreign aid, thus helping to reduce the possibility of conflict produced by the "spasm reflex" of a dying regime. In December 1997, the Four Party Discussions—among the two Koreas, China, and the United States—were convened, with a second session planned for spring 1998. Insofar as external powers can consciously influence developments in Korea, that influence is being directed toward reducing the likelihood of conflict.

North Korean weakness also points to reduced possibility of conflict. In the mid-1970s, the balance of economic strength shifted permanently to the South. The 1996 increase in South Korean GDP—amounting to U.S. \$27 billion—exceeded the total of North Korea's economic output by some \$21 billion. Although North Korea remains able to wreak great havoc on its adversary to the south, the combination of South Korean strength and U.S. support means that Pyongyang cannot reunify the peninsula on its own terms militarily.

Similarly, North Korea's economy remains in a state of collapse. The *juche* regime in Pyongyang is incapable of providing even bare essentials for its population. The extent of North Korea's economic decline is striking. The loss of major power sponsors, along with the structural deficiencies of its command economy and a series of natural disasters, has led to economic retraction over the past seven years, with no end in sight. In nearly every area of competition, with the exception of the military, South Korea, with strong backing from America, has emerged as the clear winner in this rivalry.

While the United States and the ROK should continue to try to capitalize on the potential opportunities afforded by Pyongyang's willingness to engage diplomatically, they must never lose sight of the fundamental requirement to maintain forces sufficiently powerful to deter and, should deterrence fail, to fight and win. North Korea still poses a significant military threat, ranging from a last gasp attempt to reunify the peninsula via mili-

tary conquest, through more limited aggression intended for political gain or diplomatic leverage, to a purely punitive assault launched with the sole purpose of inflicting maximum damage on the South as North Korea goes down fighting.

Fluctuation in Sino-American Relations

China is a key transition state. Beijing already plays a defining role in regional affairs, and its influence will only increase. In 1992, after more than a decade of preparation, the Chinese began in earnest to modernize the People's Liberation Army (PLA). Although equipment modernization is proceeding slowly, the PLA is clearly on the path to greater modernity. Within two

decades or so, China will have reached sufficient comprehensive national strength to mount a regional challenge to core values, should it choose to do so. Relations with the United States are thus a matter of vital interest to both Beijing and Washington.

Economic development is China's main national priority, and Beijing has slowly come to accept many core economic values. In February 1992, Deng Xiaoping's "Southern Journey" signaled acceptance of market mechanisms. After the 15th National Congress of the Chinese Communist Party (CCP) in October 1997, President Jiang Zemin used his political strength to intensify efforts to complete reform by privatizing the 400 or so state-owned enterprises (SOEs). Although these comprise but 15 percent of the total, the need to subsidize inefficient SOEs had long imposed a major burden on China's fiscal resources. This recent emphasis on privatization suggests that the Chinese may be more willing to implement other reforms required for World Trade Organization (WTO) accession and then to observe the norms of the rule-based global trading system. The National People's Congress is likely to reinforce these trends in spring 1998. At the same time, if the Asian financial crisis weakens the Chinese economy, painful reforms (e.g., privatizing state-owned enterprises) could be slowed.

Despite Beijing's willingness to deal with core economic values, however, China's relations with the United States are not smooth. After the Tiananmen Square incident of June 1989 and the collapse of the Soviet Union in 1991, long-repressed stresses in U.S.-Chinese relations surfaced; since then bilateral ties have had ups and downs. These respond to disagreements on a wide range of issues, including Taiwan, a growing trade deficit, proliferation of WMD, and human rights. These strains will continue, and U.S. ties with China could become increasingly competitive.

Beijing is extremely suspicious of Washington's long-range strategic intentions. Chinese leaders see U.S. support for Taiwan, alleged resistance to China's WTO accession, pressures to change its arms sales policies, and the recent expansion of the U.S.-Japan Security Alliance as evidence of Washington's desire to contain

Security Implications of the Asian Economic Crisis

The Asian economic crisis will generate a number of potential problems for U.S. security relations with the nations of the region. For example, demonstrations in Indonesia and Malaysia raise the specter of political instability. Also, unanticipated shortfalls in revenue may complicate or even prevent the efforts of regional allies and friends to fulfill prior commitments to purchase arms, participate in planned exercises, and, of greatest importance, continue to provide the full measure of expected support for U.S. military forces. Third, the crisis has already caused some diminution of U.S. status and prestige, because certain centers of political opinion with different regional nations view the United States as a major cause of the crisis. In any case, owing to its close identification with the International Monetary Fund, Washington is viewed as the force behind the often unpopular measures advocated by the IMF.

Thus far, because of its nonconvertible currency and the fortunate fact that most of its investment capital is derived from foreign direct investment rather than loans, China has avoided the major negative effects of the crisis. However, all the conditions that prompted events elsewhere in Asia—a large number of nonperforming loans, cronyism, and the practice of basing economic decisions on political expediency—exist in China. If the reforms announced at the March national People's Congress are not fully successful, China too could encounter slowed rates of economic development and resultant political instability.

A challenge for U.S. policy will be to resist any temptation to react negatively to regional complaints and provide the political and economic support that will enable regional governments to persevere through the present difficulties, implement necessary reforms, and ultimately consolidate their positions within a more stable regional and global economic order. In other words, the crisis provides opportunities for shaping the regional environment in ways consistent with the economic values of the core.

Chinese Weapons Purchases from Russia

China: Began buying Russian weapons in 1994, shortly becoming Moscow's top customer. Recent purchases include two Kilo subs, SU-27 fighters, S-300 missiles.

Total Value of Russian Arms Deliveries to China, 1993-1995: \$1,200 (millions)



Top Sellers:

KILO-Class Submarine	Sukhoi SU-27 Fighter	MiG-29 Fighter	T-72/T-80/T-90 Tanks	S-300 Air Defense Missile
Diesel-powered patrol submarine that carries sophisticated search-and-attack sonars	Long-range jet capable of carrying up to 10 air-to-air missiles	Smaller, cheaper than Sukhoi; highly maneuverable (not confirmed)	Heavy battle tank with good reputation for reliability, maneuverability, heavy armament	Potent ground-to-air missile capable of shooting down aircraft and missile warheads

SOURCE: Jane's Information Group, *Jane's International Defense Markets*, 1996, and U.S. Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers*, 1996

China. This, in turn, slows Chinese economic development, prolongs its division, and prevents Beijing from exercising its proper regional role and influence.

At the same time, many influential political figures in the United States are similarly suspicious of Beijing's intentions. There is concern that as China's comprehensive national strength increases, Beijing will challenge U.S. regional and global leadership, a course that if adopted could directly threaten vital national and core interests.

As the October 1997 meeting of the two presidents indicates, however, neither side wishes to see relations deteriorate. Given the high priority China assigns to economic development, good economic and strategic relations with the United States and the other core states are a vital national interest and will continue to be so for decades to come. On one hand, Beijing must engage with the core to gain economic benefit, but on the other it remains concerned about the potential impact of core political values on its future stability. The United States and the other core states

place a similarly high value on economic relations with China but retain varying degrees of concern about its political system and strategic intentions.

China's response to this impasse has been to keep its economic and political options open while protecting its core interests in Taiwan by all available means, including military options and, more significantly, shaping a regional security framework that will best meet China's future interests. Both efforts lead to direct competition with the United States and, under certain circumstances, might risk confrontation and armed conflict.

In March 1996, Beijing conducted military exercises in the Taiwan Strait. The PLA tested a number of M9 missiles by firing them near Taiwan's northern and southern port cities of Keelung and Kaohsiung. The Chinese were not attempting to compel Taiwan to accept immediate reunification but rather were signaling their determination to arrest the growth of sentiment favoring Taiwan's independence.

The Chinese clearly misjudged U.S. reaction and were surprised by the successive deployments of two aircraft carrier battle groups. Yet Beijing would almost certainly use military means again if it considered them necessary to prevent a Taiwanese declaration of independence. Many circles in China, particularly the PLA, continue to see the U.S. response as an indication of its support for Taiwan's independence. The issue of Taiwan will continue to vex U.S.-China relations and, were one side to miscalculate the other's intentions, could lead to armed conflict.

Beijing's effort to build a separate regional security framework also is developing. During March and April 1997, through bilateral strategic dialogues, the official English-language press, and discussions on confidence-building measures convened by the Conference on Security and Cooperation in the Asia-Pacific (CSCAP), the Chinese began to promulgate a new paradigm for regional security that emphasizes multilateral security structures and regimes. Beijing's approach appears to challenge directly the present architecture's reliance on bilateral security alliances and forward military deployments. "Security Cooperation Partnerships" similar to those between

PLA sailor on board *Zhuhai*

China and Russia now form part of the proposed Chinese vision.

The new approach is risky for Beijing because it flies in the face of overwhelming regional satisfaction with the present security structure. Nevertheless, Chinese strategists view this approach as an effective means of circumscribing the U.S.-Japan Security Alliance, fostering the development of multipolarity within the region, and undercutting Washington's primacy in regional security affairs. This challenge to the U.S. regional position will very probably emerge as a regular element of Beijing's overall position. This manner of low-intensity, low-risk competition with the United States is also highly likely to continue into the future and to contribute to the persistent pattern of pendulum swings in the relations between Washington and Beijing.

Recurrent Pan-Asianism

Although transition states, particularly those in Southeast Asia, clearly accept core economic values, their positions on such political norms as pluralism, the value of civil society, and legitimate government are ambiguous. As the 1996 and 1997 ministerial sessions of the ASEAN Regional Forum (ARF) showed, considerable disagreement exists between the United States and other ARF participants over issues such as the right of political expression, working conditions, and free elections.

The regional response to perceived U.S. pressure on human rights is defensive, which is often manifested as a reflexive assertion of "Asian Values." China and Singapore are the most vocal examples. Malaysia, Indonesia, and Thailand share this resentment. From time to time in the past, these stresses have proved damaging to U.S. security relations with such states.

U.S. International Military Education and Training (IMET) and arms sales to Indonesia, the largest and most powerful member of ASEAN, for instance, remain curtailed in response to Jakarta's military suppression of the East Timor separatists. Washington also imposed sanctions after Megawati Sukarnoputri was removed as head of the leading opposition party on the eve of the May 1997 parliamentary elections. Similarly, protests over the caning of an American boy in February 1994

brought bilateral relations with Singapore to a near standstill. They also slowed efforts to energize bilateral agreements to provide U.S. military forces with access to repair facilities in Singapore. Finally, disagreement on imposing sanctions on Myanmar in response to human rights abuses has become almost a permanent sore point between Washington and other ARF members. Should such stresses become the norm, problems would clearly intensify. Washington is challenged to adopt proactive policies for dealing with this potential problem.

Shaping the Strategic Environment

Averting Conflict

The Korean peninsula and the Taiwan Strait are the two most probable sites of conflict in the Asia-Pacific region. Unresolved territorial claims include:

- The South China Sea which involves China and Vietnam, Malaysia, the Philippines, and Brunei
- Jurisdictional and sovereignty disputes over islands in Northeast Asia, involving China, Japan, and the ROK.

The powers involved have consistently demonstrated a commitment to preventing situations from escalating into sustained conflict and, in all cases, have resorted to political means to contain tensions within nonconflictual bounds. This commitment will continue into the future.

The dynamics of the Korean peninsula and the Taiwan Strait are very different and therefore require different strategies to avert conflict. With respect to the Korean peninsula, the potential adversary is a rogue state that may be on the edge of failure. Averting conflict there requires, first and foremost, maintaining and strengthening deterrence. It must be made clear to Pyongyang that the use of military means for any purpose will inevitably result in total destruction of the *juche* regime.

Republic of Korea

The principal means of averting conflict on the Korean peninsula is to maintain an actively engaged U.S. military presence. This presence must be large and vigorous enough to serve several interrelated functions. First, for example, even though the military balance may in many respects have shifted in favor of the ROK, it is unrealistic to expect that the armed forces of the South could prosecute and win a major conflict against the North entirely on their own. By design, as reflected in the concept of the Combined Forces Command, South Korean and U.S. military forces complement, rather than duplicate, each other's capabilities. As a result, the intelligence, naval, air, and logistical assets of ROK military forces are insufficient to deal with a determined North Korean assault without complementary U.S. strength.

Second, presence is similarly the best means of dealing with a relatively new element in the peninsular military equation, the threat posed by possible North Korean WMD. Although the nuclear dimension of this threat appears to be under control, questions remain about the chemical and biological weapons capabilities of the North. Presence needs to include capabilities for dealing with this potential threat.

Finally, deterrence through presence is an effective means of supporting and encouraging new political and diplomatic developments of the inter-Korean situation. The United States needs to demonstrate that it is engaged for the long haul and is an enduring, consistent presence that remains relatively well-insulated from political currents.

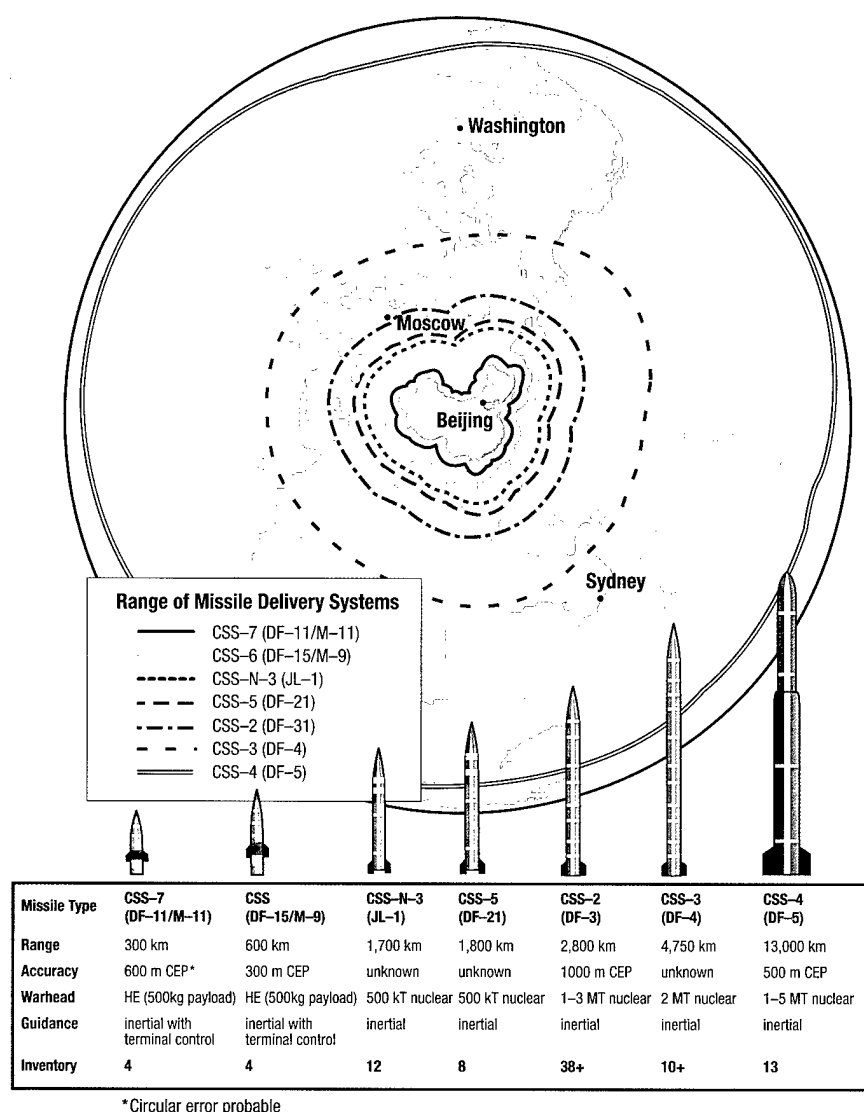
While continuing to maintain an appropriate force presence, innovative approaches to defining and maintaining presence must be explored. Here, the experience of the U.S. military in the Middle East may be useful. As noted in chapter four, U.S. forces in the Middle East are required to be lethal and active but also to retain a relatively low profile in order to avoid sparking nationalist or religion-based opposition. Thus the United States relies heavily on prepositioning, demonstrating the ability to surge, and rotating forces and assets. Its forces in Korea will continue to have far more latitude than their counterparts in the Middle East. These forces may prove useful for developing proactive strategies to maintain deterrence while avoiding the frictions produced by social and political developments.

ASEAN Military Budgets (1995 constant U.S. \$)

	Defense Expenditures						Percent of GDP			Strength of Armed Forces		Reservists (estimate)	Para-military
	millions (U.S. \$)			per capita (U.S. \$)			1985	1995	1996	(000)		(000)	(000)
	1985	1995	1996	1985	1995	1996				1985	1996	1996	1996
Brunei	280	268	330	1,250	909	1,091	6.0	6.0	6.5	4.1	5.0	0.7	4.1
Indonesia	3,197	4,403	4,599	20	23	23	2.8	2.2	2.1	278.1	299.2	400.0	186.0
Laos	75	73	76	21	15	15	7.8	4.2	4.1	53.7	37.0	n.a.	100.0
Malaysia	2,409	3,514	3,542	155	153	148	5.6	4.5	4.2	110.0	114.5	35.8	25.8
Myanmar	1,200	1,880	1,929	32	40	40	5.1	7.5	7.6	186.0	321.0	n.a.	85.3
Philippines	647	1,361	1,457	12	20	21	1.4	2.0	2.0	114.8	107.5	131.0	42.5
Singapore	1,622	3,970	3,959	634	1,349	1,325	6.7	5.9	5.5	55.0	53.9	221.0	11.6
Thailand	2,559	4,006	4,212	49	66	69	5.0	2.4	2.5	235.3	254.0	200.0	139.5
Vietnam	3,277	910	930	53	12	12	19.4	4.3	4.0	1,027.0	572.0	3,000.0	50.0

SOURCE: International Institute for Strategic Studies, *The Military Balance 1997-98*

Estimated Chinese Missile Threats



NOTE: Boundary representations are not necessarily authoritative

SOURCE: International Institute for Strategic Studies, *The Military Balance 1997-98*; Jane's Information Group, *Jane's Strategic Weapons Systems*, 1997; and *The Washington Times*, June 4, 1998

Taiwan

Averting conflict in the Taiwan Strait poses a different challenge. Conflict there is probable only if Taiwan declares independence. The cross-strait problem is political and best resolved by interaction between Beijing and Taipei. Yet the United States is involved: the Taiwan Relations Act, which has the force of U.S. law, mandates that Washington provide Taiwan with the materiel required to defend the island. Moreover, any U.S. administration would come

under significant pressure to defend Taiwan were conflict to occur, no matter the cause.

Visits to Taipei and Beijing by mid-level Taiwanese and Chinese officials in June and August 1997 suggested that the stage is being set for a resumption of the cross-strait dialogue suspended by Beijing after Taiwan President Lee Teng-hui's visit to the United States in June 1995. In the circumstances, the best means available to Washington to avert conflict is to continue to reassert its insistence on a peaceful settlement by encouraging and supporting resumption of that dialogue and by using arms sales to Taiwan to maintain the military balance across the strait. The United States might also use political channels to convey its concern to Taipei about any unilateral attempt to alter the status quo in the Taiwan Strait.

Other than regular transits of the strait to assert the right of innocent passage by U.S. naval vessels through international waters (freedom of navigation operations, or FONOPS), there is no requirement for routine presence by U.S. forces. Deployments are necessary only in times of crisis and would serve as a convincing demonstration of U.S. insistence on a peaceful resolution, helping to assure other states in the region of U.S. determination and constancy. Of course, deployments during a crisis must be wisely managed because, as the U.S. deployment of two carrier battle groups to the Taiwan Strait area in March 1996 showed, both Taipei and Beijing interpret such actions as supporting Taiwan and thus opposing Beijing. Other regional powers express concern that such deployments may provoke an accidental conflict.

Enhancing Confidence

Japan, South Korea, the members of ASEAN, and even China acknowledge that the balancing function of the U.S. military presence has been and remains crucial to maintaining the order and stability of the region. If the United States were to withdraw or to reduce its role significantly, the consequences for regional stability would be unpredictable. In every corner of the

Asia-Pacific, the United States is challenged to enhance confidence in its intention and ability to remain a commanding economic, political, and military presence. Put differently, Washington is challenged to enhance confidence in its ability to function *primus inter pares* as the effective source of regional leadership. The United States aims to enhance such confidence to keep the region peaceful, stable, and secure.

During the Cold War, enhancing confidence meant maintaining an overwhelming preponderance of military force in the region. Alliances with Japan, South Korea, Australia, the Philippines, and the remnant SEATO connection with Thailand, many strategically located permanent bases, and frequent periodic exercises such as RIMPAC (Northeast Asia), *Cobra Gold* (Southeast Asia), and *Team Spirit* (Korea), all served convincingly to demonstrate U.S. strength and resolve, despite a temporary decline after the Vietnam conflict. Regional confidence in the United States was demonstrated by the remarkable economic development that occurred. Even China acknowledged the considerable benefit of the U.S. military presence and role.

Since 1991 and the collapse of the Soviet Union, regional confidence in the United States has fluctuated. It hit a low point in late 1995 and early 1996 when the U.S. regional economic role was challenged by Japan, severely straining U.S. ties with both China and Japan. The reconstituted alliance with Japan indicates a renewed sense of common purpose, and the exchange of presidential visits suggests the possibility of improvement in U.S.-China relations.

These changes provided strong evidence that the effectiveness of U.S. leadership is now judged in the region according to criteria that include a new, larger measure of political and economic elements than during the Cold War. In present circumstances, enhancing confidence involves:

- Maintaining a superior military strength
- Redefining the U.S.-Japan Alliance
- Avoiding regional fears about new Japanese military roles
- Managing China's integration into the core
- Fostering a peaceful process of Korean reunification

- Preventing economic frictions with regional powers from escalating into trade wars
- Managing pressures to develop a new security architecture.

This is not to suggest that the role of the Department of Defense in enhancing confidence in the United States in this region is shrinking, but rather that it may face pressure for change. Military presence will continue to be the most important means of supporting confidence-enhancing goals and the one that provides a basis for efforts in the political and economic spheres. Japanese and Korean willingness to adjust their treaty relations with Washington according to new realities imposed by the end of the Cold War demonstrates that the region views military presence as the most potent symbol of U.S. commitment. The potential diminution of the North Korean threat and the willingness of ASEAN members to allow U.S. forces access to their facilities are further indications of this view. However, the forces, trends, and requirements of the confidence-enhancement agenda noted above suggest a need for greater activism in demonstrating the constancy of the U.S. commitment. Pressures exist to consider means of making credibly deliverable capabilities the measure of presence, rather than numbers of military personnel and permanently deployed weapons systems.

Engagement is a key to such a transition. The United States can share its superior capabilities with its allies and, as with Japan, can join with them to develop new capabilities. Washington might also develop an incremental program of exercises to enhance interoperability and joint and combined operations and to develop the revised defense cooperation guidelines with Japan. It would also be useful to begin exercises with the PLA in peacekeeping operations, if only as an initial effort. Then, too, professional military education channels are useful in developing an appreciation of joint doctrine. In sum, an active engagement with the militaries of the region by the Department of Defense would demonstrate not just the superiority of its military power

but also its willingness to use it in support of core interests.

Creating Complementarity

If present trends, including a perception of a reduced threat from North Korea and recurring cycles of pan-Asianism, continue, the United States will face increasing pressure to reduce the size of its regional military deployments. This, in turn, may require considering measures to maintain presence while simultaneously reducing the number of forces, but it would not require reducing either the visibility of U.S. forces or the ability of the United States to bring its power to bear. A key factor is building greater complementarity with the military forces of the region.

A high level of complementarity already exists between the forces of the United States and those of its Australian, Japanese, and Korean allies. In the event of crisis on the Korean peninsula, the combination of U.S. and ROK forces will hold the line until U.S. power projection capability can be brought to bear with help from Japan and Australia. In Southeast Asia, the situation is different. Except for Thailand, considerably less complementarity exists between U.S. forces and those of the ASEAN transition states. The likelihood of armed conflict within the subregion is small.

Thus the issue for Washington is to fine-tune complementarity with Canberra, Tokyo, and Seoul in order to deal with a regional threat. The United States must simultaneously build complementarity with the members of ASEAN, to the extent that political conditions permit, to safeguard the future. The process of revising the Defense Cooperation Guidelines with Japan shows that such efforts will be complicated by the need to avoid threatening China and provoking regionwide concern about new roles for Japan.

For this reason, the division of labor with allied and friendly military forces should not be changed. Superior American intelligence and power-projection capabilities, the lethality of U.S. forces, and the proven effectiveness of joint doctrine should continue to provide the basis for any potential activities by combined military forces.

The United States is extremely well positioned to build complementarity in the Asia-Pacific region for the following reasons:

- Robust alliances already provide a framework for activity
- There is an appreciation of the U.S. military presence
- There is a desire in the region that the U.S. military presence remain
- The effectiveness of U.S. weapon systems is well known
- U.S. joint doctrine is acknowledged.

The key to progress, then, is to intensify active engagement between the United States and regional military establishments.

Arms sales are an obvious and central means to building complementarity. But translating weapons systems into credible military capabilities is also essential, as is an active pattern of engagement. The need to master identical systems requires education and training, which Washington provides through its IMET programs. The Pentagon might consider expanding these and drawing more foreign military officers into the IMET and professional military education networks. Washington might also consider:

- Expanding the frequency of military exercises
- Holding exercises to enhance peacekeeping operations capabilities
- Enhancing capabilities for military operations other than war
- Increasing military-to-military contacts.

Hostile and Transition States

With respect to the Korean peninsula, the United States may already have achieved some success in shaping the strategy of the DPRK. The combination of deterrence and diplomacy led to the 1994 Agreed Framework. Although severely criticized at the time, the agreement seems to have blunted North Korea's attempt to neutralize U.S. power with the threat of nuclear weapons. Pyongyang's reprocessing plant has been closed, it is cooperating with IAEA inspectors, and initial work on the reactor for power generation has begun. Similarly, Pyongyang's participation in the Four Party Talks suggests a new willingness to use political and diplomatic means to achieve its

Quality versus Quantity

Generation
of
Technology

On the ground



South Korea



North Korea

1,055,000 total military personnel
3,500 tanks
2,500 armored personnel carriers
10,600 field artillery pieces
2,600 multiple rocket launchers
56 surface-to-surface missiles
10,000 surface-to-air missiles

1940s 672,000 total military personnel
2,130 tanks
1950s 2,490 armored personnel carriers
4,540 field artillery pieces
1960s 156 multiple rocket launchers
24 surface-to-surface missiles
1970s 1,026 surface-to-air missiles
1980s

At sea

6 attack submarines
7 destroyers
33 frigates
4 corvettes
11 missile attack boats
90 coastal patrol craft
17 amphibious craft

26 attack submarines
0 destroyers
3 frigates
3 corvettes
47 missile attack boats
179 coastal patrol craft
260 amphibious craft

In the air

0 bombers
480 fighters
25 transport aircraft
143 attack helicopters

80 bombers
760 fighters
300 transport aircraft
300 attack helicopters

SOURCE: Defense Intelligence Agency, *North Korea: The Foundations for Military Strength—Update 1995* (1996, unclassified) and International Institute for Strategic Studies, *The Military Balance 1997–98*

goal of prolonging the existence of the regime. Thus far, and despite uncertainties about potential chemical and biological capabilities, nothing indicates that U.S. strategies are pushing North Korea to adopt additional asymmetric measures. The challenge for the United States now is to encourage this tendency and to translate it into concrete gains in further reducing the threat of conflict on the peninsula.

Certainly, the U.S. military presence there has been essential to gains achieved thus far and must be maintained into the future. If, however, the North Korean threat continues to recede, pressure will grow to reduce U.S. forces in Korea. This

pressure will pose certain dilemmas. Continued presence will remain essential to supporting diplomatic efforts to maintain deterrence. It will be essential, too, to reassure Japan and the region of U.S. commitment and remind China of Washington's vital interests there. Finally, the United States may wish to consider redefining the alliance with Korea as it has done with Japan, to focus it away from defense and toward maintaining regional peace and stability. Korea would thus join Japan as a base from which U.S. forces could stage to deal with crises elsewhere.



Cobra Gold '97, Thailand

It is possible to retain an adequate level of military presence on the peninsula, to adjust it in response to changing conditions and requirements, and to use those adjustments to secure additional gains. For example, the United States might introduce the issue of reducing the threat of military conflict into the diplomatic processes now unfolding on the peninsula. North Korea might be persuaded that aid, establishing diplomatic contacts, and support for joining the Asian Development Bank are available, but only if it were willing to reduce military tensions. If its condition further weakens, North Korea could be required to reposition certain categories of forces away from the DMZ and to participate in several threat-reduction, confidence-building measures. Washington and Seoul might offer roughly equivalent actions, in addition to aid and assistance.

Defense against any aggression is the immediate purpose of U.S. engagement in the region. In the longer run, the chief purpose will be to shape the strategy of China, a transition state that holds the key to the future of the Asia-Pacific region. For Washington, shaping China's strategy means persuading Beijing that its best interests lie in adopting the values of the core and that

it has little to gain by attempting to build military capabilities equal to those of the United States and using them to challenge the U.S. regional position.

The U.S. strategy toward China is to demonstrate its overall strategic capability through alliances and forward military deployments. This capability will deter Chinese military adventurism and simultaneously engage it in ways designed to enmesh Beijing in a web of relationships that serve mutual interests. Eventually, it is hoped, the combination of approaches will produce the desired result.

Yet a contradiction between the two approaches seriously challenges the ability of the United States to realize its aims. China's deep suspicion of U.S. strategic intentions makes relations between the two states fundamentally competitive. Thus actions designed to demonstrate U.S. power and resolve to maintain regional peace and stability are interpreted by Beijing as evidence of efforts by Washington to create hedges against China's future behavior or, more seriously, to prevent its rise to the status of a great power.

At the regional level, Beijing sees U.S. efforts to avert conflict in Taiwan, to enhance confidence in and cohesion with Japan, Korea, and Southeast Asian states, to build complementary capabilities, and, indeed, to shape strategies all as efforts aimed against China. Some Chinese believe they are a target of U.S. actions. Similarly, at the bilateral level, efforts by Washington to engage Beijing in such areas as proliferation, entry into the WTO, or human rights, or to secure a peaceful transition in the Taiwan Strait are viewed as intrusions into China's internal affairs or infringements on Chinese sovereignty.

Resolving this dilemma completely may not be possible. The United States can neither abrogate its responsibilities nor reject its interests. The most appropriate course may be to accept the contradictions and try to limit their negative effects. The United States might reaffirm engagement with a new focus on the major issues and also emphasize areas of agreement.

Within that context, the major contact points between the United States and China in the next 10 years will probably involve Taiwan, the Korean peninsula,

proliferation, and multilateralism. Taiwan is the most significant friction point. If it were to cease being the defining issue in U.S.-China relations, the way would be clear for progress in other areas. If the United States is to shape Chinese strategies, it will need to interact with China on these issues and problems. Efforts by DoD will necessarily be supportive of those mounted in the political and economic relationship. Nonetheless, the U.S. military has an important role to play.

Beijing points to U.S. arms sales to Taiwan as evidence of negative U.S. intentions, while seeking reassurances that the United States does not support Taiwan independence. Washington can neither provide such assurances nor deny that Taipei's case for continued arms sales is strengthened by such Chinese behavior as the March 1996 military exercises and missile tests.

Two developments may provide some latitude. First, Taiwan is now acquiring 150 F-16 and 50 Mirage fighter aircraft. Its navy is acquiring six LaFayette-class and seven Perry Class frigates and is actively seeking submarine purchases. With the exception of air defense systems, the Taiwanese Armed Forces are at the end of a procurement cycle, and time is needed to assimilate the new systems. For the next three years or so, realistic pressure by Taiwan for new sales will diminish. Second, evidence suggests that cross-strait dialogue may resume sometime in 1998. The combination of these events might reduce the rationale for new sales and thereby provide Washington with grounds for a more agnostic approach to arms sales. At the same time, the U.S. military must also stand ready to reaffirm U.S. insistence on a peaceful settlement, should tensions flare up again.

On the Korean peninsula, China and the United States share an interest in helping to resolve any problems created by the failure of the North Korean state, such as refugee flows and disarming the North Korean military. The U.S. military might enter into discussions with Chinese counterparts on these subjects. A more sensitive topic would be the U.S. presence on the peninsula after reunification. China would probably insist on a major reconsideration of the U.S. presence after reunification or of a greatly reduced threat from North Korea,

but would also assume the continued existence of some manner of security tie between the United States and a unified Korea. Discussions might help to clarify the thinking of both sides and to define proactive policies for the future.

Beijing demonstrates increasing willingness to participate in efforts to control the proliferation of WMD by subscribing to or signing the following:

- The Nuclear Non-Proliferation Treaty
- The Comprehensive Test Ban Treaty
- The Chemical and Biological Weapons Conventions
- The Missile Technology Control Regime
- The organization of a Proliferation Group within the Ministry of Foreign Affairs.

In addition, China has placed the most objectionable portion of the peaceful nuclear technology agreement with Iran on hold. Only the relationship with Pakistan, of high geostrategic importance to Beijing, will continue uninterrupted. Despite this, Beijing has informally signaled willingness to join with the United States to consider ways and means to reduce the potential for conflict in South Asia. This, too, might prove a fertile field for exploration by Washington.

The United States must also deal with the challenge of China's call for a new regional security framework with a high component of multilateralism. Bilateral relations aside, the alliance management and relations with ASEAN require a firm response by Washington. At present, alliances with Australia, Japan, and Korea are stronger than at any time since the late 1980s. These three states would most probably not be willing to trade the certain benefits of alliances for uncertain potential benefits of a multilateral security regime. The DoD would be unlikely to lose by expanding engagement with regional military forces to include discussion of a range of multilateral confidence-building measures and participating in combined exercises.

In Southeast Asia, the strategies of the ASEAN states are evolving toward consonance with U.S. interests. ASEAN military forces routinely share intelligence on such matters as piracy and refugee movements,

Qualities of U.S. Power Accentuated in the Asia-Pacific Region

Power Projection	C ⁴ ISR	Joint Doctrine	Lethality	Robustness	Model Establishment

☐ very important
☐ important

and annual exercises help to develop complementarity and interoperability. The task for the United States is to encourage these trends and to build and consolidate ties with the military establishments of the subregion.

To accomplish this, Washington will have to move carefully. The ASEAN states are sensitive to the fact that U.S. military presence created an environment in which they could take the first tentative steps toward military cooperation. Yet they are equally sensitive to the prospect of future relations with China requiring that U.S. presence be neither too visible nor too active. Thus, the U.S. role in shaping ASEAN strategies lies in engagement once removed from the region itself and heavily infused with professional military education and strategic consultation.

Conclusion

Shaping the environment of the Asia-Pacific region presents the United States and its core partners with two major challenges. The first involves a contradiction; the second involves means.

The first challenge suggests it is absolutely essential to consolidate ties with Japan and the transition states of Southeast Asia. U.S. efforts to do so, however, have already generated tension in U.S.-China relations and will continue to do so into the next decade. Security ties between Washington, its alliance partners, and ASEAN are closer than ever before, at the cost of a strained relationship with Beijing. If such stresses continue, they might spill over, exerting a negative influence on relations. Managing the integration of China into the community of core states will increasingly

occupy the attention of U.S. officials as they seek to shape the regional environment for the future. It will require the greatest coordination of military, political, and economic instruments.

The question of means is very significant. To shape the environment most effectively, the United States will continue demonstrating its ability to project power into the region, although present trends indicate that the changing regional political environment will make it increasingly difficult to accomplish this by means of permanent bases and forward deployments. For that reason, in the next decade, U.S. forces will be challenged to maintain necessary capabilities while simultaneously reducing their size in the region. A new emphasis is highly likely on sharing roles and missions with regional allies, developing interoperability, preparing for rapid reinforcement, and prepositioning materiel for use in emergencies.

THE INDIAN OCEAN REGION

The modern states of India, Pakistan, Nepal, Bhutan, Bangladesh, and Sri Lanka comprise the area commonly referred to as South Asia or the Indian Ocean region. However, attention is usually turned toward the two principal states, India and Pakistan. These states have fought three wars against each other since independence from Great Britain in 1947 and are perhaps the most likely flashpoint for conflict involving nuclear weapons. Any confrontation between the two armies of over a million troops evokes world attention, and yet this is a region where U.S. influence is minimal.

Background

The history of India and Pakistan is a blood-hued mosaic of invasions through Central Asia. The most successful invaders were Muslims using Mamaluke blades as persuasively to convert as to conquer. For Muslims and the indigenous Hindus, zealous believers both, their foods, places of worship, tolerances, even attitudes toward animals challenge each other: there is little middle ground and little room for compromise. In addition to historic animosities, the region echoes the general Asian challenges to the core's values, including issues such as human rights, economic practices, and terrorism. Also, India has an indigenous nuclear weapons capability, and Pakistan is suspected of receiving Chinese nuclear technology to assist in developing its own.

Indo-Pakistani Tension

Colonial India was fragmented among nearly 600 princely states and provinces, led by powerful Hindu or Muslim rulers. Perhaps 200 years' experience in India convinced the British of the need to separate Hindu from Muslim. On August 15, 1947, Great Britain granted independence to the Republics of India and Pakistan, and the Indo-Pakistani conflict was born. Pakistan was further divided into East and West Pakistan, separated by nearly 1,000 miles of northern India. The provinces could join either India or Pakistan, and their rulers were sent the draft Instrument of Accession upon which to affix their nation of choice. For the most part, states voted with their religious majority—Hindus to India and Muslims to Pakistan—but an estimated 12 million refugees fled across new borders, and nearly a million more are estimated to have died in associated hostilities. The artificial peace enforced by the British between Hindus and Muslims disintegrated with the demise of the Raj.

Kashmir, the largest of the princely states, was unique in that it was a cultural composite of Hindu and Muslims, contiguous to both India and Pakistan. The maharajah of Kashmir refused to sign the Instrument of Accession, though a full-scale attack by Pakistan within a month prompted a decision to join with India, as a precondition for military assistance. Pakistan did not accept the legality of the document and continued fighting. India referred the conflict to the newly formed United Nations in December 1947. In January 1949, India and Pakistan agreed to a cease-fire line along existing positions, a withdrawal of forces, and a Kashmiri plebiscite to make a final determination of its future. Fifty-one years, two more Indo-Pakistani conflicts (1965 and 1971), and thousands of casualties later, Kashmir is no nearer a solution than in 1947.

U.S. Interests

Encourage Regional States to Resolve Their Differences Peacefully

While the United States has no interest in mediating the Kashmir issue, India's desire to assume greater regional influence hinges upon an Indo-Pakistan political rapprochement. An impartial U.S. support for peaceful resolution will avoid alienating either state and may improve relations with both.

Contain WMD Proliferation

Both India and Pakistan are essentially members of the nuclear power club, but Pakistan is increasingly linked to the covert receipt (at least from China) of various components required to enhance its nuclear capability. While the United States recognizes the sovereign right of states to determine their defense needs, in the case of India and Pakistan there remains global concern that a future Kashmir conflict would involve tactical nuclear weapons, significantly lowering the threshold of nuclear use.

Promote a Climate of Regional Trust and Cooperation

Economic power and security have gained global importance as tools of policy in the post-Cold War environment, especially in the Indian Ocean region. Although India's United Front (UF) coalition government failed late in 1997, caretaker Prime Minister I.K. Gujral's "Gujral Doctrine" of peace and cooperation with India's neighbors—to include Pakistan—endured until early 1998, when new elections brought in a Bharatiya Janata Party (BJP) government. Additionally, both India and Pakistan can make use of historical links and current economic ties to the Persian Gulf region to assist in enhancing stability within that key region.

Encourage Regional States to Embrace Core Values

The Indo-Pakistani dispute generates little interest within most of Asia but does detract from the regional image both countries wish to project. India has already realized tangible benefits from its Association of Southeast Asian Nations (ASEAN) and ASEAN Regional Forum (ARF) partnerships.

Trends

Peaceful Resolution of Differences Evolving Slowly

For India the Kashmir dispute remains a sufficiently threatening national security issue. It has eclipsed virtually all other defense-related concerns and has contributed to the growth of nationalistic political parties like India's Bharatiya Janata Party, and to rounds of fragile coalition building among political splinter groups. With the fading of the Nehru and Gandhi legacies, the dominating, unifying role played by the Congress (I) party has essentially disappeared. Nevertheless, India has moved proactively to ease tensions with Pakistan, to improve its relations with other regional neighbors, and to play a more active regional economic and strategic role.

WMD Proliferation Covertly Continuing

Weapons of mass destruction, particularly nuclear weapons, are making a comeback as traditional approaches to nonproliferation have an increasingly weaker effect on aspiring regional powers. While many factors influence a state's decision to pursue WMD capabilities, worst case assumptions concerning a rival state's activities or intentions all too often are the deciding factor. India's 1974 detonation of a nuclear device, for example, prompted Pakistan to develop a nuclear weapons program. Policymakers in both India and Pakistan have concluded that a nuclear weapons capability serves their national security and political interests. While India's nuclear development is indigenously supported, Pakistan's program has relied on foreign assistance, principally from China.

India Seeking Broader Role

India has turned its strategic interest from Pakistan to the South Asia region. It recently gained ARF membership and seeks to join in other regional security and economic fora. Owing to efforts by both New Delhi and Beijing, Indian relations with China are stable. India looks forward to closer economic ties and political parity, while maintaining subregional dominance.

Core Values Gradually Spreading

Over a third of the population of this region still lives in abject poverty. Over 40 percent (primarily women) cannot read or write. Famines and drought still ravage the population of the subcontinent. However, measurable advances are taking place, particularly in India, where the government is taking more responsibility for the human rights of its populace and taking steps to avert the major crises that affect the region. Furthermore, increased interest in expanding economic ties through membership in regional fora is an indicator that India and Pakistan are gradually accepting the globalization of markets and are at least willing to address economic and political reform to further integrate into the global economy.

Shaping Forces Available to the United States

Traditionally, the United States has considered South Asia a strategic backwater. Developing relations with the core poses a strategic dilemma for India: on the one hand, New Delhi is aware of the economic benefits of such ties, but it also recognizes the many strings attached, such as changes to nuclear weapons policy.

India is in the U.S. Pacific Command area of responsibility (AOR); Pakistan is in the U.S. Central Command AOR, which causes some problems of coordination of policy. Given the lack of strategic interests in the region, such shaping factors involving force projection, robustness, or lethality do not play a major role in relations with the Indian Ocean region. Diplomacy and increased military-to-military relations are the most likely venues for enhancing regional stability and encouraging local nations to join or improve relations with the core. These are long-range factors, depending on a gradual increase in confidence and simultaneous decrease in tensions. As defense strategies are developed over time without resorting to armed conflict, the heavy reliance on nuclear WMD as a policy will mature, preferably into a policy similar to that developed by the rest of the "nuclear club," most of which are in the core.

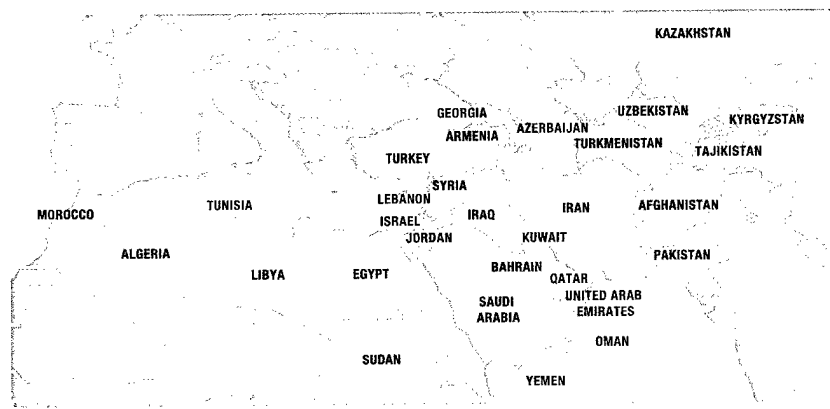
Model Establishment

The Indian armed forces have nearly a million troops and sufficient combat platforms to mount a credible defense of national interests. There have been combined exercises with the U.S. 7th Fleet over the past three years. Pakistan maintains a large land force of half a million troops, with a primary mission to protect the long land border with India and the contested Siachen Glacier region. U.S. contacts with the Pakistani armed forces have dropped in recent years, with military sales nearly dried up after decades of heavy investment during the Afghanistan civil war.

Unlike Pakistan, India possesses the manpower, expertise, and raw materials to support a growing defense industry. To India's possible disadvantage, however, military leaders play no role in the formulation of defense policy, and for the most part, bureaucrats within India's Ministry of Defence know little about national security and defense issues. As a result, India has neither a national strategy planning process nor strategic defense doctrine. The United States provides a training environment for selected South Asia military students at senior professional military education institutions such as the National War College and the Industrial College of the Armed Forces. Additionally, India and Pakistan have asked U.S. military leaders to share knowledge gained through force structure and mission analyses such as the Quadrennial Defense Review to improve their own military planning strategies.

CHAPTER FOUR

Greater Middle East



The region from North Africa through the Levant to the Persian Gulf, including Afghanistan, Iran, and Turkey, has important similarities from the perspective of U.S. interests and the security challenges it faces.

From the perspective of U.S. global strategy, the basic characteristics of the Middle East are that it is an indispensable source of energy for the core states and that it has a concentration of rogue regimes, along with some failed states. The region is characterized by instability, including:

- Frequent major conventional wars, including three in the last 25 years—the October 1973 Arab-Israeli war, the Iran-Iraq war in 1980–88, and *Desert Shield/Desert Storm* in 1990–91
- Bitter civil wars in Afghanistan, southern Sudan, and the Kurdish regions of Iraq and Turkey
- Five of the world's seven terrorist-sponsoring states—Iran, Iraq, Libya, Sudan, and Syria
- Bloody nationalist and religious conflicts, as in Algeria and the Palestinian area

Armed conflicts will remain a danger in the Middle East for the foreseeable future. A heavy concentration of weapons—including weapons of mass destruction (WMD)—is located primarily in the Arab-Israeli theater and the Persian Gulf. While serious, Arab-Israeli tensions may be less likely to involve the United States than was the case during the Cold War, when the superpowers several times were toe-to-toe on behalf of their respective friends.

U.S. forces are heavily committed to the defense of energy-rich states from rogues. Energy shocks from the Middle East can shake the core states: twice in the last 25 years (in 1973 and 1979/80), wild oil price fluctuations cut annual Western economic output on the order of 2 percent (approximately \$400 billion). On the other hand, the stable oil prices of 1987–97 have contributed to taming inflation and reducing fears about resource shortages. Besides the obvious desire to avoid another oil price shock, the core states must be concerned about the uses to which a rogue regime might put windfall oil income, specifically, that it would be able to acquire advanced weaponry and a formidable WMD capability.

U.S. Interests

Securing Energy Needs

The core industrial democracies share a vital interest in ready access to ever-more energy supplies at stable and reasonable prices. The U.S. goal for energy security is an environment in which energy is available from a variety of types and sources and in which market forces, rather than political factors, determine availability.

Such an environment offers the best prospect for market stability, because it minimizes the impact of disruption in any one supplier, both by providing alternative sources and allowing markets to quickly pass through price adjustments. An additional part of the U.S. energy security interest is ensuring that the other core states share the burdens of energy security.

Deterring Iran and Iraq

Both Iran and Iraq remain committed to revising the status quo in their favor, and the core states have an interest in preventing that from happening. Iran is a revolutionary regime, with an ideology that justifies meddling in other countries' affairs and destabilizing moderate Arab states (as in Bahrain) and disrupting the Middle East peace process. Iraq's ruler, Saddam Hussein, has

invaded two of his neighbors (Iran in 1980 and Kuwait in 1990) and shows every indication he will try again.

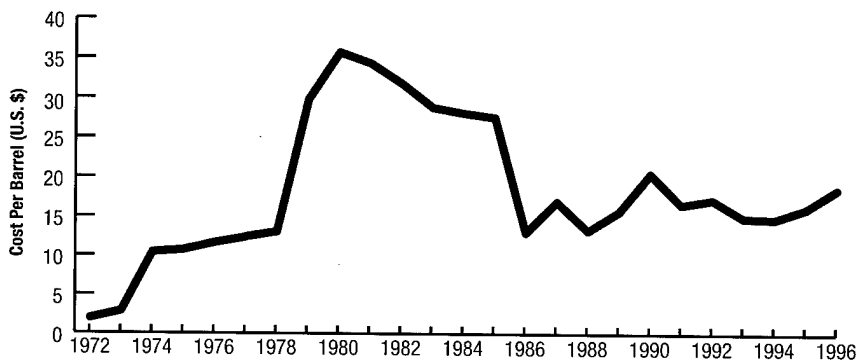
The Middle East faces a distinct threat of nuclear, biological, and chemical (NBC) weapons, as witnessed during the Iran-Iraq war. The United States has an interest in preventing their use, especially against allied or U.S. forces. While the U.S. goal is eventually to rid the region of WMD, the pace and modality may differ depending upon the weapon and the country. As far as country-specific targets go, there is a strong international consensus that Iraq's past aggression shows it cannot be trusted with WMD, and so a mandatory international inspection regime is required. On the other hand, nuclear weapons have proven a useful deterrent against states that would otherwise threaten Israel's right to exist.

Securing Arab-Israeli Peace

Besides Turkey, Israel is the only country in the region that can be considered to be fully part of the core, sharing values such as democracy as well as historic ties. The United States has a long-standing commitment to defending Israel's right to exist and has invested heavily in diplomacy to promote Middle East peace. The United States has, however, few interests in the shape of final Arab-Israeli accords except that they should be agreed to by all parties and should be sustainable.

The United States has developed close relations with several Arab states, especially Egypt, Jordan, Saudi Arabia, and the smaller Gulf Cooperation Council (GCC) countries. It wants these transition states to be fully integrated over time into the core democratic world and, to that end, has an interest in the political reform of moderate Middle East regimes. That includes such goals as deepening and broadening civil liberties, reinforcing the rule of law, encouraging civil society, and making government more transparent and accountable. However, that may not translate into early full parliamentary rule in every Middle Eastern country. Monarchic rule has become consistent with partial parliamentary power in Morocco, Jordan, and Kuwait; it has been a better system of government than what replaced it in Iran and Iraq.

Oil Prices
(Arabian Light/Dubai)



SOURCE: British Petroleum, *Statistical Review of World Energy*, 1997

Preventing State Failure

Prevention of state failure, such as has recently occurred in Afghanistan, is a U.S. interest, not least because the failure of a state such as Algeria could spill over into Europe, either into the NATO allies or into the former Soviet Union.

The most vibrant challenge to domestic tranquility in the region comes from radical Islamists, who claim a religious basis for their violent opposition to core interests. The United States thus has an interest in demonstrating that it can work with devout Muslims, as it does with the Saudi Government. The problem with radical Islamists is their violent political agenda, not

their religion; friendship toward the United States can be fully consistent with devout Islamic belief and practice. At the same time, Washington thinks that other governments should follow its example in not distinguishing among citizens on religious grounds and not promoting or discouraging any religion.

Current Trends

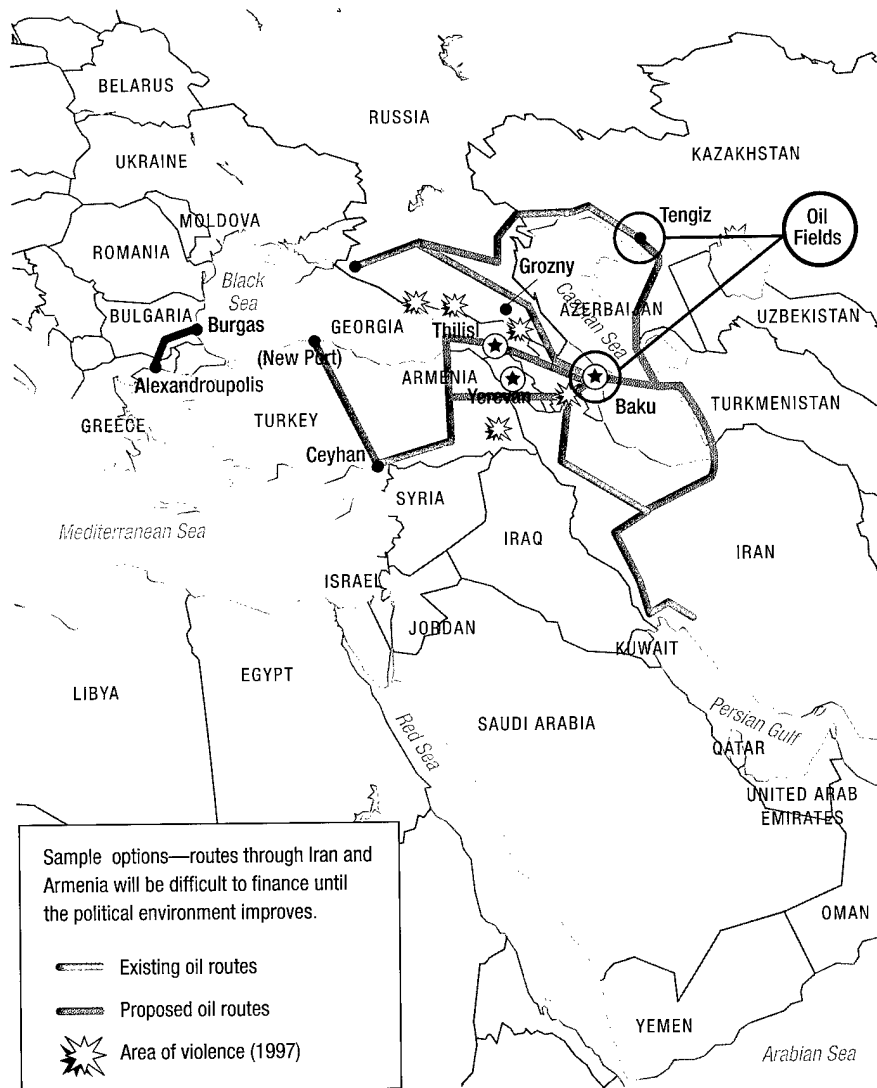
Oil Generally Plentiful

The world oil market continues to have an ample supply and therefore relatively low prices. While prospects are good for sustained increases in oil output, the price of oil will also depend upon demand.

If demand continues to rise quickly, then the Middle East share in world oil output could continue its recent rise, from the historic low of 27 percent in 1986 to 32 percent in 1991 and then 35 percent in 1996. On the other hand, if demand grows more slowly, the technological revolution in oil production and the more welcoming attitude toward foreign investment elsewhere could lead non-Middle East output to grow enough to stabilize or reduce the Middle East's share. In either case, the pattern of world oil trade will continue to shift, with more Persian Gulf oil going to Asia while Europe and North America import oil from Africa and South America.

While the role of market forces in the oil and gas industry is increasing, one area where geopolitics remains primary is the Caspian basin. Azerbaijan, Kazakhstan, and Turkmenistan could have 5 percent of the world's oil reserves and by 2008 might produce 5 million barrels per day (mbd), primarily from Azeri offshore fields in the Caspian Sea and the Kazakh Tengiz field northeast of the Caspian. Those three countries plus Uzbekistan have 5 percent of the world's gas reserves, with Turkmenistan having the largest reserves. U.S. firms are committed to billions of dollars in investment, primarily in the Azeri offshore and Kazakh Tengiz fields. The problem is how to get the oil and gas to market from the landlocked Caspian countries. Some pipelines are already under construction or

Possible Routes for Oil



The Oil Supply

The world oil market continues to have ample supply and therefore relatively low prices. Despite an upward blip in 1996, crude oil prices in the mid-1990s have been about the same as in the mid 1980s, while the average price level for other goods rose about 30 percent over that decade. The cost of producing oil has been dropping, thanks to the reduced cost of drilling and to technology that has made possible a 40 or even 50 percent recovery instead of 30 percent in the past. As costs drop, more output is coming from less attractive oil fields, for example, deep offshore fields in Norway and the U.S. Gulf of Mexico. After years of decline, U.S. oil production is increasing. At the same time, more countries are welcoming foreign investment in the oil industry, with fewer protectionist restrictions. For example, because of foreign investment, Venezuela is on track to increase its oil output capacity from 3.5 to 6 mbd by 2002.

Middle East countries are also increasing their oil production capacity. Saudi Arabia has underway a program to raise its capacity from the current 9 to 14 mbd within the decade. The other GCC states—Kuwait, Bahrain, Qatar, the United Arab Emirates, and Oman—are increasing their capacity from 7 to at least 9 mbd. Were Iraq to abandon the stubborn opposition to UN resolutions, it could increase from the current 3 to 6 mbd within five years. Iran's plans to expand its capacity face serious financial constraints, not least among them U.S. threats of secondary boycotts against firms investing in Iranian oil and gas.

renovation, including a 1.2 mbd oil pipeline from Kazakhstan via Russia to the Black Sea, two 0.1 mbd pipelines from Azerbaijan to the Black Sea (one via Russia and one via Georgia), and short gas pipelines to hook the Iranian gas network on one end to Turkmenistan and on the other end to Iran. While the Kazakh pipeline will carry most of that country's projected oil capacity, additional major pipelines will be needed for Azeri oil and Turkmen gas. All the projected routes have problems, which will make the choices difficult:

- Existing pipelines go via Russia. Adding more capacity to those pipelines raises fears of excessive dependence on Russia.

- Transport via Iran faces U.S. opposition and Azerbaijani suspicions of Iranian irredentism.

- Turkey is lobbying vigorously for pipelines across its territory to the Mediterranean. But the political geography is complicated: a pipeline from any of the producing countries would have to cross at least one transit country before getting to Turkey, plus the best pipeline routes inside Turkey cross unstable Kurdish areas.

- Other transport routes are equally difficult politically (to India via Afghanistan and Pakistan) or challenging economically (to China).

Responding to Iraq and Iran

The U.S. policy of dual containment has had only modest success. The policy has not always been well received by U.S. allies, particularly in Europe.

- Iraq. Saddam Hussein's hold on power seems secure. His ruthless security services make coup or assassination attempts extraordinarily difficult. The exile Iraqi opposition is divided and largely ineffective, despite political and clandestine financial support from the United States for two of the larger groupings. Three northern governates are controlled by two Kurdish parties, the Kurdish Democratic Party (KDP) of Massoud Barzani and the Patriotic Union of Kurdistan (PUK) of Jalal Talabani, which have been fighting each other intermittently since 1994.

Saddam Hussein's intentions are not entirely clear. There is strong reason to believe he wants to control Kuwait if the opportunity presents itself. As witnessed by the 1998 inspection crisis, his most troubling behavior is the refusal to cooperate fully with the UN Special Commission on Iraq (UNSCOM), which is responsible for ensuring Iraq does not produce WMD or ballistic missiles with a range over 150 km.

The UN Security Council has unanimously supported UNSCOM, though it has of late become more reticent to act. Since late 1995, it has not declared Iraqi violations to be material breaches of the ceasefire; in the past, following such declarations, the U.S. use or threat of force has resulted in Iraqi cooperation. Regional support is dropping too: the Gulf States were unenthusiastic or critical of U.S. limited air strikes and an extension of the southern no-fly zone from the 32 degrees north latitude to 33 degrees against Hussein after his September 1996 move into Kurdistan. While they want an end to the Hussein problem, regional states other than Kuwait seem to have become relaxed about the threat from Iraq.

- Iran. The regime in Tehran faces popular discontent and the indifference of

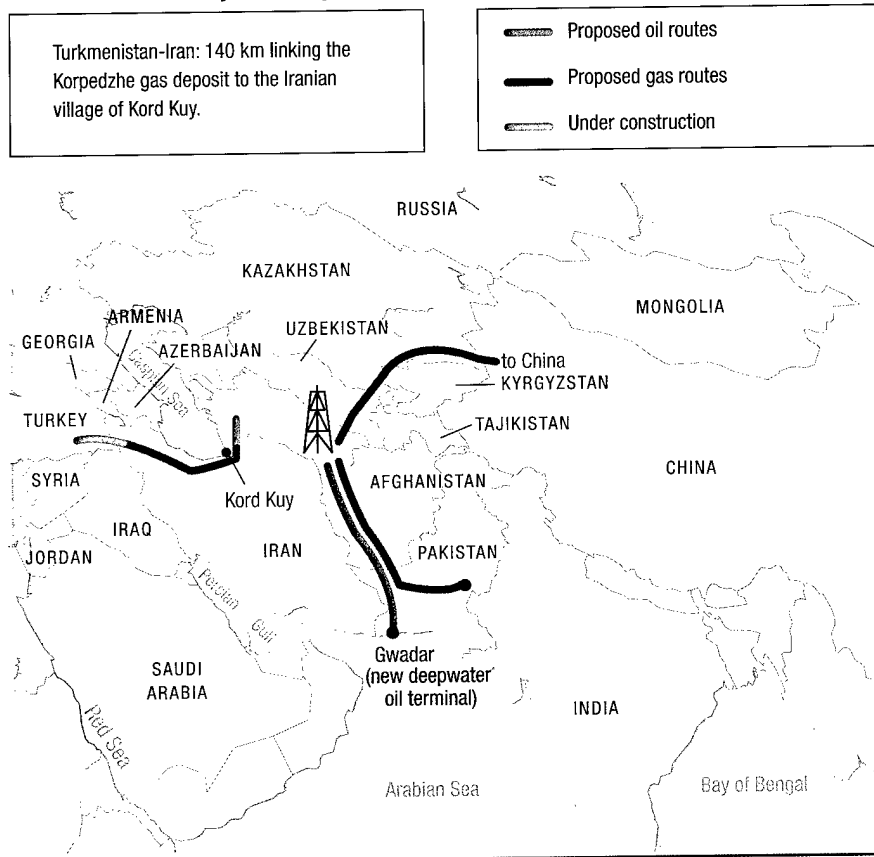
the senior clergy, who have little to do with the minority of the clerics active in politics. But the Islamic Republic is unlikely to fall, in part because it adapts to domestic pressure, expressed through hotly contested elections fought between candidates carefully screened to ensure their loyalty to the revolution. However, socio-economic discontent may grow, as

the baby boom after the 1979 revolution reaches the labor force at the same time as the country's oil exports fall. Iran is caught between growing domestic oil demand, fed by massive subsidies, and aging fields; its official forecast is that the country will cease exporting oil in 15 to 25 years. Foreign financing and technology could extend oil exports, but Iran has not offered particularly good terms to investors, and the United States has banned involvement of U.S. companies. Furthermore, under the 1996 Iran-Libya Sanctions Act, Washington has threatened secondary boycotts against foreign firms investing in Iranian oil and gas. While Iran has the world's second-largest gas reserves after Russia, the potential for finding markets in the next decade is rapidly shrinking.

There is a struggle underway for control of Iran's foreign policy, between the government of President Mohammad Khatemi and Ayatollah Ali Khamenei. On the one hand, Khamenei supports policies such as the *fatwa* calling for Salman Rushdie's murder and support for terrorism against Israel as crucial to the Islamic Republic's legitimacy as heir to Ayatollah Ruhollah Khomeini. Furthermore, Iran's claim to represent the world's radical Muslims can be seen as a powerful force-multiplier for Iran, providing it with access to places such as Bosnia in which it would otherwise never be a player, even though it has also tarnished Iran's image with moderates and made it a pariah in some circles. On the other hand, Khatemi has made overtures which can be interpreted as an effort at rapprochement with the United States. Iran's overall orientation, however, remains anti-American for the moment.

The United States has had limited success in generating support for its campaign against Iran's behavior. Russia is building a nuclear power plant and continues arms deliveries; President Yeltsin's agreement not to enter into new arms contracts has had little practical effect, since so much remains undelivered under a 1989 agreement, which Iran had to stretch out as its finances deteriorated. China seems to regard arms sales to Iran as a

Turkmenistan: Pipeline Options



Iraq as a Potential Threat

Iraq remains a potent military threat. Although degraded by the Gulf War and sanctions, Iraq's land force is larger than and qualitatively superior to all the GCC states combined or Iran. With an active ground force of over 350,000 (and a reserve of 650,000), over 2,000 battle tanks, and 4,500 armored vehicles, Iraq dwarfs the GCC, although the Saudi Royal Air Force with over 300 modern combat aircraft is more than a match for Iraq's 316 aging aircraft, of which as few as 80 may be serviceable. Iraq retains sufficient ground forces near Basra to break out and overrun Kuwait quickly, unless there is adequate warning to reinforce the standing forces there. Furthermore, Iraq has demonstrated the ability to load and move forces quickly over substantial distances.

Iran as a Potential Threat

Iran appears to be pursuing unconventional weapons. Its nuclear weapons program is apparently advancing slower than had been believed in the early 1990s. However, after years of little progress, its missile program is finally moving ahead. Iran has a substantial inventory of missiles that can reach GCC states, including 400 SCUDs and SS-8s. It is on track to develop domestic production of missiles in the next decade, quite possibly including missiles with the 1,000-km range needed to reach Israel.

As for conventional forces, Iran has focused on upgrading its naval and missile capabilities in the Gulf. Its assets include:

- 3 Russian KIL0-class submarines
- 10 fast-attack craft with 4 C802 missiles each and 10 patrol boats being fitted with C802s
- Shore-based antiship missiles: Some C-802s (95-km range), 100 C-801s (40-km range), and 100 H-42s (20-km range)
- 2,000 modern mines
- 51 Swedish Boghammer boats capable of harassing shipping
- 3 frigates and 3 light frigates
- 6 landing ships of more than 2,000 tons each.

Iran has 297 combat aircraft, of which about 175 are operational. Iranian military leaders have described Iran's strategy in the event of a U.S. attack as being to block shipping through the Strait of Hormuz. While it might seem irrational for Iran to impede shipping through a strait vital to itself, that is in fact exactly what it tried to do in the "tanker war" of 1987-88, during the Iran-Iraq war. Although Iran could not close the Strait, it could pose considerable danger to shipping that could affect world oil markets and the willingness of civilian ships to bring in supplies vital to U.S. forces.

useful retaliation for U.S. arms sales to Taiwan. European Union (EU) members and Japan enforce their bans on sales to Iran of arms and dual-use technology, but they reject U.S. arguments and pressure for economic isolation of Iran. After the verdict in the 1997 Mykonos murder case in Berlin, the EU suspended its critical dialogue with Iran, but the EU remains committed to encouraging Iranian moderates rather than the U.S. policy of sanctions. GCC states regard Iran as their main long-term security threat but want to maintain dialogue with it. In other words, the United States is losing the propaganda war about Iran. Washington is seen as the barrier to dialogue, though in fact Ayatollah Khamenei and the other senior clerics categorically refuse to talk to the U.S. Government. U.S. sanctions are seen as ineffective, though in fact Iran has been unable to attract the foreign financing it needs to remain an oil exporter over the long run.

Stalled Peace Process

Both Israelis and Palestinians have become dissatisfied with the basic bargain underlying the 1993 Oslo Declaration of Principles, namely, Palestinian self-rule in return for Palestinian suppression of terrorism. Palestinians expected Oslo to be

the beginning of a process leading to a Palestinian state in Gaza and nearly all the West Bank, but that is not the intention of the government of Benjamin Netanyahu, who became prime minister in June 1996. Instead, both sides engaged in behavior that enraged the other: the Netanyahu government permitted construction of new Jewish housing in East Jerusalem and in settlements on the West Bank, while Palestinian Authority (PA) police initially stood by or joined in deadly riots aimed at Israeli forces in September 1996.

In 1997, Palestinian anger over the peace process spilled over into reaction against the U.S. role. Much of the Palestinian mainstream came to see the United States more as a supporter of Israeli positions in the negotiations than as a neutral broker. The spillover of anger at the Netanyahu government into dissatisfaction with the United States became common in the Arab world. Open criticism of U.S. peace process policy became common even from moderate governments generally friendly to the United States. As Arab governments and public opinion coalesced in anger at the state of the peace process, the positions of moderate Arab governments and hardliners such as Syria became closer

not only on the peace process but on foreign policy in general.

On several issues besides the peace process, 1997 saw increased disquiet with the positions advocated by the United States. Several Arab governments friendly to the United States (Egypt, the United Arab Emirates, and Qatar) called for reconsidering the sanctions on Iraq. Popular opinion in many Arab states indicates unhappiness with the impact on the Iraqi people of the UN sanctions, as well as with UN sanctions against three Arab countries (Iraq, Libya, and Sudan). Furthermore, owing largely to the credibility of American power, Arab public opinion has become less concerned about the threat of external aggression in the Persian Gulf, paradoxically eroding support for U.S. presence. There is a desire for a more vigorous Arab role, for less reliance on the West, and for a more unified stance among Arab states—in short, a revival of Arab nationalism.

Radical Islam

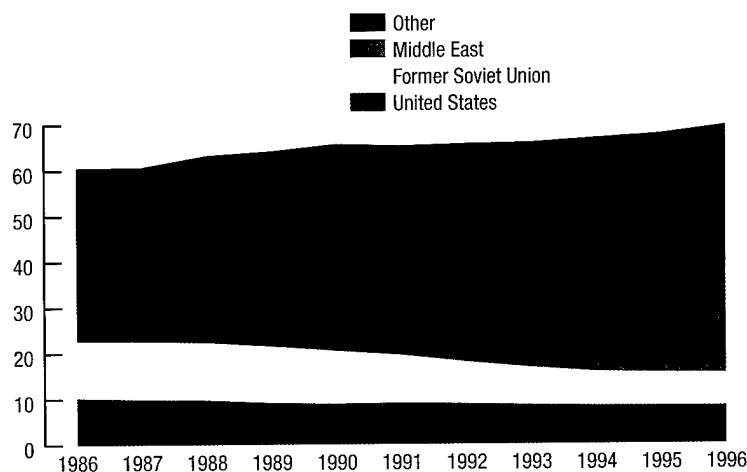
The great majority of Muslims reject radical Islamism, which is doing poorly in most of the Middle East. Some governments have effectively responded to the threat of violent Islamism, using a mixture of repression and accommodation, typically cracking down hard on the organized violent opposition, while absorbing parts of

the social agenda and allowing an opposition that works within the existing system. Jordan has been particularly successful, thanks to the development of moderate, nonviolent Islamism and to economic growth that tempered criticism of social injustice. Economic growth in Egypt has also drained the recruiting pool for radical Islamism, while effective (if at times strong-armed) police work broke the back of the violent groups, though they can still mount isolated attacks like that which killed 45 foreign tourists in Luxor in November 1997.

In Turkey, the Islamist Refah (Welfare) party became the lead governing party in June 1996. In order to hold together his coalition and to work with the military, Refah Prime Minister Necmettin Erbakan had to abandon an anti-Western stance, agreeing not only to remain in NATO but also to extend the allied monitoring of the northern Iraq no-fly zone, and even to deepen military cooperation with Israel. The Turkish military, which takes seriously its role as protector of the secular state founded by Ataturk in the 1920s, demanded that Erbakan stop or reverse policies seen as promoting Islam in government affairs. Faced with increasing military pressure and other political problems, enough members of the junior coalition partner defected to cause the Erbakan government to fall in June 1997. The overall effect of this experience was to show that Refah cannot change Turkish foreign policy and to harden non-Islamist opposition to Refah.

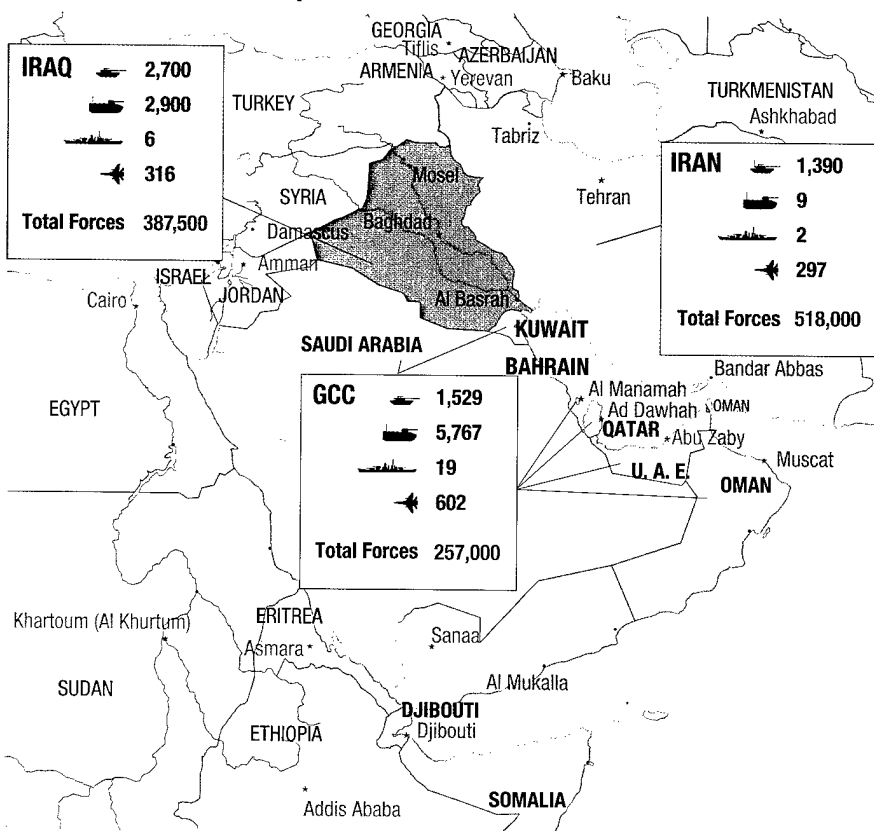
The revolutionary Iranian model has become increasingly less attractive to people throughout the Middle East. The May 1997 Iranian presidential election was won by the underdog candidate, Mohammad Khatemi, who soundly defeated the candidate widely seen as the official choice, with 20 million votes, accounting for 69 percent of those voting (33 percent of the population). Khatemi emphasized the need for the rule of law, implicitly criticizing revolutionary vigilantes, and for moderation in culture and lifestyle—such as allowing blue jeans for men and lipstick for women. It is not clear if the pressure for moderation extends to foreign policy as well.

World Oil Production (million barrels per day)



SOURCE: British Petroleum, *Statistical Review of World Energy*, 1997

Iran, Iraq, and Gulf Cooperation Council Force Structures



Source: International Institute for Strategic Studies, *The Military Balance*, 1997-98

In the Arabian Peninsula, religious fundamentalism is the main outlet for criticism of the rulers. The GCC monarchies face serious domestic problems of the sort that are certain to give rise to political discontent, including:

- Succession to a new generation of rulers (only Qatar has a young monarch)
- Providing suitable employment for the young adults raised in the era of the oil boom who expect high incomes without much work
- Trimming the generous welfare state to fit within the more limited revenues per capita as populations rise and oil incomes stagnate.

In some parts of the Middle East, violent Islamism remains an acute problem. In Algeria, 70,000 people were killed in 1992-97 in the confrontation between the government and the Islamist opposition. President Liamine Zeroual won a second term with 61 percent of the vote in the November 1995 presidential election, in which three-fourths of the electorate cast their

ballots despite the Islamic Salvation Front (FIS) and Armed Islamic Group (GIA) call for a boycott. Violent attacks stepped up in early 1997 after the pro-government National Democratic Rally won 155 of 380 seats in the parliamentary elections.

The threat of violent Islamism remains high where there is a poor record of economic growth in the region. In the last decade, the Middle East (excluding Turkey and Pakistan) has had an economic track record almost as bad as that of sub-Saharan Africa. According to a 1995 World Bank study, the region is plagued by bad governance and inappropriate economic policies, which have led to \$350 billion in capital flight. Plus, it is overly dependent on oil: the Middle East's nonoil exports are smaller than Finland's. The most politically explosive problem is acute youth unemployment. While population growth rates are declining throughout the Middle East, past high fertility means that the working-age population will grow by 3 million a year, nearly doubling in the next 20 years. Those countries with the best economic performance—Jordan, Morocco, and Tunisia—are those that have the best governance and the most reliance on market forces. It is no accident that they are among the West's best friends in the area.

Shaping the Strategic Environment

A basic U.S. goal for the next decade is to demonstrate that it has the means and the will to make rogues pay dearly for their aggression. The United States will certainly have sufficient forces globally eventually to reverse aggression by any potential Middle East rogue intent on monopolizing control over Gulf oil and gas. However, the most desirable environment would be one in which rogue states realize they could not prevail even in the initial confrontation, for otherwise they may falsely expect to get away with a *fait accompli*. The problem will be ensuring that the United States has sufficient presence and capability to surge forces into the area. The United States also wants to reach consensus with its core partners, especially those in Europe, on how to

respond to the challenges from rogue regimes, such as in Iraq and Iran.

The main military-related environment-shaping goal relating to Arab-Israeli peace is to create confidence on all sides that borders can be secure after a peace treaty. This may involve some minimal use of foreign military units, similar to the Sinai Multilateral Force and Observers (MFO). But the key military instrument is the U.S. commitment to Israel's technological superiority, accomplished through technology transfer and military aid.

Preserving stability in the Persian Gulf is central to U.S. global strategy. For the first two decades after the British withdrawal from the Gulf in 1971, the United States tried to preserve stability without a direct role. Washington first tried supporting Iran's bid to be regional superpower, and then promoted a balance of power among the three major Gulf powers, Iran, Iraq, and Saudi Arabia. These strategies were unsuccessful, leaving the United

States no apparent option but to assume a direct security role in the Gulf.

Deter Aggressors

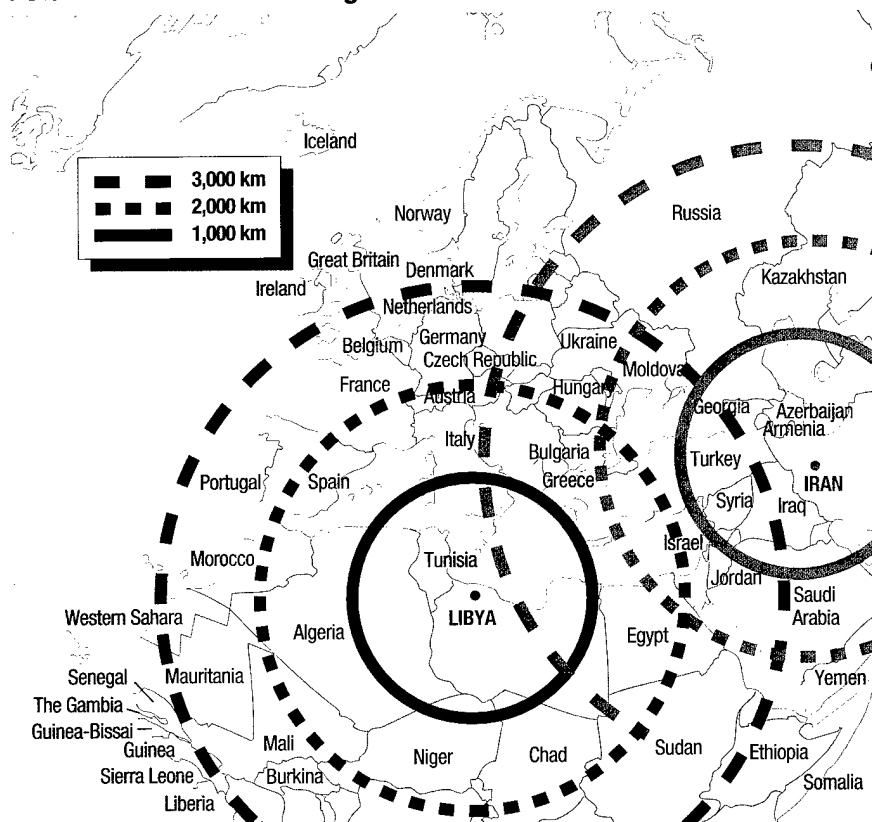
The U.S. military has to be concerned about two major theater war (MTW) scenarios in the Gulf: a land attack by Iraq or a naval attack by Iran. The Gulf could also see small-scale contingencies (SSCs), such as subversion conducted by a foreign power (e.g., what Iran tried in Bahrain), but the U.S. military is less likely to be directly involved in such a conflict.

The principal means to avert a clash is to demonstrate U.S. will and ability to respond to aggression in the Gulf. It is unrealistic to expect the Gulf monarchies to be able to defend themselves, or that a multilateral force—say, from Arab states—will fulfill that role. The United States is well positioned to provide the forces needed to defeat aggression in the Gulf because of the key features of U.S. forces analyzed in earlier chapters, particularly:

- Power projection—forces designed to deploy quickly, lift to get them there, and logistics to sustain them
- Strike power into even the most hostile battlefields, with an abundant arsenal of accurate weapons
- Robust forces, imposing in quality and size.

The U.S. interest is to deter potential aggressors through a combination of presence and demonstrated ability and will to reinforce with larger forces from beyond the region. A particularly thorny issue is the presence required. The United States may be able to defend its interests in the Gulf with power projection and strike power to the point that little onshore permanent presence is needed. But a small and transient presence might be falsely interpreted as a lack of ability and will to defend the Gulf. At the same time, too prominent a presence could inflame nationalist or religious sensibilities. The Middle East has a history of such reactions to Western military presence. For instance, the creation of the Baghdad Pact in 1955 was one reason for the overthrow of the Iraqi monarchy, and the status-of-forces agreement with the United States was an important factor in

Potential Missile Threat Ranges



NOTE: Illustration assumes that Libya or Iran acquires North Korean *No-Dong* 1 (1,000 km), TD-1 (2,000 km), or TD-2 (3,000 km) missiles.

the bloody rioting that shook Iran in 1963. The most important example was the Iranian Revolution, aggravated by the presence of 50,000 U.S. military contractors and trainers, as well as the popular Iranian perception that the Shah had become an American puppet. U.S. interests would be ill served were the presence in the GCC states to lead to a similar reaction.

The demonstration of power projection and strike power convincing enough to deter but without a permanent presence so large as to destabilize requires innovative techniques rather than the large, permanent bases used in Europe and East Asia. Thus, the United States relies heavily on pre-positioned equipment to demonstrate its ability to surge into the area.

U.S. power projection is also accomplished through extensive use of rotated units. In Kuwait, there has been a near-continuous presence of a battalion, with frequent presence of a brigade, often engaged in live-fire exercises. Air Expeditionary Forces (AEF), which are deployments for some months of a squadron or more along with all support equipment and personnel, have been sent to Bahrain, Qatar, and Jordan. Along similar lines, intensive use has

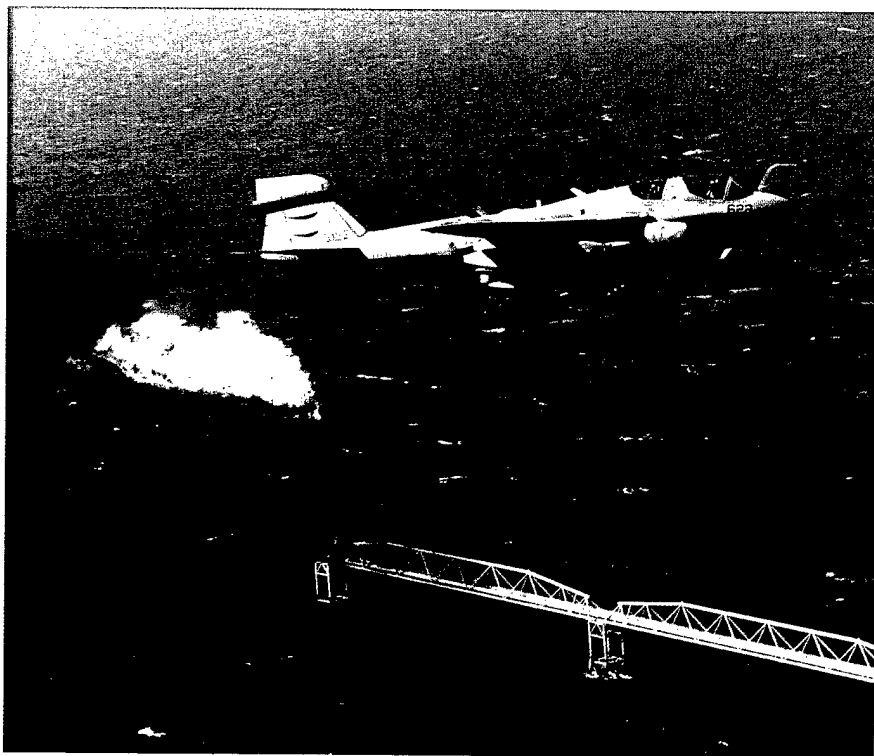
been made of commercial ports, including about 200 calls a year at the Jebel Ali port in the United Arab Emirates. Several thousand airmen have been based in Saudi Arabia since *Desert Storm*, but the United States has not constructed any permanent facilities, so as to demonstrate that its presence is strictly a function of the continuing threat from Saddam Hussein.

Promote Confidence

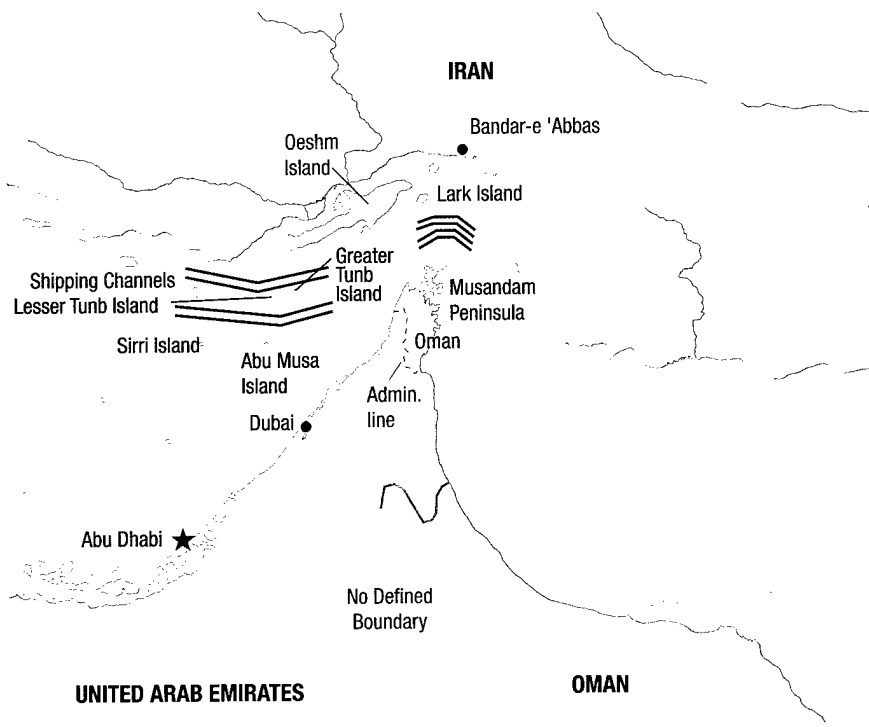
To reassure the core states about access to oil, the United States aims to sustain confidence in the free flow of oil through the Strait of Hormuz. It could be argued that this can be accomplished in a variety of environments. For instance, the United States has placed priority on preserving free use of the Strait of Hormuz. The Strait has taken on a symbolic importance for world oil markets that may exceed its actual economic role. Using the two pipelines across Saudi Arabia to the Red Sea (one built for Iraq) and chemicals that speed flow through pipelines, Gulf oil exports could quickly be at two-thirds their current level without use of the Strait. Nevertheless, the Strait of Hormuz remains important because of its role in commercial shipping of all kinds, including the access to ports essential to surging men and materiel into the region during a crisis.

In the Persian Gulf, the United States faces the challenge of inspiring confidence simultaneously in two not entirely consistent aims: repelling aggression and treading lightly. GCC elites are worried about how lasting the U.S. commitment is, recalling that the British left in 1971 despite the fact that Gulf powers wanted them to stay. They are also concerned about the U.S. departure from Beirut in 1984 and Mogadishu in 1993 after taking casualties. At the same time, these same elites are worried that the United States may have too high a profile in the region. Cultural or religious conservatives, already concerned about what they see as the corrosive effect of American mass culture, worry about the impact of thousands of young Americans, including working women. Based on the historical experience of colonialism and special status for foreigners, local feeling is

EA-6B Prowler over Persian Gulf



Strait of Hormuz



sensitive to perceived slights to local sovereignty, be it the need for overflight on short notice or for a status-of-forces agreement.

In the Levant, enhancing confidence means:

- Support for the peace process. In addition to the high-level diplomatic attention, support for the peace process includes aid. The \$2.1 billion a year in aid to Egypt since the late 1970s, including \$1.3 billion in military aid, has substantially increased acceptance of peace with Israel, by providing tangible evidence of a peace dividend. The \$3.0 billion a year in aid to Israel, including \$1.8 billion in military aid, is seen by the Israeli public as a barometer for American support for Israeli security.

- Maintaining Israel's qualitative edge over its Arab neighbors in military technologies. U.S. willingness to share technologies and to promote cooperation between Israeli and American defense industries has been more important than U.S. cash aid.

The more confident Israeli public opinion is about Israel's superiority over Arab

militaries, the more likely Israelis are to take risks in the peace process, such as to withdraw from the Golan Heights or to reduce military presence in the Jordan Valley.

Improve Coalitions

For the Middle East, the main issue is inducing partners to complement U.S. forces. The friends whom the United States would call upon for defense of the Gulf can be arrayed in three tiers.

- The GCC states will not be able on their own to repel external aggression from either Iraq or Iran. However, if resources are used more effectively than now, their forces could make a distinct contribution to a joint effort with the United States. These forces could provide some of the first line of defense while U.S. forces arrive in number. If that first line does not hold, the U.S. forces in theater will be forced to trade space for time.

- Other regional states that could contribute include:

- Egypt, which could provide substantial forces as well as politically important support
- Syria, which has the forces and the proximity, but is not likely to agree to work closely with the United States; even during *Desert Storm* it maintained a distant relationship
- Turkey, which is geographically situated to make it useful as a bridge to the Gulf and potentially as a theater from which Iraq or Iran could be pressured in the event they engaged in aggression in the Gulf
- Israel, which possess the ability and will to help in a Gulf crisis, also faces political constraints that will strictly limit its role, probably to that of logistical support during a Gulf deployment. Israeli and U.S. forces have little operational experience together, which would limit their ability to function in a coalition.

- NATO states already make a small contribution to Gulf security, with French and British forces participating in Operation *Southern Watch* overflights of Iraq from Saudi bases. Given Europe's reliance on Gulf energy and its general ability to contribute to global security, many U.S. analysts are encouraging Europe to share more of the responsibility for Gulf security, as well as to agree with the United States on a common approach to rogues. Common NATO procedures and training provide the basis for forming a coalition in a crisis. European militaries generally lack the power projection capability to deploy quickly to

Recent and Projected Oil Consumption (million barrels per day)

	1990	1995	2000	2005	2010	2015
United States	17.0	17.7	19.4	20.7	21.6	22.1
Western Europe	12.9	13.9	14.3	14.8	15.1	15.4
Former Soviet Union	8.4	4.4	4.9	5.8	6.7	7.7
China	2.3	3.3	4.4	5.5	6.9	8.6
Industrialized Asia	6.2	7.0	7.7	8.3	8.9	9.4
All Other Countries	19.2	23.1	27.1	32.1	36.4	41.4
World Total	66.0	69.4	77.8	87.2	95.6	104.6

SOURCE: Energy Information Administration, *International Energy Outlook*, 1997

the Gulf, so they may be looking for U.S. assistance at precisely the moment when U.S. transport assets are stressed. At the very least, the United States would want ready use of European facilities, such as airports and ports, during a crisis.

Limit Potential Threats

The quandary for the United States is that by demonstrating its overwhelming ability and will to prevail in any conventional confrontation, it inadvertently pushes rogues to adopt asymmetric strategies. It is no coincidence that this region has most of the states of proliferation concern and most of the world's state sponsors of terrorism. The problem for the United States is to find ways to make WMD and terrorism less attractive to rogues.

At the same time, the United States wants to encourage currently hostile states to change their basic security orientation. The principal defense instruments to this end are sanctions and the prospect of threat reduction measures.

- **WMD dissuasion.** The most important U.S. goal for shaping Iran and Iraq is to make acquisition of WMD and their delivery systems less possible, more risky, and less attractive. Regarding Iraqi WMD, the principal environment-shaping instrument is UNSCOM, which has established a monitoring program combining periodic inspections and on-site monitoring devices. The U.S. military supports UNSCOM with intelligence, and in 1992-95, America threatened or carried out military strikes

against Iraq to force compliance with UNSCOM demands.

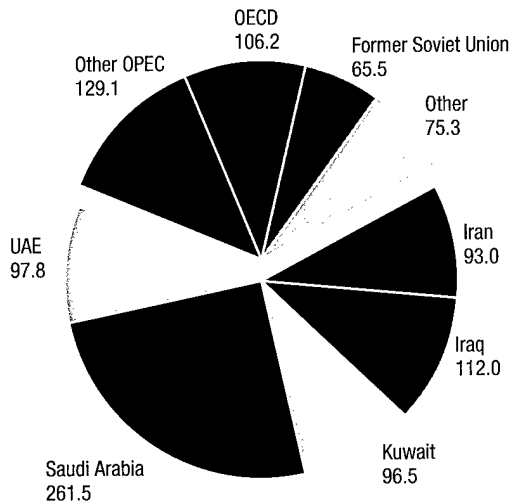
To slow down the development of Iranian WMD, the United States relies primarily on technology transfer limits. Iran has been uninterested in quid-pro-quo deals to alleviate Western concerns about its WMD. Iran has never seen its proliferation-troubling nuclear power plant at Bushehr as a bargaining chip for negotiations with the West. The United States has stated that regimes would suffer for use of WMD, though Washington has been ambiguous about how it would retaliate.

- **Antiterrorism.** To shape the environment and reduce the value of terrorism, the United States has implemented a wide array of initiatives to protect military forces in the Gulf. That, however, has left the problem of the vulnerability of American civilians, especially the 20,000 U.S. citizens in the Eastern Province of Saudi Arabia (the province in which the Khobar Towers bombing occurred). There is also a potential for terrorist attacks inside the United States, as was done at the World Trade Center in 1992.

It is unclear who has been behind recent terrorist episodes, such as the November 1995 bombing of the U.S. assistance team to the Saudi National Guard in Riyadh and the June 1996 bombing of the Khobar Towers housing facility used by the U.S. Air Force in Dhahran. The United States has particular problems responding to ambiguous sponsorship of terrorism. Washington wants broad international support for any retaliation, in order to accomplish the goal of isolating the perpetrator and persuading it that terrorism does not pay, but such support is likely only if the evidence is overwhelming. The United States has found it useful to approach terrorism as a criminal matter in order to gain cooperation from other governments that might not otherwise be available. But treating terrorism as a crime committed by individuals makes it difficult to take action against a sponsoring government, since the latter can always claim the terrorists acted without authorization.

- **Sanctions.** Sanctions have limited success in persuading regimes to change

Distribution of Oil Reserves (1996) (billion barrels)



SOURCE: British Petroleum, *Statistical Review of World Energy*, 1997

policy but have been more successful at weakening the ability of targeted governments to carry out aggressive measures, such as reducing the resources Iran has available to purchase modern weapons. Despite the limited power of sanctions, they continue to be used against Middle East recalcitrants primarily because there are no obvious better nonmilitary measures and because there is strong domestic political support for such efforts.

Sanctions

The United States uses economic sanctions more often in the Middle East than anywhere else:

- **Iraq.** The sanctions imposed by the United Nations on Iraq in 1990 were among the most comprehensive ever put on a country both in the rigor with which they have been monitored and the breadth of items covered—everything except food and medicines. Concerned about the impact of the sanctions on ordinary Iraqis, the UN Security Council ever since August 1991 offered Iraq limited oil sales to finance humanitarian imports. In 1996, Iraq finally accepted the latest offer, made in Resolution 986, and humanitarian imports began in early 1997 at the rate of about \$2.6 billion a year, including several hundred million earmarked for the Kurdish-controlled north.

- **Libya.** For its refusal to hand over the suspects in the bombing of U.S. and French civilian airliners, Libya was made subject in 1992 to certain sanctions by the United Nations, including reductions in number of Libyan diplomats, a ban on airplane flights, and a ban on imports of specified equipment for petroleum production. The United States took a tougher stance than the United Nations by imposing a ban on trade in 1984. The United States has urged more extensive UN action, and in 1996 Congress authorized secondary boycotts of firms breaking the UN import restrictions or investing in Libyan oil and gas.

- **Sudan.** Because the Sudanese government harbors fugitives from a 1993 assassination attempt against Egyptian President Hosni Mubarak while visiting Ethiopia, the UN Security Council imposed restrictions on Sudanese diplomats.

- **Iran.** The United States imposed a unilateral ban on trade with Iran in 1995. In 1996, the Iran-Libya Sanctions Act authorized a secondary boycott of foreign firms investing in Iran's oil and gas.

- **Case-specific sanctions.** Syria is on the State Department list of terrorism-sponsoring nations, which by law means that the United States cannot provide aid and opposes loans from international organizations. As a result of government complicity with airplane hijackers in the 1980s, Lebanon and Afghanistan airlines are not permitted to fly to the United States. Because of the risk of kidnapping by terrorists, Lebanon was subject to a U.S. travel ban from 1985 until July 1997.

The U.S. military will continue to enforce sanctions in the Middle East. The United States has been the main participant in the Multinational Interdiction Force (MIF) that monitors ship traffic in and out of Iraq. The U.S. Navy provides on average 10 ships dedicated full time to this mission.

In addition to sanctions, the United States has used aid to induce countries into cooperation. After Egyptian President Anwar Sadat agreed to a peace treaty with Israel in 1979, Egypt began receiving \$2.1 billion in aid annually. Similarly, after the Palestinian Liberation Organization and Israel reached agreement in 1993 on their Declaration of Principles, the United States sponsored a donors' conference at which \$2.5 billion in aid over five years was pledged for the Palestinian Authority. The political climate in the United States is less

receptive to aid now, but there is more interest in potential economic cooperation measures, such as access to Western markets on preferential terms and policies to encourage private sector loans and investment. There is a prospect Syria could get some such economic rewards were it to make peace with Israel.

● **Threat reduction.** Considerable threat reduction has been achieved in the Arab-Israeli theater:

- As part of the Camp David treaty, Israel and Egypt agreed to a mutual withdrawal of forces, which is monitored by U.S.-supplied observers and by the Multinational Force in the Sinai, to which the United States contributes two brigades.
- After decades of effort, Syria abandoned the pursuit of strategic parity with Israel and decided to join the peace process when it realized that it could not terminate the existence of Israel.

■ Since 1991, the United States has sponsored Arms Control and Regional Stability (ACRS) talks as part of the multilateral talks accompanying the Arab-Israeli peace process, but they have been stalled since 1994.

In the Gulf, the principal threat reduction means so far has been to deprive rogue regimes of money and technology, in the case of Iraq combined with no-fly and no-drive zones plus a rigorous WMD inspection regime. In the future, especially if Iran or a post-Saddam Iraq becomes less hostile to the West, other means, such as arms control, might be considered. Conceivably, the United States might gain an advantage from applying, in the Persian Gulf, arms-control techniques similar to those in the Conventional Forces in Europe (CFE) agreement (e.g., limits on the numbers of major military items, establishing limits on armaments in zones near borders, prior notification about military exercises, and observation of large exercises). The United States holds an important means to induce Iran and Iraq to agree to such CFE-like measures, namely, the offer to remove economic restrictions. For instance, the United States could support larger Iraqi oil sales in return for a permanent and monitored reduction in Iraqi forces in the zone near the Kuwaiti border.

Promote Political-Military Reform

GCC states could make more efficient use of the resources they devote to their militaries. Much of the problem is attracting skilled, motivated manpower, which is not easy in countries with generous social welfare programs, acute shortages of technically trained workers, and a poor work ethic. The manpower problem is not made easier by the perception that, in the end, the defense of the GCC depends on U.S. forces. The United States encourages vigorous training programs and cooperates closely in exercises and military education, but it would be unrealistic to anticipate that the manpower problem is going to improve sharply soon.

Arms deliveries to GCC countries are running at about \$10 billion a year, much

Arms Deliveries by Supplier (1993–96)

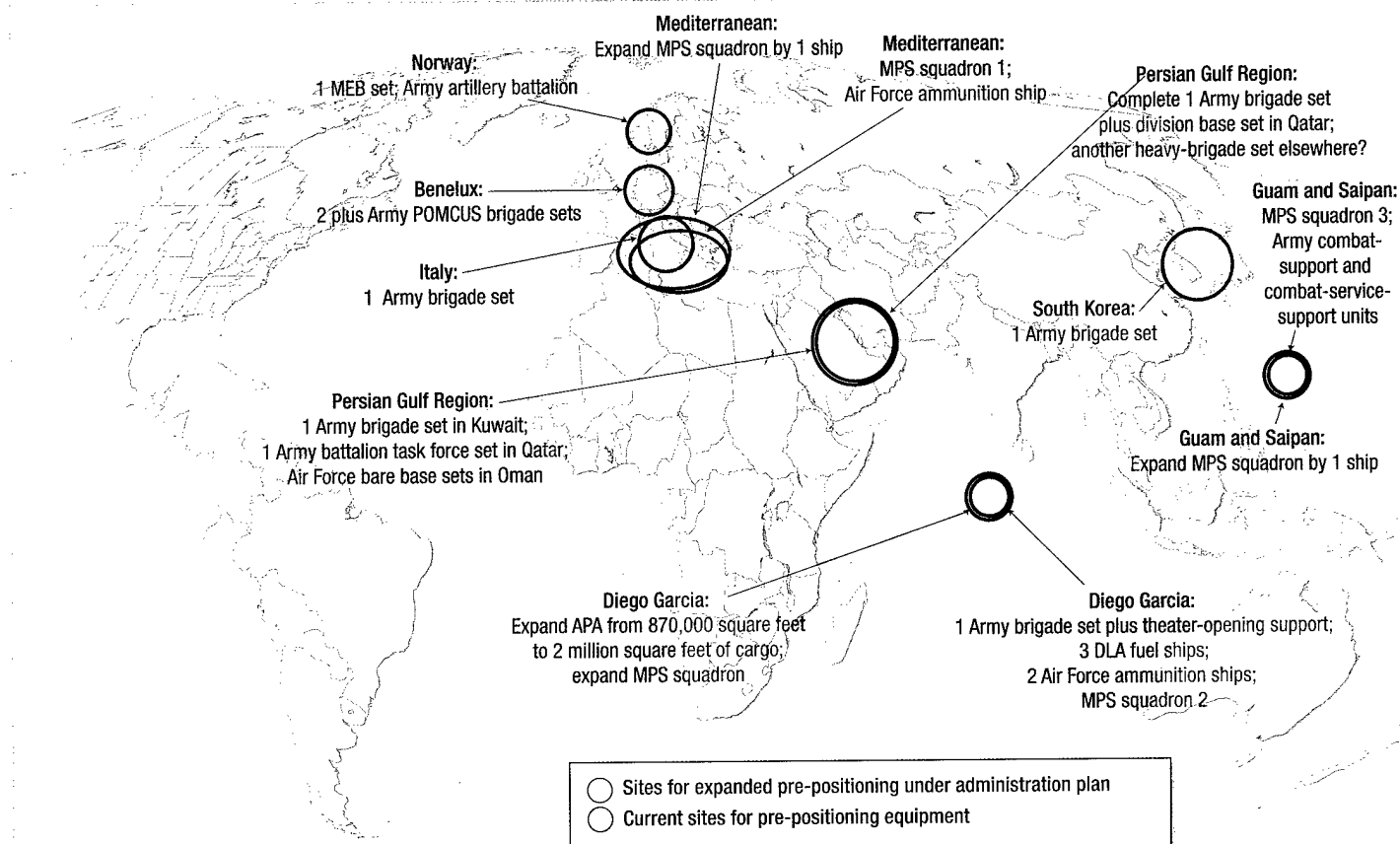
millions (U.S. \$)

Recipient Country	United States	Western Europe	Other
Algeria	0	0	500
Bahrain	200	0	—
Egypt	5,600	100	600
Iran	0	0	2,200
Iraq	0	0	—
Israel	1,900	300	200
Jordan	100	0	100
Kuwait	3,000	600	800
Lebanon	100	0	—
Libya	0	0	—
Morocco	100	100	—
Oman	0	900	200
Qatar	0	0	—
Saudi Arabia	12,200	16,600	1,000
Syria	0	0	500
Tunisia	100	0	100
U.A.E	700	900	700
Yemen	0	0	500

NOTE: 0 = data less than \$50 million or nil. All figures are rounded to nearest \$100 million. Western Europe includes France, United Kingdom, Germany, and Italy as an aggregate.

SOURCE: Congressional Research Service, *Conventional Arms Transfers to Developing Nations, 1989–96*

Pre-positioning Site Plan (1997)



NOTE: Benelux=Belgium, the Netherlands, and Luxembourg; POMCUS=Pre-positioning of Overseas Materiel Configured to Unit Sets; MEB=Marine Expeditionary Brigade; MPS=Maritime Pre-positioning Ships; APA=Army Pre-positioned Afloat Program Ships; DLA=Defense Logistics Agency.

SOURCE: Congressional Budget Office, *Moving U.S. Forces: Options for Strategic Mobility*, 1997

of which is not spent as well as it could be. The United States has limited leverage to influence the size and composition of arms purchases because GCC leaders are quite ready to buy elsewhere if the United States does not sell. The United States does not always use the influence it has and is frequently in the position of urging a GCC government to buy American. GCC public opinion suspects that arms sales are designed primarily to reward friends like the United States and to provide a vehicle for corruption, rather than to make GCC militaries more effective.

The prospects are mixed that U.S. allies throughout the Middle East could work together:

- The GCC states are of mixed minds about cooperation, reflecting traditional rivalries and the smaller states' concerns about Saudi domination. Various plans for combined forces remain in limbo.

- Cooperation between Israel and Egypt has been difficult to achieve. Even military-to-military contact remains low. Jordan and Israel, by contrast, have established professional contacts.

- In the context of the multilateral peace process talks, the United States has promoted some agreements and de facto cooperation (e.g., search and rescue at sea).

- The Israeli-Turkish military-to-military cooperation includes joint training and defense industrial joint ventures. Growing cooperation since the Israeli-Turkish defense agreement of November 1996 has unsettled Iran, Iraq, and Syria, suggesting to the first two that they could face Israeli forces and to the third that failure to make peace with its two neighbors could find Syria caught in a vise between them.

In countries where the military is responding to domestic disturbances, the

Qualities of U.S. Power Accentuated in the Greater Middle East

Power Projection	C4ISR	Joint Doctrine	Lethality	Robustness	Model Establishment

☐ very important
☐ important

United States can encourage militaries to respect human rights:

- The most important such situation for the United States is in Turkey, where the southeastern quarter of the country is under direct military rule in face of the Kurdish insurgency led by the PKK terrorist group.

- In other parts of the Middle East, the United States has less influence. For instance, it has few means to influence how the Algerian military responds to terrorism.

Conclusion

To accomplish the environment shaping strategies, the principal U.S. military activity in the Middle East will be to demonstrate the ability to project power into the region by bringing to bear robust forces and lethal strike power. The aim will be to deter aggression while, in line with the region's cultural and nationalist sensitivities, maintaining a presence with as small and unobtrusive a footprint as possible. The principal instruments will be a strong naval presence in the Gulf and nearby waters, extensive use of pre-positioning, and temporary deployment of units, sometimes on a continuing rotational basis. The level of presence will be continuously adjusted to meet the threat, always bearing in mind that the goal is to deter, not just respond to, a crisis. It is quite possible that the presence will at times be below the mid-1990s average of 25,000 personnel, either because the

threat from Iran and Iraq is reduced or because those rogue states can be deterred with a smaller presence.

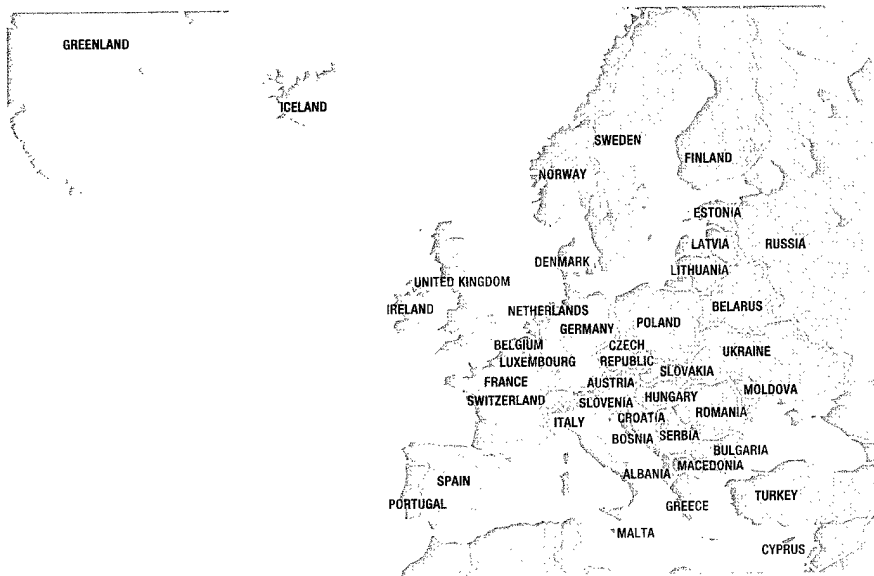
The U.S. military will also be involved in large-scale arms sales to the Middle East. Most of the sales will be to GCC states, which are determined to acquire weaponry they can afford. The U.S. aim will be to steer GCC acquisition to equipment that best meets their defense needs. Besides the sales to GCC states, the United States will also sell arms to Israel and Egypt, as continuation of the aid begun after the Camp David peace treaty and in light of the U.S. commitment to maintaining Israel's qualitative edge over Arab militaries.

Smaller scale activities by the U.S. military will include:

- Combined operation exercises with individual GCC states, with core states contributing to the defense of the Gulf, and with Levant states, as well as occasional multilateral exercises, e.g., United States-Israel-Turkey
- Traditional peacekeeping, principally the two brigades committed to the separation of forces in the Sinai
- Sanctions enforcement, such as the Multinational Interdiction Force operation underway against Iraq since 1990
- Possibly some small-scale contingency in the event of state failure or humanitarian disaster.

CHAPTER FIVE

Europe



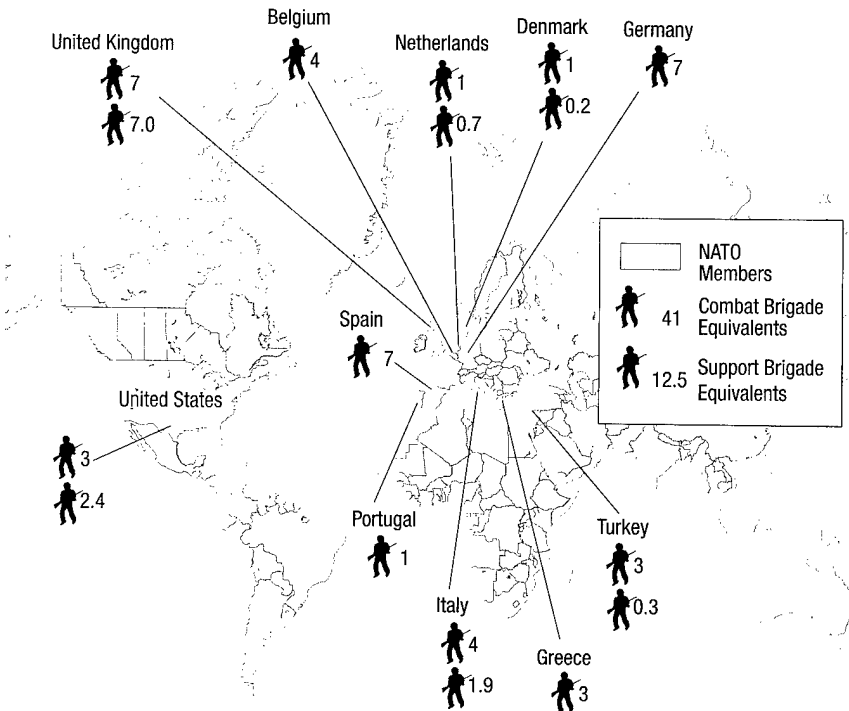
Two world wars and more than 40 years of the Cold War indicate that Europe was a dangerous place for most of this century. Today this region is the greatest success of U.S. security policy. With no major threat to its security, the continent enjoys a situation unprecedented since the Roman Empire. Except for the Southern Balkans—an important exception—peace and cooperation prevail. The North Atlantic Treaty Organization (NATO) is the foundation of this European peace, as well as of the integration of Europe under way since the mid-1950s. In July 1997, the Alliance opened itself to new members, inviting Poland, the Czech Republic, and Hungary to begin negotiations. This policy of NATO enlargement has allowed historical animosities in Central and Eastern Europe to be set aside. Political, economic, and military reforms have proceeded in the sometimes fragile transition to a post-Communist world with general success. A framework has

begun to emerge under which Europeans will take increased responsibility for regional security and that could complement U.S. forces in military operations outside the continent.

U.S. Interests

The end of the Cold War increased sentiment at home favoring disengagement from overseas commitments. But the United States has a fundamental interest in consolidating security in Europe and in capitalizing on it to create security elsewhere, alongside European core partners. Europe in the 20th century tended toward competition and conflict, but with a U.S. force presence of just over 100,000 troops and the resultant credibility the United States has brought to European security, Washington has a tremendous opportunity to shape the environment in Europe as the next century opens. Through NATO and key relationships with other transatlantic and European institutions, the United States seeks to consolidate and expand a core of democratic and free-market states that can share the burdens of safeguarding common interests in Europe and beyond.

National Contributions to NATO Ground Forces (1996)



Source: Department of Defense

This core has already expanded beyond the traditional territorial boundaries of NATO and the European Union (EU, which includes formerly neutral countries); some emerging democracies of Central and Eastern Europe have fully entered the core—in particular, Poland, Hungary, and the Czech Republic. A number of states in transition are close to entering the core, including Slovenia, Romania, and the Baltic countries of Lithuania, Latvia, and Estonia.

Other states in Europe, such as Serbia and to a lesser extent Belarus, are potentially hostile to U.S. interests. No country there, however, has the will or capabilities to challenge the existing security order in the next decade. Instead, the challenge to stability there in the immediate future comes from the potential of failed states, such as Bosnia-Herzegovina and Albania, to require intervention, which could stretch the resources and political will of the United States and its allies and produce transatlantic fissures within NATO.

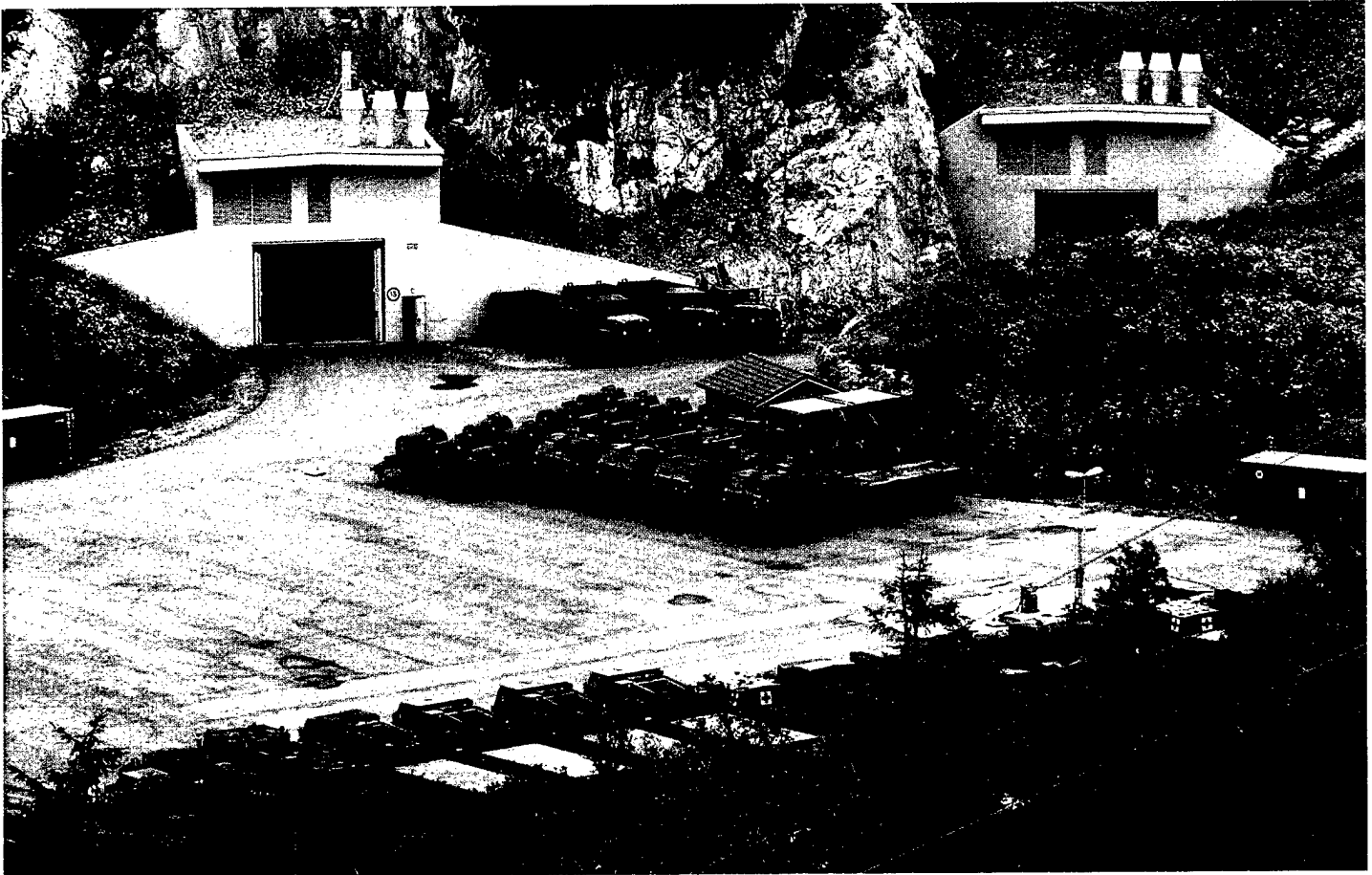
Developments in the two largest transition states, Ukraine and Russia, also will affect the overall security climate in Europe. Although implausible in the near term, a regime might emerge in Russia that could raise tensions in surrounding states and affect Central Europe; yet the prospect of renewed Russian hegemony over the region is nearly nonexistent. More likely, challenges to European security and stability will come from rogue states outside the region that could threaten U.S. and European interests, particularly in the Persian Gulf and the Mediterranean region.

Reshaping the Alliance

The primary U.S. interest in Europe is reshaping the transatlantic core of countries that share strategic interests and values into a strategic partnership capable of assuming wider international security responsibilities. Key NATO allies, and the capabilities and cooperative arrangements formed in the Alliance, provide the foundation of this partnership. The United States has an interest in ensuring that its core partners remain committed to the Alliance and that greater cooperation in European defense, including a European Security and Defense Identity (ESDI), remains under the NATO umbrella. In military terms, NATO's most obvious success has been the promotion of transparent national defense planning, integrated through the multilateral sharing of information. This cooperative effort, which has reduced the need of states to invest in costly national defense programs, is a key function of NATO and its Partnership for Peace Program.

Consolidating Reform

The core is not limited to members of NATO. Some Eastern European states have indicated their Western identity in terms of future membership in NATO. The United States shares interests with many different countries emerging into a post-communist national identity as well as with neutral states that have not sought membership in NATO. Defense reform to the east can continue to include countries shaping their policies in order to join the core, particularly Ukraine and the three Baltic democracies. Although none of these countries is



Bjugn Cave, Norway

likely to join NATO soon, ongoing bilateral and multilateral efforts will keep open institutions that enhance and stabilize reform. The Partnership for Peace and the effort to open NATO activities (especially NATO Charter Article 4) to partners are keys to larger U.S. goals.

Stabilizing Failed States

An important security challenge in Europe will be to stabilize states that face disintegration or civil conflict. Ensuring long-term stability in the Balkans will prevent the possible spillover of conflict into areas of vital interest to the United States, while maintaining international confidence in the institutions charged with preserving security in Europe and helping European partners take on more (but not all) the responsibility. In Europe, the problem of failed states, although limited, directly affects the interests of the core states.

Deterring Rogue States

Rogue states—those that do not conform to minimal international norms and standards of behavior—may pose a threat to U.S. and European interests, both on the continent and outside Europe. Iran, Iraq,

Comparative Cost Estimates of NATO Enlargement millions (U.S. \$)

Reinforcement Option ¹	1-Year			12-Years
	U.S.	Other NATO	New Members	Total Cost
Clinton Administration (1997)	150–200	950–1,300	1,250–1,420	27,000–35,000
RAND Corporation	420–1,400	530–1,500	867–1,433	30,000–52,000
Congressional Budget Office	1,038	3,500	3,992	110,900
NATO Headquarters	—	—	—	1,500 ²

¹ Reinforcement Option: New members modernized their forces enough to defend themselves until reinforced by other NATO members.

² NATO estimates that common investment and infrastructure costs through 2010 will be 1.5 billion dollars, a figure which is supported by the Clinton administration.

Libya, and Syria may be considered rogue states. Inside Europe, Serbia, and to a lesser extent Belarus neither share nor aspire toward core values. At the end of 1997, the threat of intra-European conflict appears highly unlikely, but maintaining a minimal insurance policy for collective defense of shared interests remains important. Creating the means to deter present and future rogues is a key premise of maintaining forward-deployed U.S. forces in Europe. Any rogue that threatens core interests outside Europe will face the prospect of an Atlantic coalition and therefore find it difficult, if not impossible, to play off Europe against the United States.

Current Trends

Intra-Alliance Relationships

In 1997, tensions developed in the transatlantic relationship that may have made it difficult for the United States to influence future actions of its allies. Failure to reach agreement on European command of Allied Forces South (AFSOUTH) caused France to freeze reintegration into the NATO military command structure.

Disputes between Spain and the United Kingdom over Gibraltar and between Spain and Portugal over surveillance of the waters near the Canary Islands, although minor, nevertheless complicated Spain's return to the NATO military command structure.

Some European allies resented the process by which the United States built consensus for the invitations to Poland, Hungary, and the Czech Republic to begin negotiations on NATO membership. To many European political leaders, the U.S. diplomacy appeared heavy handed. Specifically, some key allies preferred to strengthen the strategic foundation of NATO by including Romania and Slovenia in the first round. Fissures grew within the Alliance over costs associated with enlargement. Influential members of the U.S. Congress insisted that Europeans pay most of the costs, while European allies stated emphatically that they were in no position to fund the development of the power-projection capabilities required for successful defense of new members. French President

Chirac said so publicly, and other European allies expressed similar sentiments.

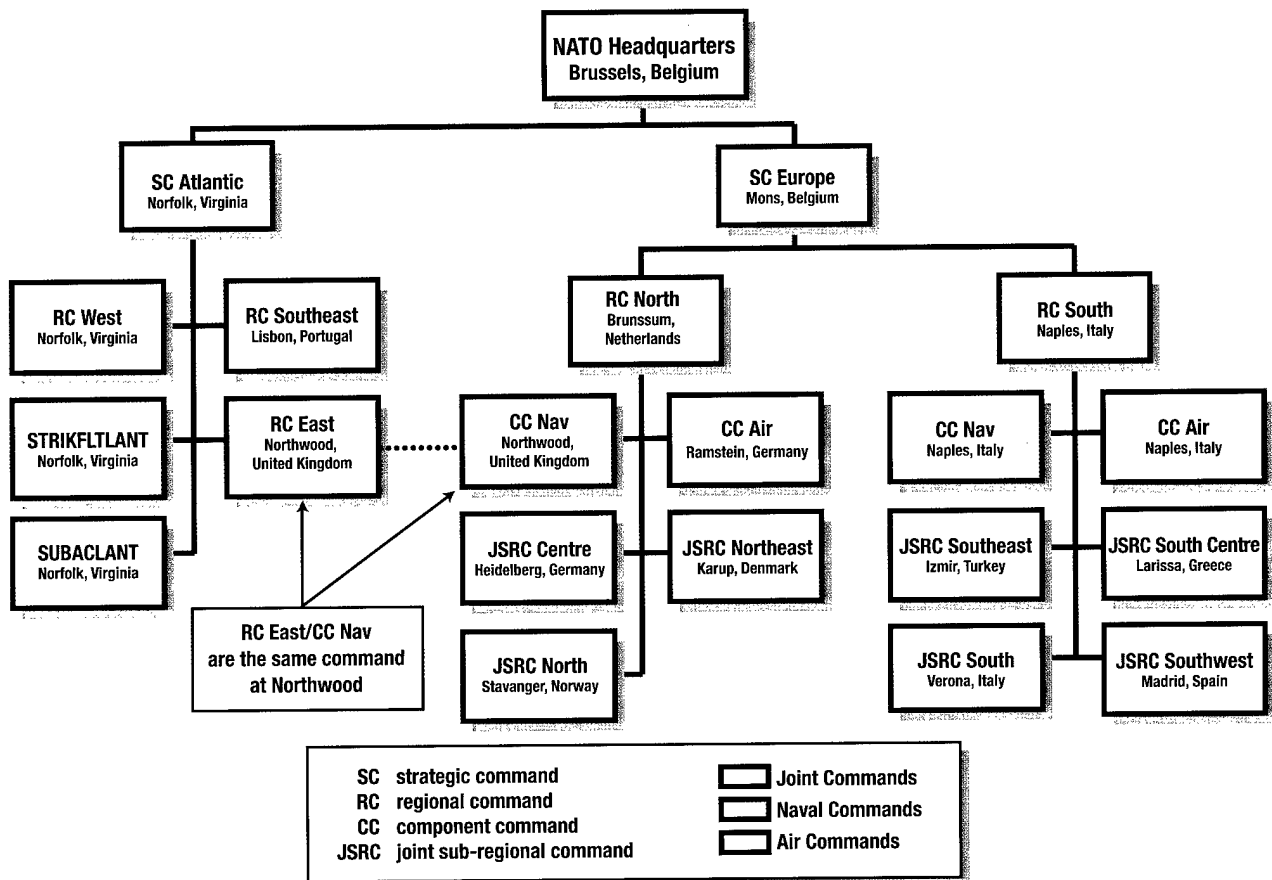
Equally important, European military capabilities have declined, creating a military imbalance within the Alliance that threatens to exacerbate transatlantic tensions. European defense spending has been directed toward maintaining a traditional force structure designed to defend the former NATO borders. European forces have taken significant measures in developing a "Euro-Force" but have not made much progress in developing an out-of-sector force projection capability. The trend is toward Europe's growing dependence on the United States for support in any intervention outside Europe.

Declining defense budgets in Europe, together with a continuing emphasis on territorial defense, yields a vicious circle. Unless these governments are able to formulate a contemporary purpose (e.g., power projection), there is insufficient public motivation in support of any defense spending. Reprogramming toward power projection is more difficult when budgets decline.

Without modernization of the military or investment in their defense industries, European allies will find it increasingly difficult to act in conjunction with the United States. With its rapidly evolving, high-technology modernization, particularly in command, control, and communication (C³), America has moved ahead, and as a result, its allies may not be able to communicate effectively with one another. The failure of Europe to keep pace with the U.S. progress in research and development may turn current and future allies into second-class citizens of NATO.

This gap in modernization can be adjusted by complementing the efforts of European nations. For example, the United States and Germany are creating an integrated air defense unit for mission deployments and to protect NATO's air space. To be known as the German-American Air Defense Unit, it will be equipped with Patriot, Hawk, and Roland missiles from both countries. Germany will provide up to 300 soldiers, and the United States will complement that number with two Patriot missile battalions and troops of a number yet

New NATO Command Structure (December 1997)



NOTE: The formal titles of the commands are yet to be determined, pending a decision on MC324, "The NATO Military Command Structure." Each nation is depicted in only one region but may participate in multiple regions.

SOURCE: Department of Defense and General Klaus Naumann, "NATO's New Military Command Structure," *NATO Review* (Spring 1998)

to be specified. Command will be shared by officers from both countries and will rotate every three years, beginning in 1998, with the goal of being operational by the turn of the century.

Another example of complementarity was the NATO exercise IVITEX '97, which included more than 25 ships from the United States, Greece, the Netherlands, Germany, Italy, France, and the United Kingdom. Its goal was to test communications links and establish common ground for communications of the naval forces. But the exercise, rather than providing solutions, demonstrated problems. For instance, commanders were forced to use the lowest common denominator in communications technology to ensure uninterrupted communication among the different navies.

The gap in modernization and overall force reductions impair NATO readiness. The Alliance can currently mobilize only a small percentage of its overall combat potential on short notice—a substantial decline since the end of the Cold War. The United States and its allies at this point are marching to different drummers: global power projection is animating U.S. but not European efforts, causing considerable divergence, which a common strategy with key partners, and with derived force goals, might help reduce.

This trend is liable to exacerbate transatlantic tensions within the core in the coming decade, as European economies

struggle to meet their commitments to the European Monetary Union. Fiscal austerity will further strain defense budgets. European allies play a greater role in operations in Europe than the United States. Europeans provided two-thirds of the forces to IFOR and SFOR. The United States furnishes three combat brigade equivalents to NATO's Reaction Forces (Ground), while other allies contribute 38.

Current trends reinforce congressional concern that key allies are not prepared to share the burden of developing a power projection capability. Germany, with current defense spending in the area of 1.7 percent GDP, plans to cut defense spending by \$5 billion over four years. In the United Kingdom, the Labour government is conducting a defense review, looking at long-term strategy through the year 2015 to challenge assumptions about defense policy, and will probably address such unconventional threats as drug trafficking. Although British transatlantic policy probably will remain unchanged fundamentally, it may assume both a more European orientation and increasing reliance on U.S. power-projection

capabilities. The 1997–2002 French defense plan will reduce procurement spending by 20 percent, and its equipment budget will suffer the greatest ongoing cuts in 1998, to meet EMU criteria.

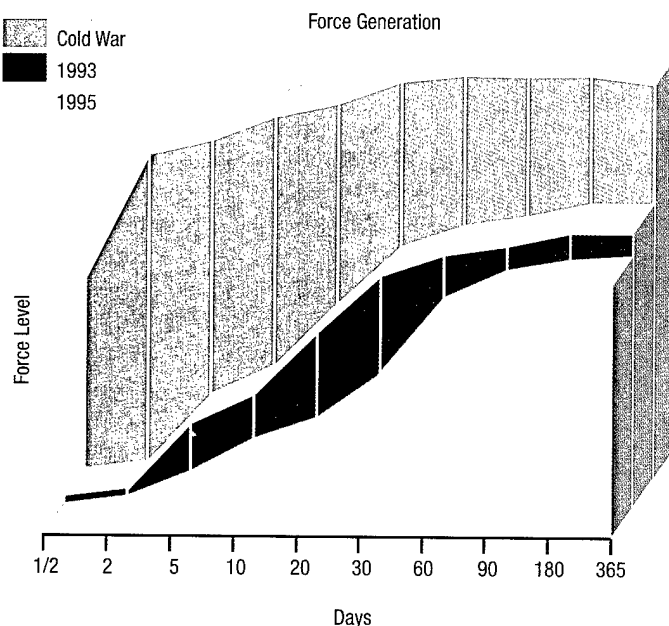
Generally, Europe is falling behind the United States in technological capabilities. Despite early talk of an independent ESDI, the trend, as said above, is toward increased dependence on the force capabilities of the United States, particularly in the areas of strategic lift, logistical sustainability, and the gathering, processing, and dissemination of intelligence. The trend stems largely from the reluctance of European allies to invest in defense programs for power projection or from an inability to agree on the source of the necessary equipment. Similarly, the gap in technology reflects the divergence in R&D strategies of the United States and European defense establishments. If this gap continues, the United States may find itself so advanced in critical warfighting skills—for example, in command, control, communication, computers, and intelligence (C⁴I) operations—that it will not be able to function with core partners.

Although the United States has emphasized an increased role for Europeans in and out of Europe through the Combined Joint Task Forces (CJTF) concept, Europeans remain reluctant to act without U.S. leadership, as was illustrated by European insistence on either continuing U.S. engagement in Bosnia or withdrawal if the United States withdraws. In the other major crisis affecting stability in Europe—Albania—neither NATO nor the WEU was prepared to engage the belligerent parties directly and thereby forced a coalition of the willing to emerge without institutional support of either NATO or the WEU.

Transition, Reform, and Integration

The U.S. strategy of supporting NATO enlargement while building special partnerships with Russia and the Ukraine has contributed to consolidating reform in Central and Eastern Europe. Countries such as Romania, Bulgaria, and the former Yugoslav Republic of Macedonia have made substantial progress toward democracy and free-market reforms. The long-term picture

Force Level and Readiness Comparison



SOURCE: Roland Smith, "A Changing NATO," *NATO Review* 45, no. 3 (May–June 1997)



President Clinton visiting Bosnia

in Russia remains uncertain, but Moscow has held Russia's first democratic presidential election, and reform-oriented politicians now head the Yeltsin government. Indeed, although critics had warned that NATO enlargement could hinder reform in Moscow, reformers still hold all key positions in the Russian government.

In an effort to balance Russian concerns, keep Europe undivided, and encourage positive trends, in January 1994 NATO initiated the Partnership for Peace (PfP) program, developing specific principles for NATO enlargement. NATO leaders determined that new members would have to conform to basic principles of democracy, individual liberty, and the rule of law; demonstrate a commitment to economic liberty and social justice; and adhere to the norms and principles of the Organization on Security and Cooperation in Europe (OSCE). Conditions for candidacy include effective democratic control of the military and some degree of military capability and interoperability. In addition to active participation in Partnership for Peace (PfP), new

members would have to assume the financial obligations of joining and of developing necessary interoperability, including defense management reforms in transparent defense planning, resource allocation and budgeting, appropriate legislation, parliamentary and public accountability, and minimal standards in collective defense planning to pave the way for more detailed operational planning with the Alliance. Finally, new members should not "close the door" to future candidate members. By creating such quantifiable standards, the United States and its allies sought to enhance stability in Central and Eastern Europe. Most of the countries that want to join NATO have made considerable progress toward meeting these goals.

Heads of state of member countries agreed at the Madrid Summit that Poland, Hungary, and the Czech Republic most closely met these goals. They also noted the positive developments towards democracy

**Baltic Challenge '97**

and the rule of law in a number of south-eastern European countries, especially Romania and Slovenia, and agreed to review the enlargement process at the April 1999 summit in Washington. Special mention was given to the three Baltic countries for their important contributions to security in that region.

NATO enlargement continues a trend of adapting the Alliance to meet post-Cold War challenges. Where this trend may lead in the long term is unclear, though NATO

may be moving away from its traditional mission of collective defense and toward a hybrid of cooperative security and more active involvement in regions outside its traditional area of operations.

NATO may evolve into a standing institution that facilitates military operations after a consensus has been reached among coalitions of the willing. Because it makes international cooperation easier to attain, the Alliance does not require an immediate threat to survive. Yet NATO is only one part of a broad, complementary institutional framework for European security.

One important element of the trend toward cooperative security is the Alliance's effort to expand contacts with Russia. During the negotiations with Russia following the decision to enlarge NATO, the United States and NATO agreed to establish a NATO-Russia Permanent Joint Council. Participants will consult and coordinate regularly and, where possible and appropriate, act jointly—as in the Bosnia-Herzegovina operations. In negotiating the Founding Act, NATO stated that for now and in the foreseeable security environment, the Alliance will carry out collective defense and other missions through interoperability, integration, and a capability for reinforcement, rather than increasing the existing permanent stationing of substantial combat forces on the territory of new members. Russia was granted a "voice but not a veto" in NATO decisionmaking processes. Significantly, the Alliance has no clear mechanism to determine when crises with Russia might prove sufficient to force an end to the relationship.

The immediate trend is toward enhancing a cooperative security environment that favors coalition building. For example, the IFOR and SFOR experiences in Bosnia have become models of multilateral security cooperation based on an inclusive strategy of using the military resources of the Western core and integrating transition countries into the Western system of multilateral military operations. The NATO model of cooperative security will probably continue to be important to the future of Europe and beyond, particularly if Russia plays a positive role. Other cooperative

efforts include the newly created Euro-Atlantic Partnership Council (EAPC), which replaced the North Atlantic Cooperation Council, and continued strengthening of the OSCE. Such initiatives contribute to a functioning arrangement of mutually reinforcing institutions, among which the United States plays a key role.

Stabilizing Failed States, Avoiding New Failures

Efforts to stabilize failed states have been mixed. In the Balkans, the trend has been toward stability without security. Peace in Bosnia-Herzegovina after the 1995 Dayton Accords is a peace without security, one that forced increased involvement of NATO states through the arrest of the primary indicted war criminals, beginning in mid-summer 1997. Whether a single Bosnia can exist remains an unsettled question. Peaceful reconciliation and renewed integration appear possible, but partition or a return to full-scale war cannot be ruled out.

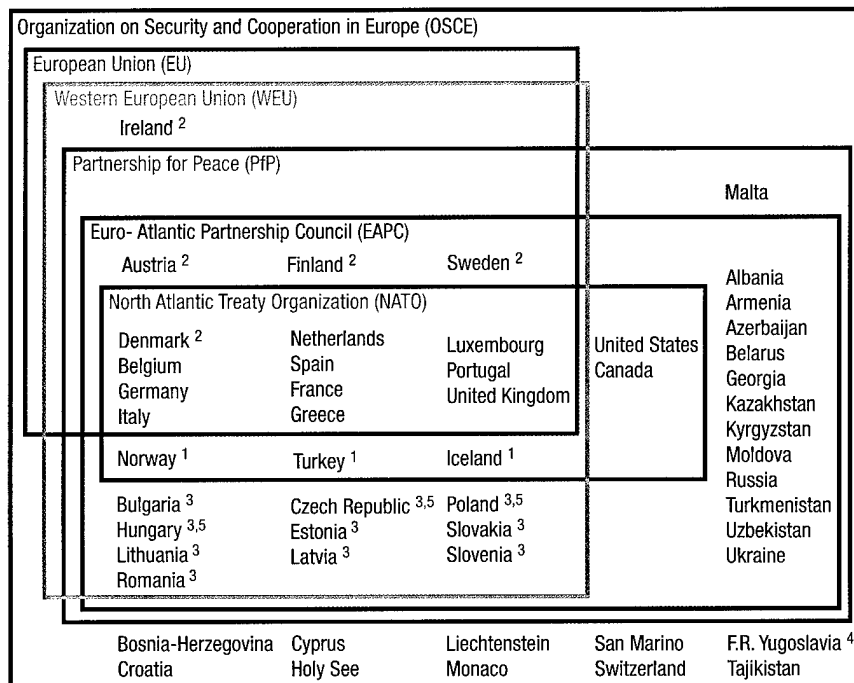
In Albania, the other failed state, the outlook seems to hold greater promise, although further international attention is

required. Operation *Alba* restored a basic sense of security there, following the collapse of political and economic structures in early 1997. After the operations ended, the United States and allies, complemented by the NATO PfP program, began to search for ways to rebuild the Albanian military along democratic lines, which may take years.

Deterring Rogues

Rogue states on Europe's periphery pose potential threats to European interests as much as or more than to U.S. interests. Rogue states have been known to sponsor terrorism capable of striking Europe. They also seek access to weapons of mass destruction (WMD) and long-range delivery systems that ultimately could threaten Europe. If rogues gain control of the Persian Gulf or major oil fields in the region, they would have the means to blackmail if not directly threaten NATO allies. Within Europe, Serbia has become an outcast in the European system and might well harbor ambitions of obtaining chemical weapons, if not other WMD. Belarus, another outcast in the European system, openly espouses antidemocratic and anti-market principles and is capable of selling weapons and key materials for the manufacture of WMD to rogue states. Deterrence of rogue states is an important purpose of the U.S. presence in Europe.

Interlocking European Organizations



¹ WEU Associate Member

² WEU Observer

³ WEU Associate Partner

⁴ Suspended Member

⁵ NATO Candidate

Shaping the Strategic Environment

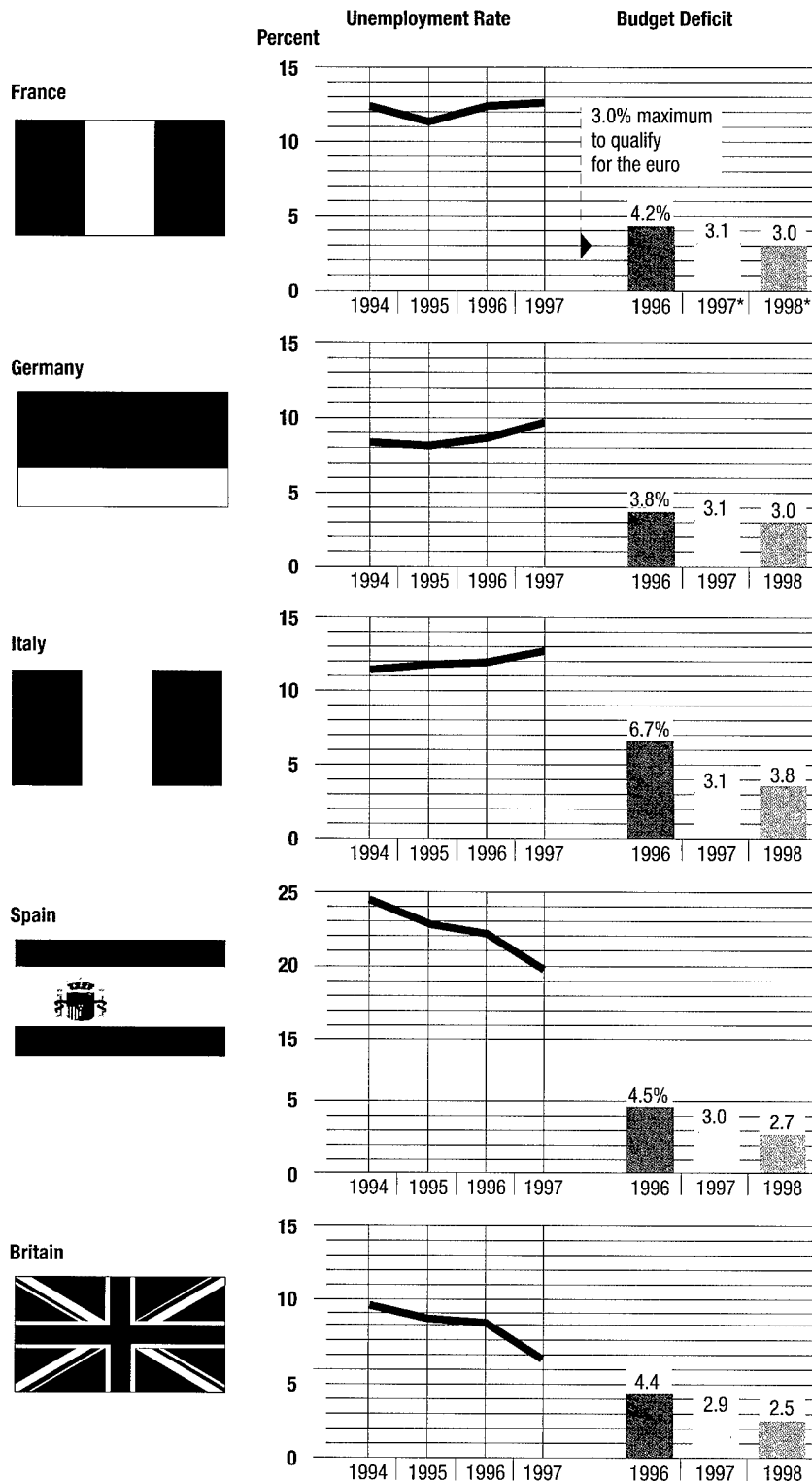
In Europe, the United States has an opportunity to shape the strategic environment to ensure stability well into the 21st century.

Avert Conflict

Enlarging NATO to include Poland, Hungary, and the Czech Republic is a fundamental element of a long-term preventative strategy to avert conflict in 21st century Europe. In the 20th century, two major wars were fought over security competition between Germany and Russia and the security vacuum that lay between them. A cautious and deliberate enlargement of NATO will virtually eliminate the possibility of

Toward European Monetary Union Criteria

Stubbornly high unemployment in many Western European countries has made it politically difficult for some governments to cut their budget deficits enough to meet the criteria for monetary union. Here is how the five leading European Union members are faring:



* Figures for 1997 and 1998 are forecasts.

SOURCE: Organization of European Cooperation and Development and Bloomberg Financial Markets

nationalization of armed forces in Europe and inhibit the interest of any country in seeking regional power. An enlarged NATO would help ensure that the United States need not again shed blood and expend resources in Europe and would inhibit the ambition of any state to pursue its aims through force.

Another goal of the United States in Europe is to manage and contain crises such as in the former Yugoslavia. Working closely with its allies, the United States helped implement the Dayton Peace Accords and served as a deterrent against the spread of fighting. Extension of the NATO mandate in Bosnia demonstrated American willingness to sustain the peace. In the longer run, the United States may continue to help shape the environment, however, by maintaining some involvement in the region through "over-the-horizon" forces which exercise on the territory of Bosnia-Herzegovina. As a result, it would complement efforts by its allies to deter conflict on the ground independent of a long-term commitment of U.S. forces. Attaining such a compromise between the United States and its allies would be of strategic significance, because the U.S. Senate may find it difficult to support conflict aversion strategies in Europe if America's allies are not seen as committed partners willing to exercise responsibility for security on the continent.

The United States will seek to use its force presence and diplomatic influence to avert conflict between two historic enemies, Greece and Turkey. In 1997, it took substantial steps complementary to those of NATO Secretary General Javier Solana to promote confidence and security-building mechanisms between these countries. The appointment of Special Envoy Richard Holbrooke sent a strong signal that the United States will use its resources to shape a lasting stability between them. Small steps, including U.S. provision of a secure communications systems at NATO Headquarters to link Ankara and Athens with the NATO Secretary General's office, provide enhanced confidence there that small misunderstandings will not lead to a major conflict.

Russians disembarking from U.S. landing craft



Collective self-defense (Article 5) issues are increasingly not the day-to-day activity of NATO, because there is no threat to any current or future member. Nonetheless, the credibility of the collective defense principle underpins the security of its current and future members. Thus, as NATO enlarges and its internal collective defense apparatus transforms, maintaining credible deterrence forces will be essential to make its commitment valid. The United States successfully convinced its NATO allies that, while new member states will not need large-scale infrastructure investment, it would be important not to negotiate away their infrastructure rights and obligations. These rights remain important in the unlikely event that a threat may require a rapid defense facilitated by such basic infrastructure needs as command and control, intelligence, and logistics for rapid deployment of forces in these new member states. Such infrastructure issues are central to credibility in the process of NATO's enlargement.

Although NATO cannot commit in advance to confront threats to members' common interests outside Europe (e.g., in North Africa or the Persian Gulf), the

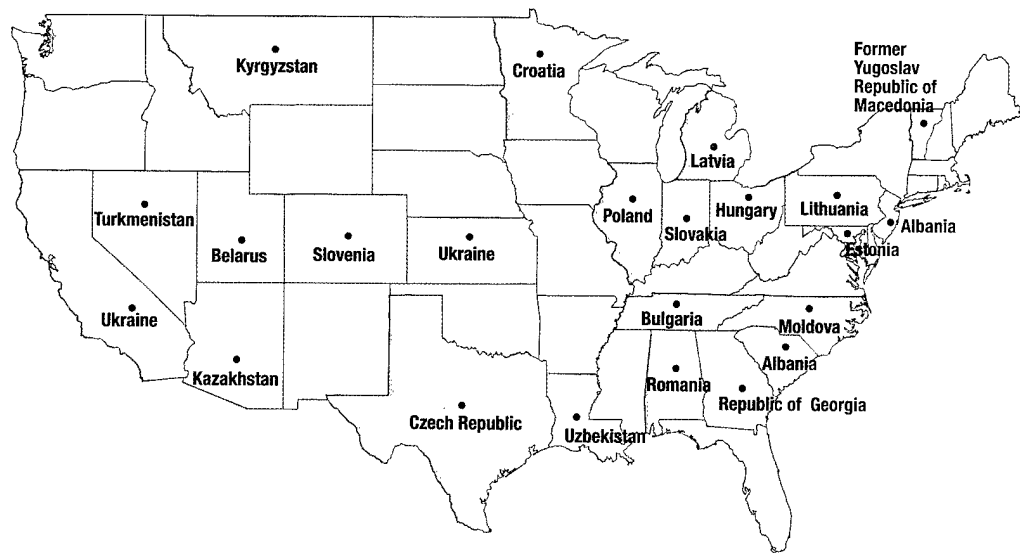
habits of cooperation, command and control, and joint exercises increase the likelihood that coalitions that include the United States and its European allies will be formed to meet such threats.

Enhance Confidence

NATO has a proven record in promoting reconciliation between adversaries. Institutionalization of transparent defense budgeting and force planning has contributed to confidence and security among European allies. Small members of NATO, such as the Netherlands, Belgium, Luxembourg, Denmark, and Norway, today feel secure in the shadow of their large German neighbor because of the defense-planning practices institutionalized in NATO. The U.S. nuclear umbrella in Europe also prevents European states—particularly Germany—from needing to develop independent nuclear capabilities.

NATO's greatest achievement since the end of the Second World War is the confidence, security, and stability that have developed in Western Europe. A major challenge at the opening of the 21st century is to expand the institutionalized zone of confidence, security, and stability to Europe's eastern half and to facilitate the region's return to Europe. NATO cannot do

State-to-State Partnerships



SOURCE: *NATO Review* 45, no. 3 (May-June 1997)

this alone. The European Union (EU), too, has facilitated common political and economic practices among its members, and it will continue to complement NATO in this endeavor. A further challenge to both will be to encourage key European partners to contribute more broadly to common security.

The Conventional Armed Forces in Europe (CFE) treaty provides the legal framework for maintaining transparent and defensive-oriented military planning in Europe. But the allies need to revise it to reflect the new strategic environment that followed on the collapse of the Warsaw Pact. Thirty parties agreed to the scope and parameters for adapting the original treaty in December 1996, thereby agreeing to adapt CFE to an evolving security environment. NATO has served as a primary conduit for attaining a common position among the United States and its allies during CFE adaptation negotiations. The United States, through NATO, helped significantly in adapting and shaping the strategic environment in Europe. Together, the allies presented an ambitious proposal in February 1998, including the following key components:

- **Equipment reductions:** A call by the 16 current members for lower equipment entitlements in the CFE area and a specific

commitment to total ground-equipment entitlements under an adapted treaty that will be "significantly less" than members of the Alliance are allowed under the 1996 treaty. Such reductions in standing forces, accompanied by restructuring NATO forces to make them more mobile, deployable, and operationally capable, are consistent with CFE commitments.

- **New treaty structure:** NATO's proposal established a system of national equipment ceilings to replace the CFE's structure of bloc limits. It also replaced the treaty's regime of zonal limits with nationally based territorial ceilings, which constrain the amount of ground equipment on the territory of any one CFE state. The new structure would preserve the existing regime of constraints covering the treaty's "flank" region.

- **Prevention of destabilizing concentrations of forces:** The proposal included a measure to ensure that under an adapted treaty—even in the context of NATO's enlargement—no increase in ground equipment would be permitted on the territory of states at the geographic center of Europe (Belarus, the Czech Republic, Hungary, Poland, Slovakia, Ukraine outside the flank, and the Kaliningrad Oblast of the Russian Federation).

CFE Treaty

	Tanks	Artillery	Armored Combat Vehicles
Original Flank Limit	1,800	2,400	3,700
Permitted to 1999	1,897	2,422	4,397
New Flank Limit	1,380	1,680	1,380

NOTE: Changes in the treaty limited items in flank zones.

● Responsiveness to new security challenges: CFE states retain flexibility to conduct cooperative military exercises, participate in peacekeeping operations, and deploy forces temporarily in emergency situations. These activities would be subject to consultation with other CFE states.

The result of the CFE adaptation negotiations should be to transfer limits on the number of heavy weapons that countries could hold in Europe from "groups of states parties"—meaning NATO (and the former Warsaw Pact)—to individual states. In this way the security of all treaty parties will be protected, and in response, NATO flexibility or defense planning will not be undermined. The CFE Treaty thus continues to be central to security within Europe.

Since the inception of Partnership for Peace in January 1994, NATO has reoriented its outreach programs and developed new institutions to manage the program. Despite initial reservations of many Central and East European states, which had hoped for an early decision on enlargement, PfP has become a very popular and successful program. Open to all members of OSCE, in just four years PfP has been adopted by 27 widely diverse countries, including the former Soviet Union and Yugoslavia, non-Soviet Warsaw Pact states, and neutrals.

The political principles reflected in PfP are drawn from the Washington Treaty of April 4, 1949. NATO began to apply these principles through the PfP program. Former Secretary of Defense William Perry's "five principles" emphasized democracy, free market economies, good relations with neighbors, democratic

control of the military, and the establishment of a military compatible with the standing forces of NATO as a prerequisite for joining the program.

To enhance confidence, these principles have been building blocks for developing security in Central Europe. As in the Franco-German reconciliation, historic reconciliations are occurring between Germany and both Poland and the Czech Republic and between Slovenia and Italy, all of them established by treaties that recognize borders as well as by combined military activities and cooperation. Similarly, Poland has expanded the zone of confidence building and cooperation to Lithuania and Ukraine.

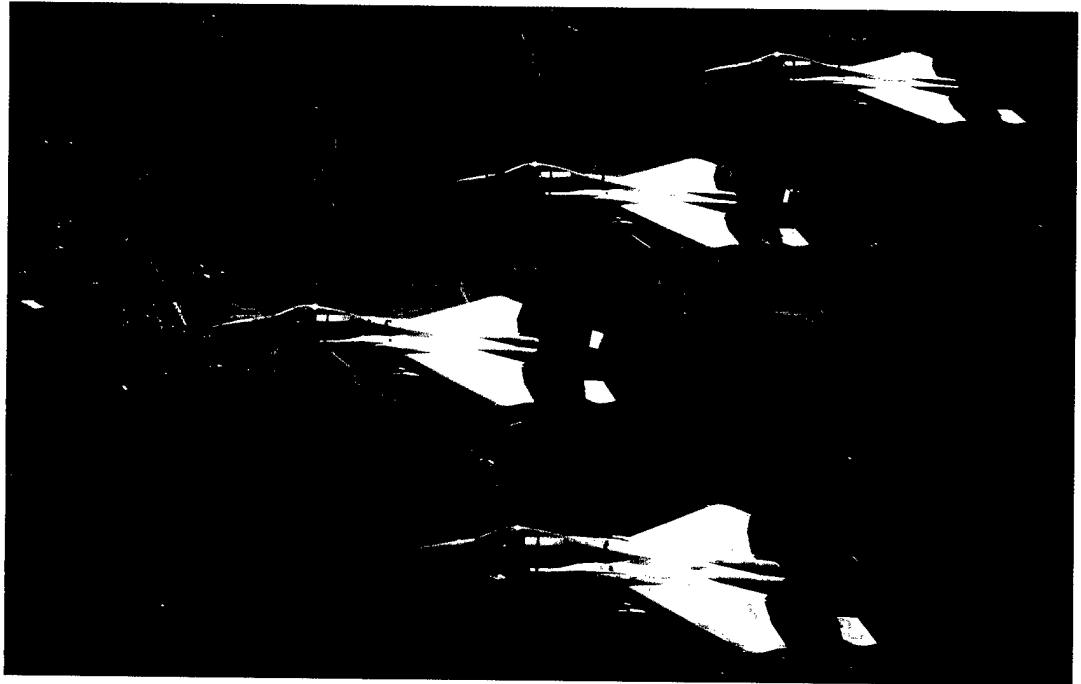
A few other examples nurtured by PfP and NATO enlargement include the basic treaties between Hungary and Slovakia and among Romania, Hungary, and Ukraine. Such treaties not only recognize existing borders, but also establish standards for the governance of ethnic minorities. All these agreements enhance confidence within the region.

Promote Defense Reform

Building on enhanced confidence, NATO has encouraged military cooperation and reform not only at the Partnership Coordination Cell (PCC) at SHAPE headquarters in Mons, Belgium, but through the Planning and Review Process (PARP) at NATO headquarters in Brussels. In January 1994, the PCC initially coordinated military planning and activities for partners in order to develop both NATO-compatible procedures and interoperability for combined peacekeeping, search and rescue, and humanitarian assistance operations. To prepare partners to deploy the Implementation Force in Bosnia, in December 1995 NATO expanded the terms of reference to include "peace enforcement measures." Again in 1997, military cooperation was broadened to include general defense planning.

PARP is an effort to provide transparency in defense planning, much as the Defense Planning Questionnaire does among NATO members. Since 1994, it has formed the institutional basis for developing real confidence in Europe's eastern half.

F-15s over Denmark



In addition, the United States, through outreach to Central and Eastern Europe, has undertaken substantial assistance programs to ensure that NATO's objectives are successful. In 1997, the Foreign Military Financing program was increased for the first time in 13 years, to include:

- A \$60 million grant for PfP countries, \$30 million of which will go to Poland, Hungary, and the Czech Republic
- \$242.5 million for the Central European Defense Loans (CEDL), to be repaid at U.S. Treasury loan rates
- \$120 million for the Warsaw Initiative Program
- \$12 million for International Military Education and Training (IMET).

Former Secretary of Defense William Perry's Five Principles for Prospective NATO Members:

- Commitment to democratic government and rule of law
- Commitment to a free-market economy
- Establishment of effective civil control of the military
- Development of good regional relations
- Establishment of minimal standards of interoperability with NATO forces

Complement Friends

The United States continues to complement its allies' infrastructure and interoperability within the NATO command structure. The most important element of this effort is the strong U.S. support for the evolution of a European Security and Defense Identity (ESDI) within NATO. At first, the United States was reluctant to endorse proposals for an ESDI based on the EU, but declining resources and force commitment in Europe (reduced to just over 100,000 U.S. troops) have given the United States cause to reassess, particularly since NATO has replaced the EU as the cornerstone for the initiative. The Berlin Accords of 1996 paved the way for the development of an ESDI within the NATO context, and they embodied the concept of a separable but not separate ESDI from the Alliance.

As the ESDI develops, it will have increasing impact on NATO-wide standards that incorporate the most effective and efficient technological advances in order to deter and meet various levels of challenges to security within and outside Europe. Enhancements to interoperability and infrastructure—areas currently neglected—will be essential to the complementarity of military equipment within

Western Defense Equipment Spending (1994-96)

Figures are constant 1996 in millions (U.S. \$)

Year	United States	Germany ^a	Italy	United Kingdom	France	NATO Europe
1994	81,727	5,161	2,204	14,132	14,897	40,944
1995	82,941	5,825	2,204	14,526	17,558	46,946
1996	80,169	5,944	2,684	12,818	14,507	42,591

Source: International Institute for Strategic Studies, *The Military Balance*, 1996-97**Western Arms Trade (1987-95)**

Figures are constant 1996 in millions (U.S. \$)

Year	United States		Germany ^a		United Kingdom		France	
	Arms Exports	Share of Global Market	Arms Exports	Share of Global Market	Arms Exports	Share of Global Market	Arms Exports	Share of Global Market
1987	20,800	26%	1,891	2%	6,428	8%	3,655	5%
1988	16,510	23%	2,185	3%	5,826	8%	2,427	3%
1989	18,810	30%	1,510	2%	5,806	9%	2,671	4%
1990	18,140	34%	1,892	3%	5,119	9%	5,565	10%
1991	15,110	41%	2,465	7%	5,252	14%	1,929	5%
1992	15,093	49%	1,356	4%	4,797	16%	1,564	5%
1993	17,506	52%	1,735	5%	4,491	13%	2,613	8%
1994	15,275	52%	1,313	4%	4,250	14%	3,027	10%
1995	13,300 ^b	44%	1,410	5%	4,800	16%	3,800	13%

^a Prior to 1991, figures are for West Germany only.^b This figure is preliminary and excludes commercial deliveries of up to \$3 billion.Source: International Institute for Strategic Studies, *The Military Balance*, 1996-97.

NATO for present and new members alike. To date, however, the existing situation has not translated into either a political willingness or a military capability to put theory into action to solve contemporary crises. A primary lesson learned from Bosnia is that although NATO adapted considerably as an alliance, it functioned in a crisis only when led by the United States. European capacity to handle low-to mid-level crises (with significant assistance from the United States) will be essential to a politically sustainable transatlantic relationship into the 21st century.

Shape Potentially Hostile Actors

Because current and future threats to Europe come from outside rather than from within the continent, credible efforts are needed to signal potentially hostile states that the United States cannot be separated from its core allies—even when immediate policies may appear to diverge. The primary deterrence mechanism will be to establish a clearly defined transatlantic bargain in which the United States and its allies signal shared responsibility for responding to global challenges. During the Cold War, Soviet strategy sought to divide the United States and its allies in the European theater as a political means of weakening the NATO alliance. Such a strategy may appeal to states that cannot threaten Europe hegemonically but might nonetheless have an interest in dividing the West as a means of attaining national interregional objectives. For example, Iran might seek to play allies off one another as a way to limit any international response to its growing regional influence in the Middle East. A potentially hostile China might pursue similar strategies.

Military steps can be taken to send a message to hostile countries that asymmetric challenges to the core carry risks and, if pushed too far, could backfire. Successful internal transformation of NATO is key to transparent defense planning and preparation for potential asymmetric challenges such as hostage taking or proliferation of weapons. Using allied military planning to shape the strategic environment beyond Europe, however, will mean a new strategic doctrine within the Alliance to provide clear political guidelines for military planning to meet asymmetric threats to the Alliance. Identification of a number of potential threats, along with combined training to respond to them in a transparent manner within the Alliance, will send any potentially hostile country a strong message of deterrence. At the same time, these efforts will give NATO a clear military sense of purpose in the absence of an immediate standing military threat, such as existed in the Cold War.

Qualities of U.S. Power Accentuated in Europe

Power Projection	C ⁴ ISR	Joint Doctrine	Lethality	Robustness	Model Establishment

☐ very important
☐ important

Conclusion

Since the end of the Cold War, the U.S. military presence in Europe has been dramatically reduced. The overall number of U.S. troops stationed there has fallen from 320,000 to about 100,000 and will stay at that level for the foreseeable future. In addition, 90 percent of the nuclear weapons under NATO control have been withdrawn from the theater. The level of U.S. forces in Europe during 1997 was 109,000 (excluding naval and marine forces stationed in nearby seas), the lowest level that the Department of Defense has determined is sufficient both to respond to a plausible crisis and to provide tangible evidence of U.S. commitment to preserving regional stability. This level permits active participation in multinational training events while minimizing the likelihood of *needing to deploy* additional forces from the United States in early stages of an emerging regional crisis.

Maintaining a sufficient level of U.S. forces in Europe is essential to responding to contingencies on and around the continent, as well as in Africa and the Middle East, and to securing U.S. influence in Europe. Command familiarity, training, and interoperability between NATO forces and the U.S. European Command enhance the effectiveness and plausibility of future multinational coalitions. Without a full spectrum of U.S. forces operating in Europe, Washington would have to discard the goal of more effectively shared contributions from key partners.

Despite the overall reduction of ground forces in Europe, remaining units are very active. European-based formations provided the bulk of U.S. ground forces for the NATO peacekeeping mission in Bosnia and Herzegovina and for operations in Africa and the Middle East. The U.S. European Command is forging links with partner-country militaries through the PFP and other bilateral programs.

As the United States continues to adapt its force structure to address multiple challenges, the key question is no longer how many troops are needed in Europe but, rather, what are they doing? For example, if the primary security challenges are viewed as coming from the south, the disproportionate number of U.S. forces stationed in Germany may be called into question. Alternatively, the role of German armed forces may expand to include further deployments outside German territory. In that environment, Americans working alongside and supporting German forces would ease historical concerns that may come with such activity. In the future, the role of U.S. forces in regional operations in Europe may be both larger and more complementary to allied forces.

The New Independent States



The overarching U.S. goal in the New Independent States (NIS) is to assure the successful transition of these states toward open-market democracies. Although U.S. interests in this region are less vital than they were 10 years ago, Russia, Ukraine, and the other Soviet successor states remain of great strategic importance. If their transition occurs as the United States hopes, a vast region of great economic and geopolitical potential will join the community of core states in promoting shared goals, values, and objectives. If, however, it does not, the resultant instability could give rise to new threats that will distract the core states and impinge on their health and security. Since the demise of the Soviet Union, the United States and its allies have therefore made major diplomatic efforts and expended significant resources in the region.

U.S. Interests

The U.S. long-term interest in the NIS is in their development from transition to core states, rather than a decline to rogue or failed states. By 2008, Russia is not likely to have emerged as a peer competitor to the United States. If transition falters during this time, however, one or more of the NIS may concentrate its limited resources and energies on rogue activities. If transition fails, one or more of these states may become sufficiently unstable to cause multiple unpredictable security problems.

In considering U.S. interests, and therefore strategy toward the NIS, Russia and Ukraine clearly represent the most important challenges. They share many attributes: they have come furthest on the path toward reform, each has a complex history in relation to the other, and both present important security concerns for the United States. Much of this chapter therefore focuses on issues especially relevant to Russia and Ukraine.

The second group consists of the Caucasus and the energy-rich Central Asian states, which also have many common characteristics, complicated and intertwined histories, and shared security issues. Although core states' interests in this

group are not now vital, the importance of these interests will grow as these states develop their energy resources. Countries as diverse as China, Iran, Turkey, Russia, and the United States have invested in the region, becoming involved in complex relationships, based on both competition and cooperation, whose key dimensions and dynamics will become apparent in the next decade.

Belarus also could pose a security challenge. Political and economic trends there have been a tremendous disappointment. Belarus verges on failing and has the ability to export instability beyond its borders to the Baltic States, Poland, Ukraine, and Russia. There is little reason to believe that Belarus has achieved a sustainable equilibrium and many reasons to believe that in the next decade it will face serious political and economic stresses affecting both its stability and the interests of the core.

Control and Reduce Weapons

Since the collapse of the Soviet Union, the primary security threat has been and remains the control and reduction of weapons of mass destruction (WMD). Progress toward resolution of this problem has been significant, although there is still much to be done. Remaining issues include the following:

- Ratification of Strategic Arms Reduction Treaty (START II) by Russia
- Shifting to START III
- Compliance and transparency of the Chemical Weapons Convention (CWC)
- Compliance and transparency of the Biological Weapons Convention (BWC).

Develop Stability

Internal stability in the New Independent States has direct ramifications for the security interests of the core states. It would imply a successful transition to open-market democracies, that is, the expansion of core states. Instability in the new independent states would raise the possibility of numerous security problems, from proliferation to armed conflict. In the worst case, strategic nuclear weapons may again become tools of diplomacy.

Given its size and arsenal of WMD, Russia's stability is obviously important. The stability of Ukraine is also critical, but for reasons less straightforward. Ukraine's geographic, cultural, and economic proximity to Central Europe makes it the "key-stone" of the arch between Europe and Eurasia as well as an important link between the core states in Europe and the Soviet successor states. Further, Ukraine may prove an important center of political and economic gravity independent of Russia and, with a successful transition, may influence events and export stability and reform to smaller states in the region.

Finally, regional stability implies respect for sovereignty and boundaries, with no state pursuing its perceived interests by threatening another.

Promote Integration

Integration into the political, economic, and security systems espoused by the core states serves two broad purposes. Domestically, integration with the West promotes stability by supporting the development of efficient markets and reliable social and political institutions. Internationally, it encourages transparency on a variety of bilateral and multilateral issues, including security. In the long term, integration with the West helps redefine existing interests and reveals new ones shared with the core states. Among these are proliferation, human rights, and the sovereignty of neighboring states. In essence, integration encourages the development of transition states into core states.

Create New Markets

Given the potential size of the economic space the NIS represent, their existing energy and raw materials reserves, and their potential manufacturing and financial power, those new markets will be increasingly important to core states. Secure and dependable access to energy resources in the region will further promote stability and foster cooperation with the core states in the long run.



Secretary William Cohen in Kiev, Ukraine

Current Trends

The situation in and among the New Independent States is complex and dynamic. Change is the only constant. Discerning the medium-term outlook is difficult, but several trends are already identifiable.

Reduction of WMD

Although there are forces impeding arms control efforts in Russia, they are outweighed by the momentum generated by recent arms control achievements. Since the collapse of the Soviet Union, Russia and the United States have collaborated to make Kazakhstan, Ukraine, and Belarus free of nuclear weapons. The START I treaty has entered into force, and its implementation is ahead of schedule. Russian and U.S. strategic weapons have been de-targeted. The Nuclear Non-Proliferation Treaty (NPT) was extended indefinitely in May 1995, and the Comprehensive Test Ban Treaty was signed by both countries in September 1996. In September 1997, Vice President Al Gore negotiated an agreement with Russia to convert its last three plutonium-producing plants to facilities that generate uranium for civilian uses.

The most important next step in arms control is START II. If implemented,

START II will define the basic parameters of arms control efforts for the next 10 years. In January 1996, the U.S. Senate ratified the treaty, but ratification in the Russian Duma has been stalled owing to concerns about the military and economic ramifications of implementation. To address these concerns, in September 1997, the United States and Russia reached important agreements on refining the ABM Treaty, theater missile defense, and issues concerning implementation of START II. They also outlined ways to begin negotiations on START III. Russian President Boris Yeltsin committed his government to working with the Duma to achieve ratification, but the outcome remains far from certain. How the United States would respond to either further Russian delay in ratification or a failure to ratify could be an important issue in the near term.

Russian opponents to START II focus on the following arguments. First, START II hits at Russia's only remaining strength, its land-based ICBMs. It bans all land-based ICBMs with multiple, independently targeted reentry vehicles (MIRVs), the backbone of Russia's strategic arsenal. The United States, in contrast, has many more submarine-based missiles, which are not banned by the treaty. Fully implemented, START II would leave Russia with approximately 3,000 warheads deployed. The United States would have approximately 3,500. More important to the Russians is the fact that because of technical considerations and the terms of the treaty, the United States might be able to upload and breakout of the treaty limits much faster than Russia. Finally, many in the Duma feel that the Russian government has not done enough to factor the impact of START II reductions into its overall defense and force structure planning. The Duma will need strong evidence from the government that it has adequately dealt with these issues.

A second important Russian argument is based on a disagreement about the economics of the treaty. Many Duma members focus on the short-run costs of implementing the treaty rather than the longer term advantage that START II saves both sides



MI-35P HIND attack helicopter

money. One of the agreements reached between Presidents Clinton and Yeltsin in September 1997 was to extend the implementation period of the treaty from 2003 to 2007 to lower the average annual cost of implementation, although the total cost, of course, increases.

Although far from certain, a two-phase approach to these problems is likely to evolve over the next 10 years. First, eventual Duma ratification of START II is likely, though it may be delayed. The political pressure on the Duma from the Russian government and from the core states will be tremendous. The economic pressure will also become increasingly clear as more and more Russians come to understand that implementing START II makes economic sense. Moreover, from a strategic perspective, the reasons for ratification are also compelling. Many of Russia's SS-18 and SS-24 missiles are nearing retirement age and replacing them would be expensive and controversial. It is almost a given that the overall levels of Russia's warheads and missiles will drop to below START II targets on their own, unless the Russians field an expensive new system. In sum, logic suggests that it is better for Russia to ratify START II and thereby commit the United States to the cuts as well.

START III represents the second major phase in arms control efforts for the next decade. The major contours of the Treaty were agreed to by Presidents Clinton and

Yeltsin at the Helsinki summit in March 1997. The initial parameters of START III are to reduce warhead levels to 2,000–2,500.

Russian progress in other areas of arms control has not been so impressive and is less likely in the near future. In particular, the government's ability to adequately control WMD and related technologies and personnel has raised questions. The precarious economic situation of the Russian defense establishment is widely known. Production and storage enterprises for nuclear, chemical, and biological weapons continue to engage in activities that contradict various nonproliferation regimes, including both the chemical and biological weapons conventions. Until and unless the Russian government can reimpose order and accountability on its defense industries, such problems and questions will persist.

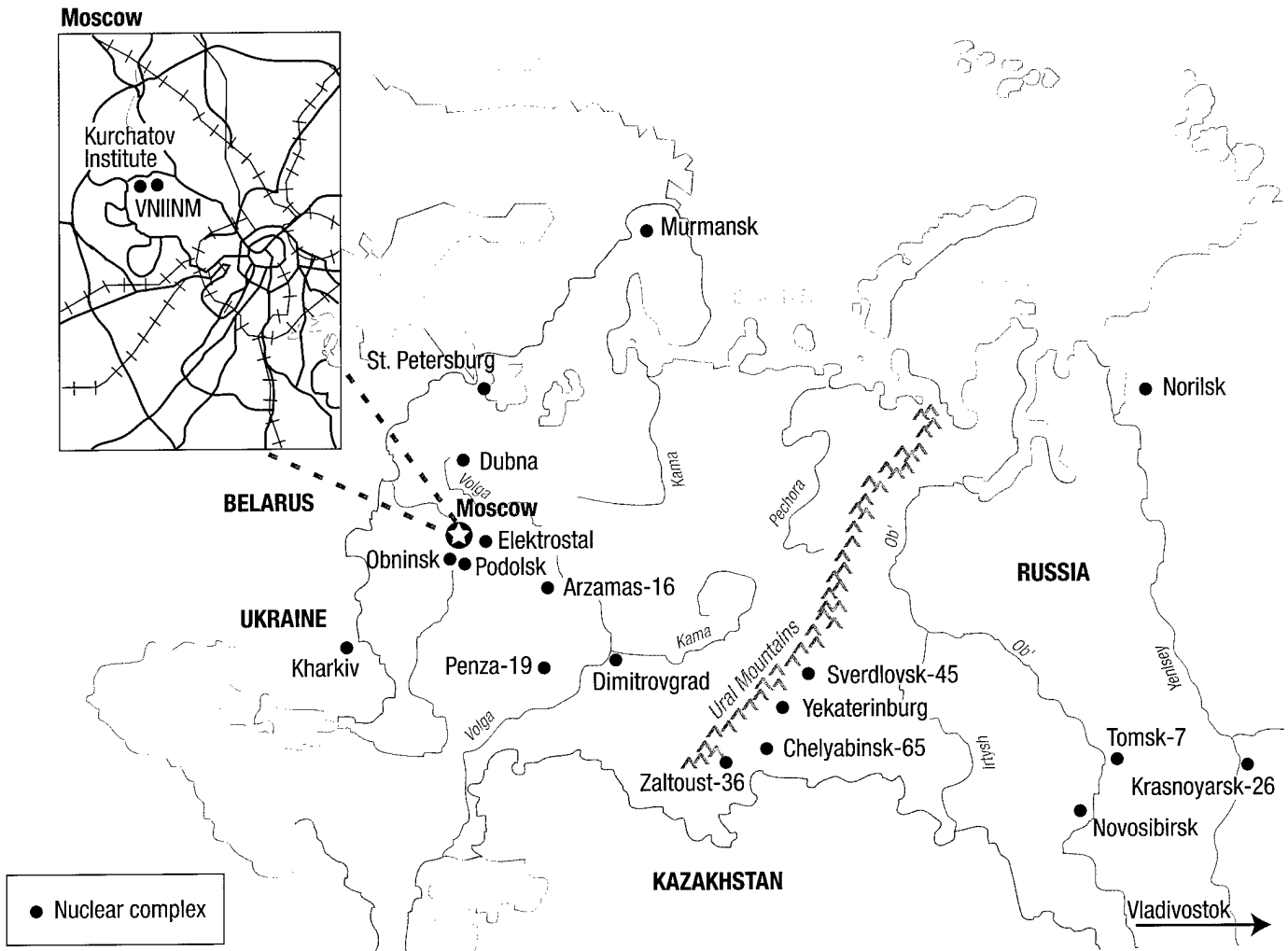
Arms control issues in the other NIS are of less concern, even though specific problems do exist. In particular in Kazakhstan and Belarus, lingering biological research and development activities may not be in compliance with the BWC. The challenge will be to engage these and other countries in the region in efforts to correct and prevent future proliferation transgressions. Yet control of the flow of technologies, expertise, and personnel relevant to WMD will continue to be a problem, especially for Ukraine, Belarus, and Kazakhstan because of the breakdown of control systems and ongoing restructuring of the economies.

Uneven and Uncertain Transition

Russia, Ukraine, and most of the other New Independent States have made progress in their transition from the Soviet socialist system, but where these countries are headed remains unclear. This question is of enormous importance to the core states. Should their transition falter, the emergence of new failed or rogue states would affect U.S. interests and present new security challenges.

Of all the NIS, Russia has gone furthest toward reform. It has stabilized its currency, privatized approximately 70 percent of its economy, and created a fledgling

Russia's Network of Nuclear Complexes



Source: Center for Defense and International Security Studies, 1997

and promising capital market. It has held several rounds of democratic elections, and the fate of reform no longer appears to depend on any one person. There is no credible way for Russia to fall back on the Soviet model: the question now is what kind of capitalism Russia will create.

Ukraine has been slower to reform than Russia but has achieved some of the same successes. Like Russia, it has tamed inflation and, in the process, successfully introduced its own currency. Although its privatization programs have been less successful than those of Russia, slightly more than half of its economy now is in private hands. Ukraine has made noticeable progress in developing key democratic institutions.

Despite these successes, the transition of Russia and Ukraine to core states is still far from certain. Three fundamental dynamics conspire to imperil this process to core states in the next decade:

- The first is the battle for political and economic primacy among advocates of reform. In the late 1980s and early 1990s, the debate in the former Soviet Union was about *whether*, rather than *how*, to reform. Now that the reformers have become established as the leading political force, they are divided into small groups that compete to set the agenda. The competition can be ruthless; unlike political competition in the

core states, there are few rules in the competition for political primacy in the New Independent States. Contract murder seems to have sometimes become an option. The resulting policies are designed by and in the interests of a narrow group of extremely powerful actors.

- The relationship between center and periphery presents a second worrying dynamic. One example of center-periphery tensions is the war in Chechnya. It has had a chilling effect on other Russian regions, as well as on neighboring countries, and shook the core states' confidence in the Russian government. Tens of thousands died in the Chechen conflict. Although the problem is far more severe in Russia, with its multiethnic republics and oblasts spread over 10 time zones, than for Ukraine, Kiev's relations with its regions are also problematic. In Ukraine, Crimea continues to stand out as a regional problem, in part because it has an important influence on Ukraine's relationship with Russia.

- The third dynamic threatening to the transition in Russia and Ukraine is the fluid relationship among actors in business, government, and organized crime. Crime and corruption undermine confidence in the state and ultimately weaken legitimate leaders' ability to govern. Organized crime

from Russia, Ukraine, and the NIS generally has broadened to take on global proportions. Drug smuggling, money laundering, and arms trafficking by Russian organized crime groups are growing problems with wide impact and have received increased attention at senior government levels in Russia, the United States, and other core states. The strength and influence of these groups will undoubtedly grow as they amass wealth, employ new technologies, and expand their networks.

Russia and Ukraine suffer from wide and growing wealth gaps that are creating a resentful underclass. Entrepreneurs uncertain of the long run seek short-term rents rather than investing in long-range projects. Center-periphery relationships are tense and unsustainable. Crime and corruption undermine reform and reformers, as well as the legitimacy of the state.

Russia has two assets working in its favor. In the short run, oil and gas will attract Western investment, bringing capital, technology, and management expertise to Russia. Already economic giants, Russian oil and gas companies will only become stronger than most other sectors of the economy. The challenge will be to transfer capital, technology, and expertise to other industries, so that the Russian economy can develop and the export of manufactured goods as well as natural resources can increase.

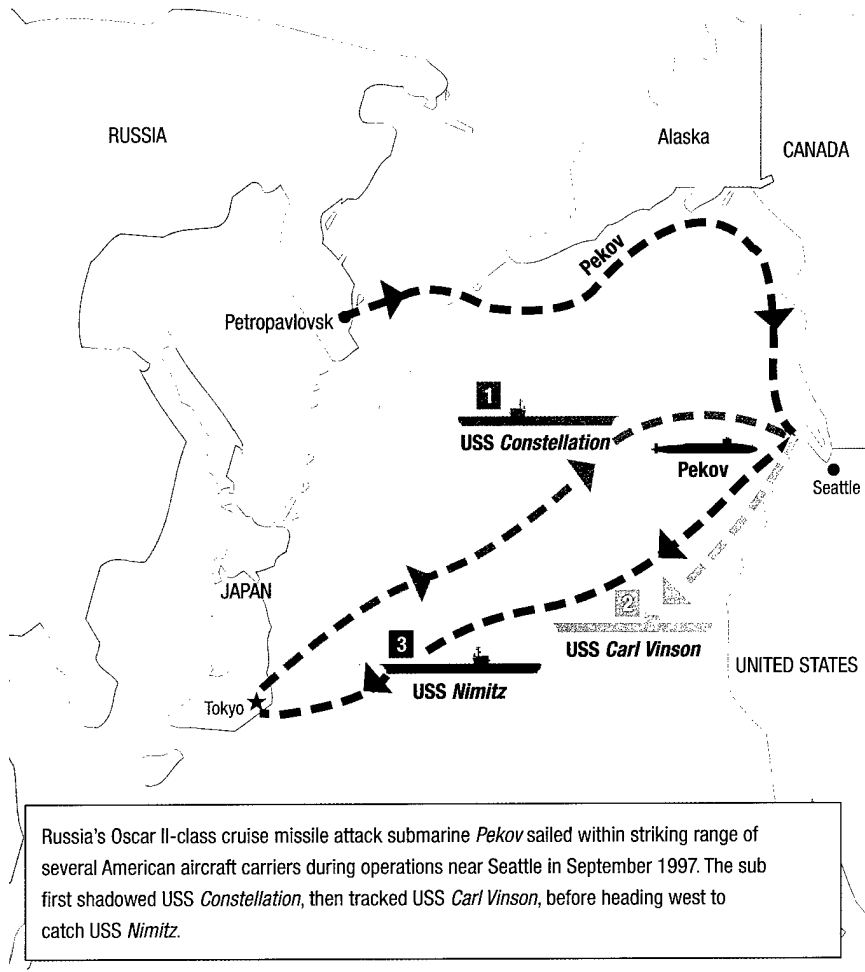
Russia's longer term asset is precisely the long term. Its demographic complexion is changing in important ways. Most significant, by the 2008 presidential elections, an entire generation of voters will not remember the Soviet Union or socialism. Recent public opinion polls show decisively that younger Russians are much less consumed by issues of Russian nationalism and competition with the West. In contrast, Western liberal ideals resonate with this younger population better than with older Russians.

Ukraine does not have the energy resources Russia has and cannot therefore rely on that sector for economic recovery. Instead, Ukraine will be challenged to push further and faster toward real marketization and integration with the emerging

Uzbeki troops



Russian Submarine Maneuvers (September 1997)



markets in Central Europe. These markets, which are increasingly tied to the core states of Western Europe, could prove an important source of economic dynamism for Ukraine. Before that can happen, however, Ukraine will need to make serious progress in consolidating achieved reforms, dealing effectively with its illegal and underground economies, and increasing openness and transparency. Sound fiscal and monetary policy will be key, as will liberalization of the energy and agro-industrial sectors. Like Russia, Ukraine's youth is Western oriented and sees its futures as increasingly tied to the core states of Europe.

Growing Integration

The extent to which Russia and Ukraine have been integrated into regional and global institutions is impressive. Both countries have joined numerous political and economic institutions, including the Council of Europe, and Russia is a member of the Paris Club and "The Eight." Both have yet to meet the criteria for accession to the European Union (EU) or the World Trade Organization (WTO), although in the next decade one or both countries might join these world bodies.

The region has gained valuable experience from working with security organizations and institutions such as the Organization on Security and Cooperation in Europe (OSCE), International Atomic Energy Agency (IAEA), and Partnership for Peace (PfP). Bilateral and multilateral military exercises with core states have contributed to the understanding by the transition countries of core state military principles, strategies, and objectives as well as improving transparency on both sides.

The most important security institution linking the NIS to the core states is NATO. In July 1997 in Madrid, the leaders of NATO's member states took a historic step by agreeing to extend invitations to three Central European countries to join NATO—Poland, the Czech Republic, and Hungary. NATO signed important documents with Russia and with Ukraine that expanded and formalized relations between these countries and the organization. The NATO-Russia Permanent Joint Council and the NATO-Ukraine Commission provide for the further development and integration of these countries with the European security system.

Ukraine in particular has taken advantage of these opportunities, stating unequivocally that it wishes further integration into the Atlantic security system up to and including membership in NATO. Ukraine has been a key participant in and benefactor of the PfP program. Although Russia remains opposed to enlargement of NATO for states of the former Soviet Union, it will have to understand that its interests, too, will best be served by working with, rather than against, the core states.

On a bilateral basis, the United States has engaged the NIS in important security-related initiatives. One prominent example is support for the Central Asian Combined Peacekeeping Battalion, or CENTRASBAT. This initiative on the part of Kazakhstan, Uzbekistan, and Kyrgyzstan to cooperate and develop their peacekeeping capabilities to UN standards is an important step in the political-military development of Central Asia. The United States has supported this effort and encouraged Russia to play a responsible role. In September 1997, CENTRASBAT concluded its first peacekeeping exercises with U.S. and Russian military officials in attendance. Initiatives of this type are likely to promote further cooperation and integration and could well develop their own momentum in the coming decade.

Limited New Markets

The NIS are unlikely to achieve their full potential as trading partners with the core states in the next decade. Russia has begun to show signs of recovery: its 1997 GDP may have grown by as much as 1.5 percent. Services, mostly financial, are becoming a larger factor in the overall economy, and industries such as telecommunications are performing strongly. Ukraine has been slower to reform and is very likely to face a number of financial crises in 1998. It should move now to make

progress on its transition. Russia and perhaps Ukraine are likely to continue to develop their markets and to open them to global competition, but even so, the challenges of economic restructuring are large enough to require two to three decades.

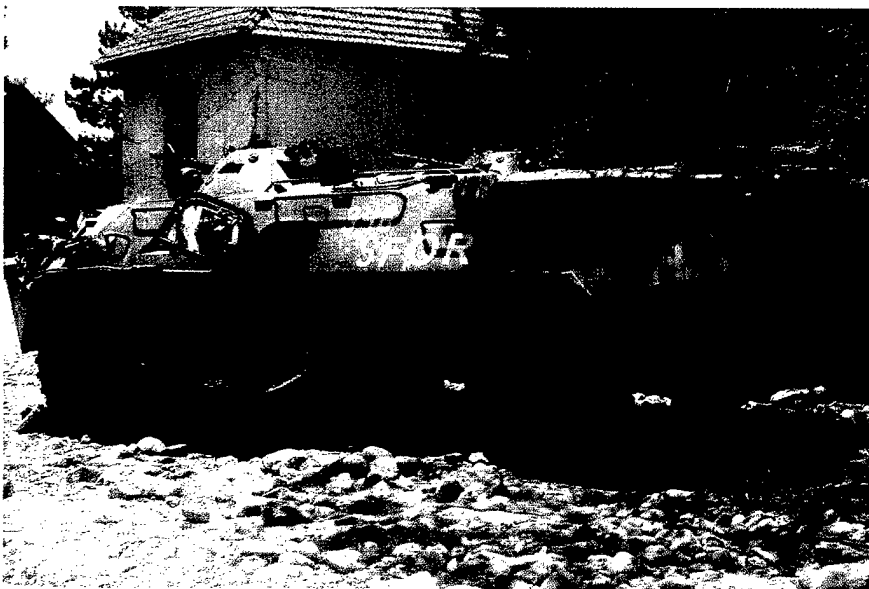
Serious reform efforts will need to be made on a number of fronts where Russia and Ukraine are only beginning to address them, and most of the other NIS have yet to grapple with them. The first front is property rights, especially those for foreign direct investors. Without clear and secure property rights, the NIS will not attract foreign direct investment in the quantity needed for economic recovery. A second front is integration into the EU and WTO. Russia and Ukraine are still far from accession to either body, mostly because their economies and policies do not meet accession criteria.

Most other NIS are quite further behind Russia and even Ukraine. There are pockets of economic stability and even recovery from time to time in places such as Georgia and Uzbekistan, but often these are false signals and are not associated with the types of fundamental economic reform that will sustain growth and stability in the longer term. Even in many of these countries, however, the benefits from marketization and privatization are becoming apparent, and some of the governments are beginning to turn their focus to real reform. In sum, the prospects are good for slow progress in the development of new markets in the NIS. Progress will be uneven, however, and success is far from certain.

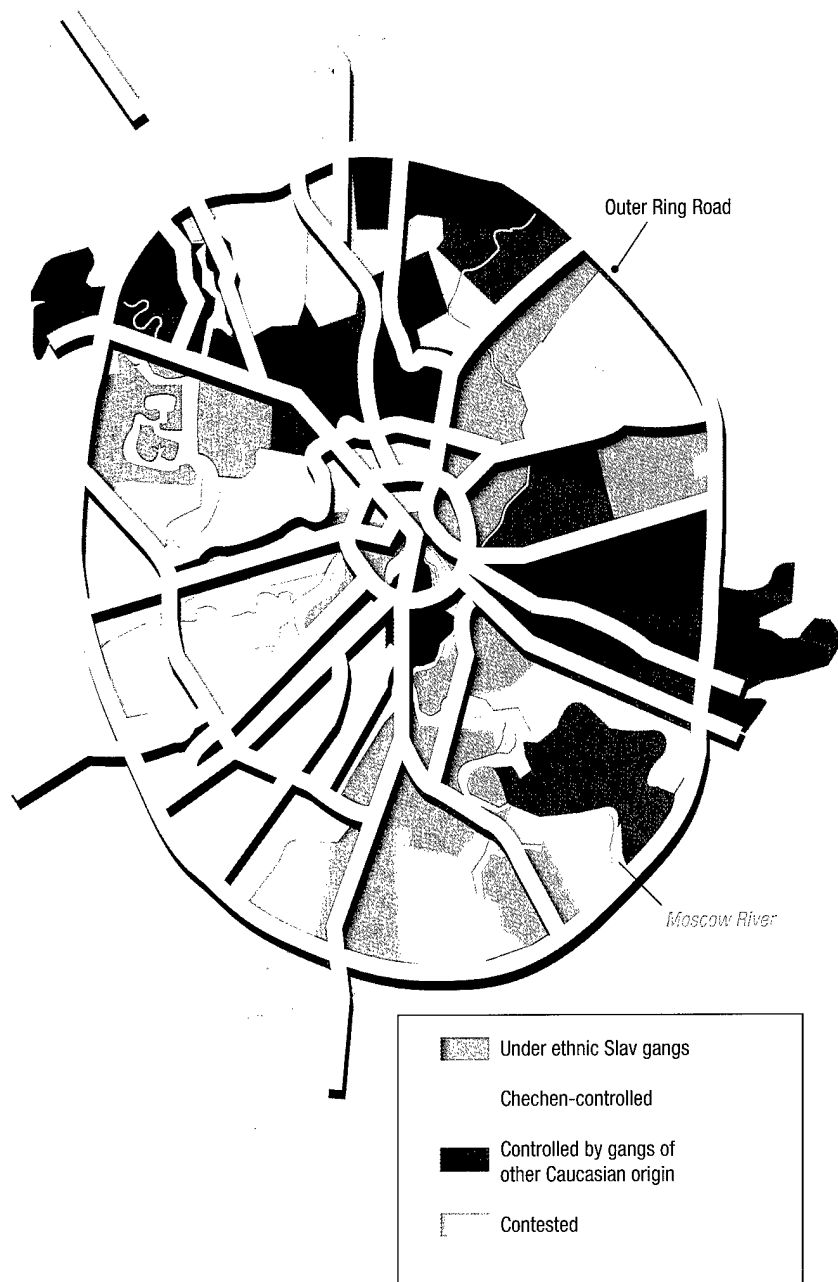
Shaping the Strategic Environment

The primary objective of U.S. military diplomacy in the near term will be to reduce the threat posed by the proliferation of WMD and related technologies and information. A second objective will be to shape Russian strategies to promote security cooperation and integration with the core states. Last, the core states can contribute to the stability in and around the

BTR in Sakotici, Bosnia-Herzegovina



Organized Crime in Moscow



SOURCE: Jane's Intelligence Review, *Mafiya: Organized Crime In Russia* (Special Report No. 10), June 1996

NIS by working with their military establishments on military reform and civil-military relations in a sustained, coherent way.

Although engaging all the NIS is an important goal, the main focus of U.S. shaping factors in the former Soviet Union will be Russia and Ukraine. U.S. objectives and strategies toward these countries will

overlap considerably, but in two areas Russia may pose the more difficult or complex problem. The first concerns questions about Russia's ability to control WMD and related technologies. Ukraine has far fewer such technologies and therefore presents a lesser, and less complicated, problem. The second area concerns alignment: Ukraine has stated its desire to become a full member of Europe, even to join NATO, whereas Russia views NATO's enlargement as a major political flashpoint.

Counterproliferation

After the collapse of the Soviet Union, only the four "nuclear" states—Russia, Kazakhstan, Belarus, and Ukraine—were the focus of U.S. proliferation programs. Following successes there and progress on the part of other NIS, in March 1997, seven states in the Caucasus and Central Asia became eligible for support under the Nunn-Lugar program. Although these countries, along with Kazakhstan, Belarus, and Ukraine, present important proliferation challenges, the main challenge remains Russia (although much of the discussion regarding Russia also applies in other cases).

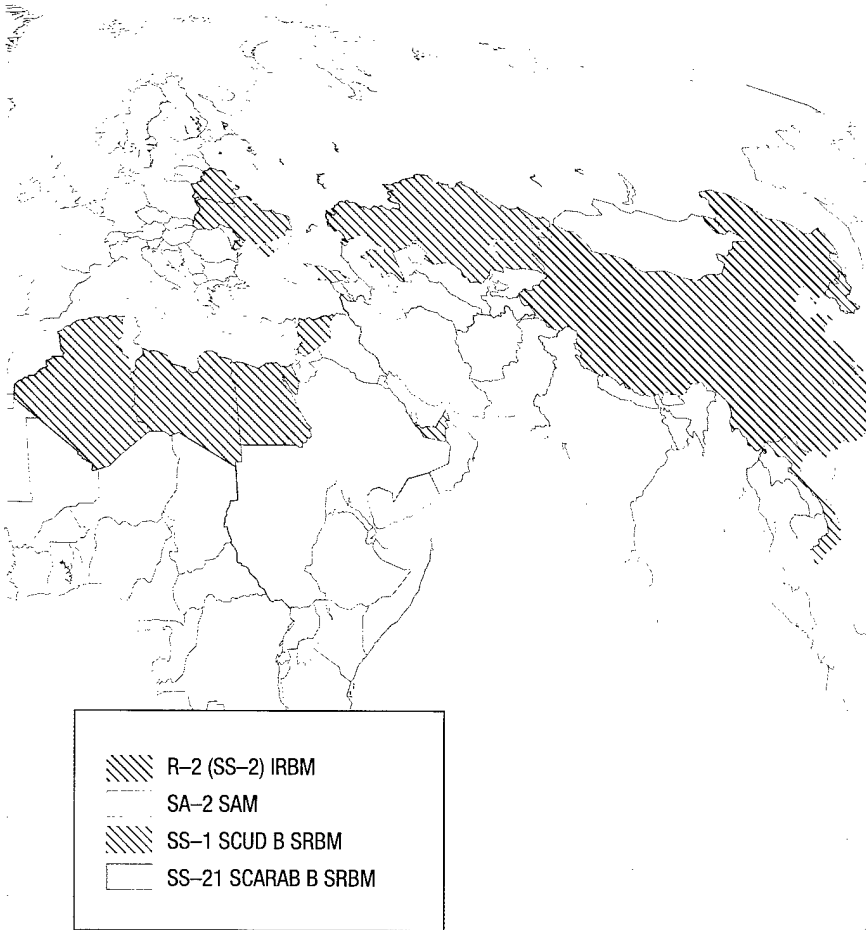
In shaping Russia's proliferation agenda, the core states will need to work in concert to:

- Improve Russian understanding of proliferation and its threat to Russia's interests
- Reduce the quantity of WMD and related technologies
- Take a more forward leaning stance on specific proliferation transgressions.

The United States has already initiated a broad agenda to engage Russia on proliferation issues and has achieved notable successes. In large measure, the future agenda will build on what is happening now.

Improving Russia's understanding of the threat of weapons proliferation will be the responsibility of all core states working together, even though the United States will inevitably play the leading role. Many in the West assume that the logic of arguments for nonproliferation will be as compelling in Russia as elsewhere. This is not a safe assumption. The gap between the United States and Russia on the issue of the Iranian nuclear reactor is only the most obvious example.

Russian Missile Transfers



SOURCE: Center for Defense and International Security Studies, 1997

NIS proliferation has two dimensions. The first is that "official" proliferation results from legitimate activities and policies of a government, of which Russian support for the Iranian reactor is one example. The second is that "unofficial" proliferation occurs illegally and is not the result of official policy. Both dimensions will challenge core states' interests over the next 10 years, and any comprehensive plan will need to address them.

Several aspects of the proliferation agenda concerning Russia are worth consideration for the medium-term future. Two focus on "unofficial" proliferation. The decentralization of political and economic decisionmaking in Russia permits and argues for a broad discussion of the problem of proliferation. In Russia and to a lesser extent Ukraine, two interrelated

groups deserve special attention. One consists of responsible officials at the defense plants, labs, design bureaus, and facilities that produce or store weapons and produce related technologies and information. They and their organizations often operate on the edge of bankruptcy and face constant financial and economic stress in trying to maintain production of military hardware and restructure to meet the demands of the new market environment. Economic stress prompted some of them to take advantage of the market for weapons and related technologies through sales outside formal channels for arms trade. Increasing efforts to address this source of the problem more resolutely thus makes good sense.

The other key group consists of the new "business-political elite" who have profited from Russia's reforms and its ties to outside markets, have a vested interest in the stability and prosperity of the NIS, and understand the importance of integration with the core states to these objectives. They also hold increasing power and influence over politics and policy in the NIS and should prove useful interlocutors on issues of proliferation. Because they know very little about the economic, political, and security consequences of proliferation, this group represents an important target for engagement and education on these issues.

Another aspect of furthering the non-proliferation agenda is cooperation with Russia, Ukraine, and other NIS countries in relevant intelligence activities, though this tactic admittedly carries some risks. Serious questions concerning the knowledge of key NIS officials about proliferation problems persist. Sharing information and intelligence will reduce these questions and lead these officials to deal with issues head on.

Reducing threats of proliferation is a strong focus of current U.S. policy. The United States should continue efforts such as the Nunn-Lugar program and highlight the positive sum outcome it produces. A major initiative to expand efforts in this area would be to encourage other core states to increase their contributions and activities.

82nd Airborne, CENTRAZBAT '97

Encouraging Cooperation

A significant number of bilateral and multilateral military initiatives are under way to encourage security cooperation and increase transparency with the NIS. These efforts have so far met with varying degrees of success, but the general trend has been very positive. In the coming years, it will be imperative to maintain and further these contacts because doing so will give the United States tremendous opportunities to lessen potential challenges. Depending on the level of NIS engagement in cooperative activities, these initiatives will afford the United States influence in the development of the structure, composition, and disposition of the militaries of the NIS.

Another important benefit of these initiatives is to demonstrate U.S. and core state interest in the region and to display our military capabilities constructively. Any regional actor that questions the core's interests or abilities will have few doubts after witnessing our sustained involvement at serious levels of engagement and the superiority of personnel, equipment, and organization. Although staged exercises are important, real security operations, including NIS militaries (IFOR and SFOR are

excellent examples), are best for these purposes, because they demonstrate real U.S. interests and capabilities in the region.

U.S. military efforts have generally been planned, prepared, and conducted under the aegis of NATO's PfP program, though the United States has impressive bilateral military-to-military programs as well. Since its inception at the January 1994 NATO Summit, PfP exercises, conferences, and other events have worked to increase stability, diminish threats to peace, and build strengthened relationships by promoting the spirit of practical cooperation.

The PfP program provides a strong foundation on which the United States can build relations with NIS countries in the medium and long terms. NATO's objectives for this program include increasing transparency in national defense planning and budgeting processes, ensuring democratic control of the military, maintaining the capability and readiness to contribute to operations under UN or OSCE auspices, and developing interoperability with NATO members over the long term. The PfP program is also an excellent way to encourage the core states to work on such



CENTRASBAT '97

problems together. Progress will be gradual but noticeable, and success in the PFP program will link the NIS militaries to those of core states in important ways.

Beyond the PFP, the United States and other core states will find it advantageous to themselves to continue bilateral programs of assistance with the NIS in order to further encourage the shaping of the NIS militaries. The United States, for example, sponsors exercises and activities "in the spirit of PFP," such as support for the BALTBAT and CENTRASBAT peacekeeping activities. Other core states should ideally participate bilaterally with the NIS militaries to make it clear that they have their own independent interests in the region and are more than passive participants in NATO's agenda.

Currently, the Caucasus and Central Asian regions are stressed by recurrent instability and conflict. For this reason especially it is important that U.S. programs designed to engage the militaries of the region do so not only bilaterally but also multilaterally. By bringing the militaries of the region together in a constructive way the United States will be promoting better regional understanding and more stable relations. CENTRASBAT is a major example of such a program. Washington has not

taken this approach in the Caucasus but should find ways to engage the countries multilaterally there as well.

Finally, the core states should be aware of opportunities to use other transition states as collaborators or even surrogates in shaping exercises. By sharing their experience, for example, with the Central European militaries, the NIS militaries may gain important insights into NIS needs and paths toward reform.

Civil-Military Relations

A fundamental component of a stable, successful democracy is solid civil-military relations generally and effective civilian control of the military in particular. The core states have done much to achieve these objectives in Central and Eastern Europe, with positive results. A similar agenda can be applied in the NIS, although progress there may be slower because of a greater resistance to change.

The militaries of the core states should take every opportunity to engage all three branches of power—executive, legislative, and judicial—on issues of civil-military relations. These include, for example, budgeting and military reform, of special interest to the Duma, which has extremely limited information or experience in such issues. Establishing a civilian-controlled ministry of defense is primarily the responsibility of the executive branch. Media relations and public affairs are also issues of great value to the military. NIS militaries have little expertise on these areas but a great need to develop it. Core states have much to offer, at least by way of example.

Since the end of the Cold War, the United States and other core states have undertaken serious reviews of their own defense and security doctrines, operations, and organizations. In the United States such reviews include:

- The Bottom-Up Review
- Army after Next
- Commission on Roles and Missions
- The Quadrennial Defense Review
- The National Defense Panel.

Versions of these and similar exercises might be successfully transplanted to the NIS, where defense planning and strategy

in the post-Cold War environment have been slow to develop.

In sum, civil-military relations in the NIS need reform. Whether the issue is chain of command, parliamentary oversight, budgetary transparency, or the development of competent civilian defense managers, work is needed. The militaries of the core states have a great deal of relevant experience, expertise, and interest in seeing that progress is made on these fronts. More quickly reforming militaries in Central Europe also have a great deal of relevant experience to share with the NIS, and integrating them into core efforts would be both an excellent way to help them to meet their responsibilities as emerging core states and an efficient way to address the needs of the NIS militaries.

Conclusion

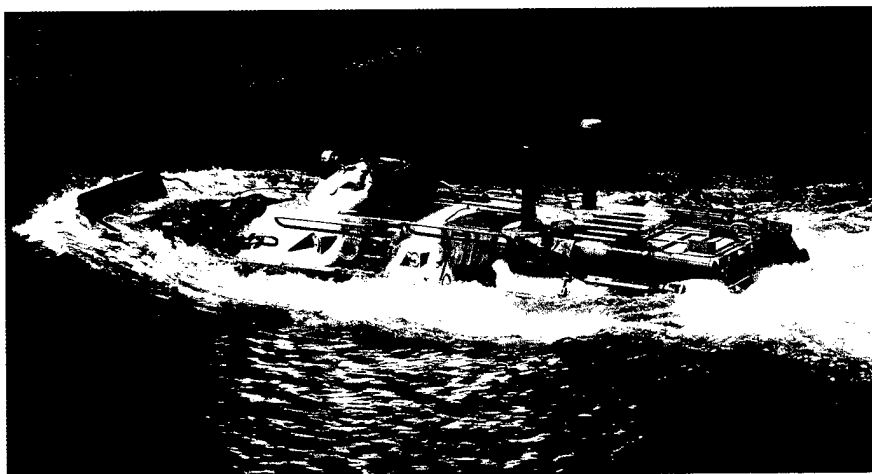
The next decade will present important opportunities and challenges for the NIS and their relations with the core states. In Russia the economic depression appears to have bottomed out, and at least some sectors of the economy are beginning to grow. Moscow is taking important steps to open its economy through reforms designed to meet the accession criteria of the WTO and is doing more to work with the EU on issues that will facilitate trade and investment. Despite these successes, Russia's relations with the core states, especially in the security arena, will require sustained engagement and attention in the next 10 years. Much of the thinking in Moscow on Russia's place and

role in the world still focuses on Russia as a counterbalance to the West. Within this framework it is difficult for Russia and the United States to reach agreement on complex issues such as Iran's nuclear program, Iraq's threats to security in the Gulf, or the future of European security.

The core states' best strategy for Russia in the next 10 years is sustained cooperative engagement. The most important vehicle through which to pursue these types of initiatives is the new NATO-Russia Permanent Joint Council (PJC). This body must not become a forum for argument and discord. To the contrary, its primary purpose should be to foster cooperation and understanding on issues where Russia and the core states have shared interests. Although many of these interests will be international in scope (regional security, proliferation, etc.), the PJC should also serve as a body that advocates and supports Russia's badly needed military reforms. One of the most important things the United States and other NATO members can do is to encourage and support Russia to initiate ideas and projects within the PJC framework. If Russia takes the lead more frequently, it will feel more a subject of European security and less of an object, more of a contributor to the process and less of a consumer of core states' initiatives.

Ukraine will also continue to be a focus of core state attention in the coming decade. Its transition to an open-market democracy is not as developed as Russia's, but it has made important progress. There is reason to believe that in the very short term the economic crisis and international engagement will motivate leaders in Kiev to intensify and accelerate their reforms. If successful, these reforms will enhance Ukraine's international position and strengthen its relations with the core states. An additional challenge for Ukraine is the modernization of its armed forces. In its current financial situation, these reforms will prove exceptionally challenging. But in many respects the largest challenges to military reform in Ukraine are not financial. Instead, Ukrainian leaders must exert the political will necessary to follow through on the early progress they have already made.

Russian BTR-70 amphibious assault vehicle



Qualities of U.S. Power Accentuated in the New Independent States

Power Projection	C ⁴ ISR	Joint Doctrine	Lethality	Robustness	Model Establishment

☐ very important
☐ important

Through bilateral programs with the U.S. Department of Defense and through the PfP program, the Ukrainian armed forces have been exposed to modern military practices, management, policies, and capabilities. Particularly among some of the junior and midlevel officers, there are signs that the examples have taken hold. Like Russia, Ukraine should focus its efforts on using its new partnership with NATO to initiate ideas for cooperative programs, especially those that will encourage and undergird Ukraine's military reforms. Finally, it is important for the core states to work with Ukraine to develop serious bilateral relationships outside of the Commonwealth of Independent States. Although Russia and the other successor states will continue to be important political, economic, and security partners for Ukraine, these relationships need to be supplemented by strengthened relationships with countries like Poland, the Czech Republic, Estonia, and Romania. Initiatives designed to support the developments of these relationships will not only help anchor Ukraine in East-Central Europe, but they will give these other transition countries opportunities to play important roles within the broader European security system.

In the Caucasus and Central Asia, the security challenges to the core states are less immediate, but important opportunities to support healthy interstate relations within the region and to avoid the development of new security risks exist and should be exploited. For the next 10 years the economics, politics, and security of energy resources

and transportation routes will define the region's development and, largely, its relations with Russia and the core states. By 2010, it is possible that the Caspian region may emerge as the fourth- or fifth-largest energy producing region in the world. It is in the interest of core states that countries within the region are stable internally and that their relations are built on politically and commercially sound footings. Moreover, it is necessary that the countries in the region are well integrated into the global economic and energy markets.

In the short term, the chief consumers of Caspian energy will be in Europe and the Mediterranean. Ukraine and other NIS countries will also be important markets, depending on how well their reforms go. The core states should move jointly to encourage the cooperative development of the energy resources of the region. This means strong support of market and democratic reforms, including a focus on conflict avoidance and resolution. A second priority should be fostering constructive relations with key countries such as China, Pakistan, and India, who are likely to be important consumers of Caspian energy in the longer term. Turkey will have an important role to play in terms of Caspian energy consumption and transport, as well as regional security, and should therefore factor significantly into policies toward the region.

The processes of transition to core states in the NIS are complex and often unpredictable. The United States and its allies must not shrink from the challenges but seize every opportunity to engage the NIS and support their development into long-term partners with many shared political, economic, and security interests. Serious investments in the security and stability of these new countries will pay important dividends over the next decade. The task is tremendous, however, and no one country can shoulder the burden alone. The task will require sustained cooperation among all the core states, a process that has the added benefit of strengthening relations among them as well.

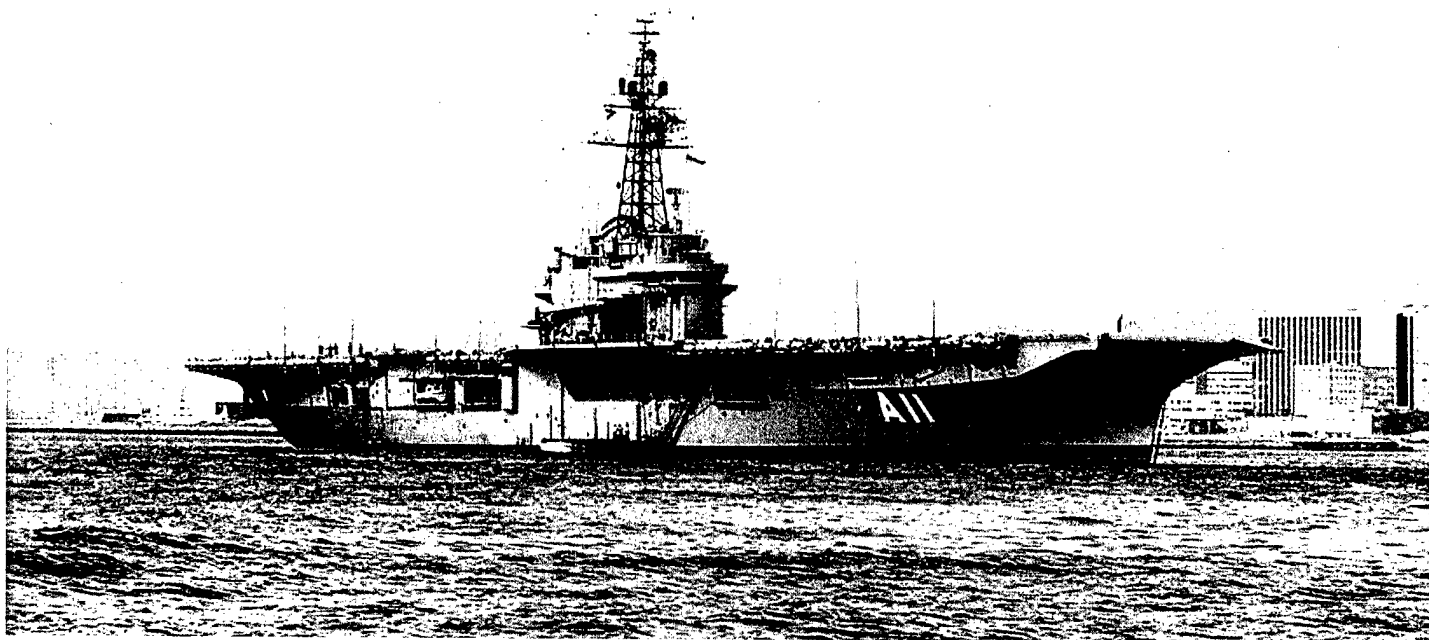
The Americas



The Americas present the United States with many opportunities and challenges, ranging from a trend toward increasing democratization, international stability, economic growth, and integration, to chronic corruption, insurgencies, human rights violations, deeply rooted organized crime, and, partly in consequence, economic migration. To northern ears, the image traditionally suggested by the moniker Latin America is one of more internal commonality and cohesion than should be assumed. To this mix can be added a history of inconsistent relations

with the region, from “benign neglect” to unilateral military intervention. From the Latin American perspective, the intentions of Washington (especially the Department of Defense) in the hemisphere are often unclear and sometimes suspect. In keeping with the general theme of *Strategic Assessment 1998*, this chapter will review the primary U.S. interests in the Western Hemisphere, trends related to those interests, and shaping factors available to DoD to affect those trends. The resulting tone of the chapter is not optimistic, in part because national policy in the region has followed ideas and concepts acceptable to a northern European culture, which do not always translate well to this predominantly Hispanic culture. Nevertheless, long-term trends in the region point to a more optimistic (though not guaranteed) outcome.

Primary U.S. interests include enhancing hemispheric cooperation through increased economic integration, expanding core values through efforts to increase political and defense transparency, reducing the serious threat from non state actors, and perpetuating interstate security and stability through increased military contact and interaction with U.S. forces.



Brazilian carrier *Minas Gerais*
in Rio de Janeiro

Means available to the DoD for shaping the security environment in this region include the use of force to contain state failure, deterrence to avoid conflict with non-state actors, the enhancement of coalitions through increased military contact (intra-region and with the United States), and advocacy for defense reform both by example and through training opportunities. The most important factor in relations with Latin America, however, is policy. In the past, DoD has relied on efforts to provide regional policy writ large, rather than on recognizing the differences among states on the basis of size, political maturity, culture, and geography. Although regional fora—such as the Organization of American States (OAS) and the Inter-American Defense Board (IADB)—are available to settle differences and provide educational opportunities, bilateral relations often are more successful because of easier agreement on the definition of specific policies, whether economic, security, or political.

U.S. Interests

There are four categories of U.S. interests in the region: economy, core values, security, and defense reform. Although these

apply generally to all states of the region, geography plays an important role. Economic interests vary from trade integration (Brazil, Argentina, Chile, Mexico), reform (Mexico, Brazil), and economic expansion (Central America, Caribbean), to salvage (Haiti, Cuba, and occasionally Mexico). The expansion of core values also applies unevenly. The English-speaking Caribbean, for example, has a long tradition of values compatible with the core, and most of this region accepts these values intellectually, if not always in actuality; Cuba rejects most civil liberties; Haiti has failed to implement even basic values. Security interests also vary dramatically. The most glaring difference is an inability to agree on what constitutes security. Different subregions have different concerns, which vary from state to state, including border security (Cuba, Venezuela, Peru, Ecuador, Chile), domestic stability (Argentina, Central America), counterinsurgency (Colombia, Peru, Mexico), economic stability (Central America, Mexico), trade policy (the Caribbean), and ecosystem security (Brazil, Colombia, Costa Rica, Haiti, Panama). Defense reform is applicable to all, largely because of the tradition throughout the region of viewing the armed forces as the “savior of the state,” responsible for ensuring stability and defending sovereignty from all threats (foreign

and domestic). The U.S. agenda calls for reform in the following areas:

- Professionalization
- Human rights policy
- Civil-military relations
- Confidence building through increased budgetary transparency
- Resource management
- Materiel modernization
- Defense organization.

Developing Trade and Integration

The expansion of trade has had a significant impact on U.S. foreign policy considerations in the hemisphere. Examples of policy reacting to economic pressure include:

- The North American Free Trade Agreement (NAFTA) with Canada and Mexico
- Warming of relations with Chile, including negotiations for NAFTA accession
- The 1994 Miami Summit and its emphasis on a hemispheric free-trade association
- The negative impact of an increase in the illegal drug trade and money laundering
- Grossly unequal income distribution, which brings increased attention to human rights issues.

Trade and investment are now viewed in the context of a global framework. The

level of trade within the Western Hemisphere has grown consistently over the past decade, and the move to greater regional economic integration has accelerated that trend. The single largest U.S. trading partner is still Canada, and the largest regional trade bloc remains Latin America. Upward of 40 percent of Latin America's trade flows north, and 40 percent of U.S. (non-NAFTA) exports stay in the hemisphere. The U.S. merchandise trade surplus with the region surpassed \$3.5 billion in 1996. A hemispheric free-trade zone was declared the centerpiece of U.S. policy in 1994, though as yet little tangible commitment is evident. The White House continues to seek fast-track negotiating authority from Congress, though there are serious domestic objections to overcome. Competition from Europe and Asia is increasing as Central and South American markets seek to expand into a region abandoned by the United States. This trend may not continue if fast-track negotiating authority is not achieved anytime soon.

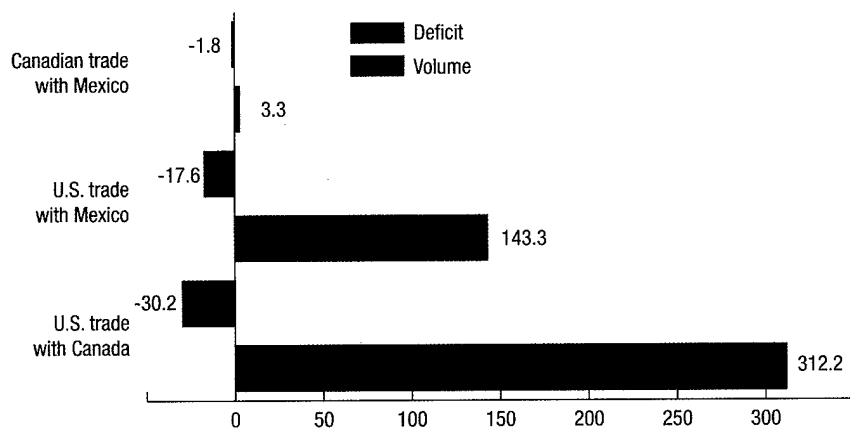
The interest in regional markets will not change in the long run, except what will result from political links of trade to other issues, such as performance on human rights or counterdrug policies. There will be minor variations in trade patterns and these will be temporary, but fast-track negotiating authority is much more important than such conditionality.

Expanding the Core

Democracy

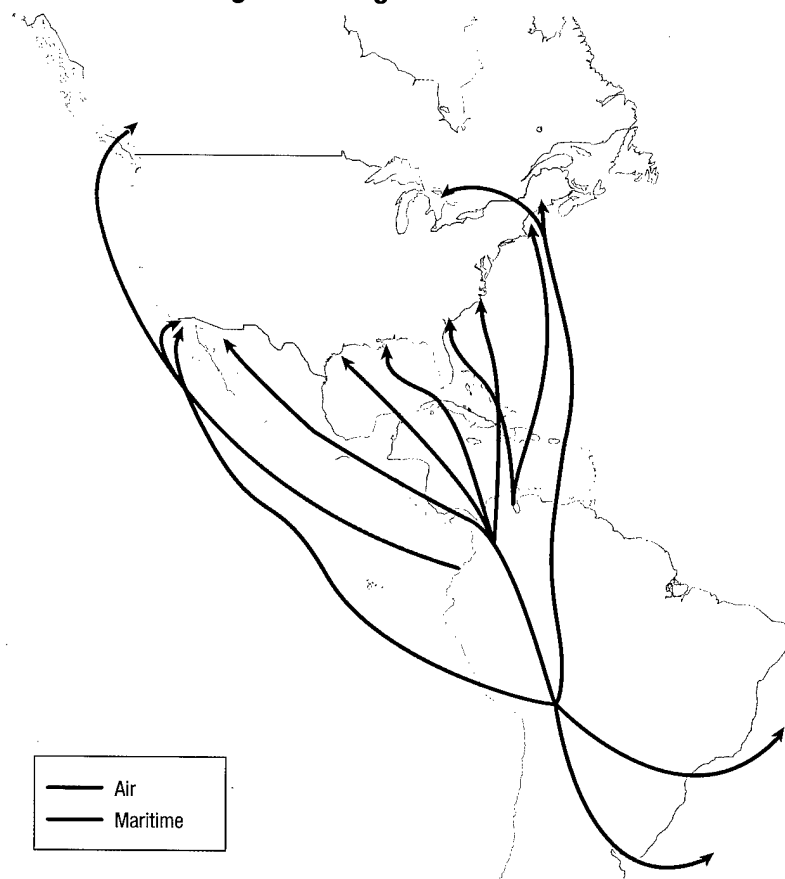
The hemisphere is for the most part in the process of democratization, though commitment is not yet complete. The U.S. objective of encouraging democratic governance has advanced rapidly, although over a rocky path. Recent overviews point out dramatic differences between current popularly elected governments and those of only 15 years ago, when the majority were authoritarian or military dictatorships. Although the region does boast of democratically elected governments in all but one state, civil-military relations remain uneven, and civil unrest is now more

NAFTA Trade Balance (1996-97)*
billions (U.S. \$)



* Last two quarters of 1996 and first two quarters of 1997 only
SOURCE: International Monetary Fund, *Direction of Trade Statistics*, 1998

Air and Maritime Drug Trafficking



SOURCE: Central Intelligence Agency

prevalent than in recent decades. Latin America's tradition of personality-based governance is strong: Fidel Castro has been in power in Cuba since 1959; Presidents Carlos Menem in Argentina, Alberto Fujimori in Peru, and Fernando Henrique Cardoso in Brazil all have changed their national constitutions to perpetuate their tenure in office; the presidents of Chile and Nicaragua cannot remove the head of the armed forces; the presidents of Ecuador, Colombia, Peru, Venezuela, and Guatemala rely heavily on the military for support; President Hugo Banzer Suarez of Bolivia is a former dictator; and in 1998, Paraguay may elect as president a former Army general who attempted a coup against the current president. That these examples persist despite the increase in democratization is evidence of the strong tradition of personality-based power politics. Some analysts argue that the current wave of democratization is cyclical and will fall to a new

wave of personality-based authoritarian regimes.

A decrease in defense budgets or reduction in military forces has accompanied the move toward democratically elected governments in Latin America. In many countries, the armed forces and police are a major component of the government presence outside the major cities, and reductions have resulted in increased common street crime. A second impact has been a change in economic policy toward a market-based system, accompanied by a decrease in the living standard, especially among the better educated middle classes, as well as high unemployment rates. The general impression is that civilian-led governments mean economic ruin and less personal security. Many agree that civil liberties are a good goal but that the economic costs may outweigh the benefits, at least in the short run.

Cuba, the region's fading rogue state, continues to be opposed to the democratic values and free-market practices that now characterize the Southern Hemisphere. Washington continues to isolate Cuba economically and diplomatically, forcing the issue and encouraging change through such measures as the 1996 Helms-Burton Act. This controversial approach has forced other states (particularly in Europe) to become themselves more active in promoting political and economic change on the island. A change of regime in Cuba does not appear imminent. Although expectations were raised by Pope John Paul II's visit in January 1998, significant political change is not likely to occur before Castro leaves power.

Human rights

A major factor guiding U.S. foreign policy toward Latin America has been an emphasis on human rights. The U.S. experience with counterinsurgency operations and its past support for, recognition of, and relations with military dictators and rumors of complicity in human rights violations have given rise to many nongovernmental organizations (NGOs) intent on monitoring such behavior. Particular attention is now paid to the connection between

the U.S. military and its counterparts in the region and on demanding accountability from either the White House or Congress. It is in Washington's interest to highlight this factor as part of its effort to expand core values to transition states. Cuba is the primary recipient of human rights attention at the policy level; Colombia and Mexico are on the list as well because of the ongoing insurgencies—the Revolutionary Armed Forces of Colombia (FARC) and National Liberation Army (ELN) in the former, the Zapatista National Liberation Army (EZLN) in the latter—while the populations of Argentina and Chile deserve support for clearing up past abuses. And yet the United States must write policy with the understanding that these situations (especially in Argentina and Chile) have not been fully resolved. Judicial reform is required to increase the rule of law and order and to strengthen the concept of justice and equality in governance.

While there are indications that much work is yet to be done in this important area, democratic governments have all shown a commitment to improving their performance. It is important, however, to note that many of the cases of human rights abuse have not been perpetrated by

agents of the government, but rather by such nonstate actors as terrorists, insurgents, paramilitary organizations, and organized crime groups.

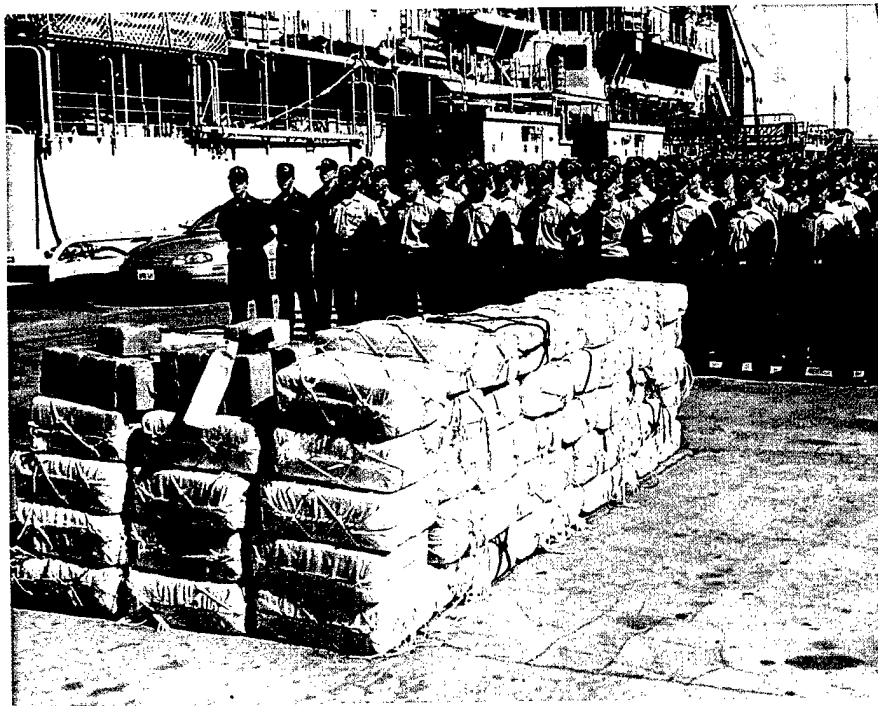
Reducing the Threat of Nonstate Actors

Drugs

One major strategic interest for the United States is to reduce the flow of illegal drugs throughout the hemisphere and across its own borders. Drug-trafficking and money-laundering operations are conducted with such sophistication and involve such large sums of money that they penetrate (or at least threaten) every law enforcement institution, judicial system, and bank and financial institution in all the Americas. Although the degree of access, impunity, and corruption may vary, states of immediate concern include Mexico, Canada, Colombia, Peru, and Bolivia. The growing consensus is that cooperation, both bilateral and multilateral, is a large component of the fight against this transnational threat. But, as in all things, style can be as important as substance in cooperation: respect for sovereignty is the starting point for effective cooperation.

Apart from the deleterious effects on society, the underground culture created by the illegal trade fosters a mentality and creates forces that work against civil governance. Though this section overlaps with the discussion of nonstate threats in chapter 13, the effect of drugs on security in the hemisphere is worth emphasizing. Illegal drugs are a serious component of instability in the Andean region (where plants used to make drugs are grown), the Caribbean and Central America (transit zones), and North America (consumption and transit). One element common to all these regions is the violence associated with the drug trade, which threatens the stability and sovereignty of several states, including Colombia, Mexico, and several Caribbean island states, and also threatens domestic safety and governance both in transit states such as Brazil, Argentina, Chile, and Canada, and consumption states such as the United States, Japan, and most of Europe.

Sailors from USS *Callaghan* with seized cocaine



Migration

Within the Western Hemisphere migration is generally caused by the impact of economic policy, rather than by issues of security and safety as was the case a decade ago throughout Central America. The states primarily affected (apart from the United States) include Mexico, Haiti, Cuba, the Dominican Republic, and those of Central America; rampant poverty and inadequate property laws are generally cited as reasons to emigrate to the United States. A major complicating factor is the volume of remittances from migrants (legal and illegal); Mexico and El Salvador estimate that over

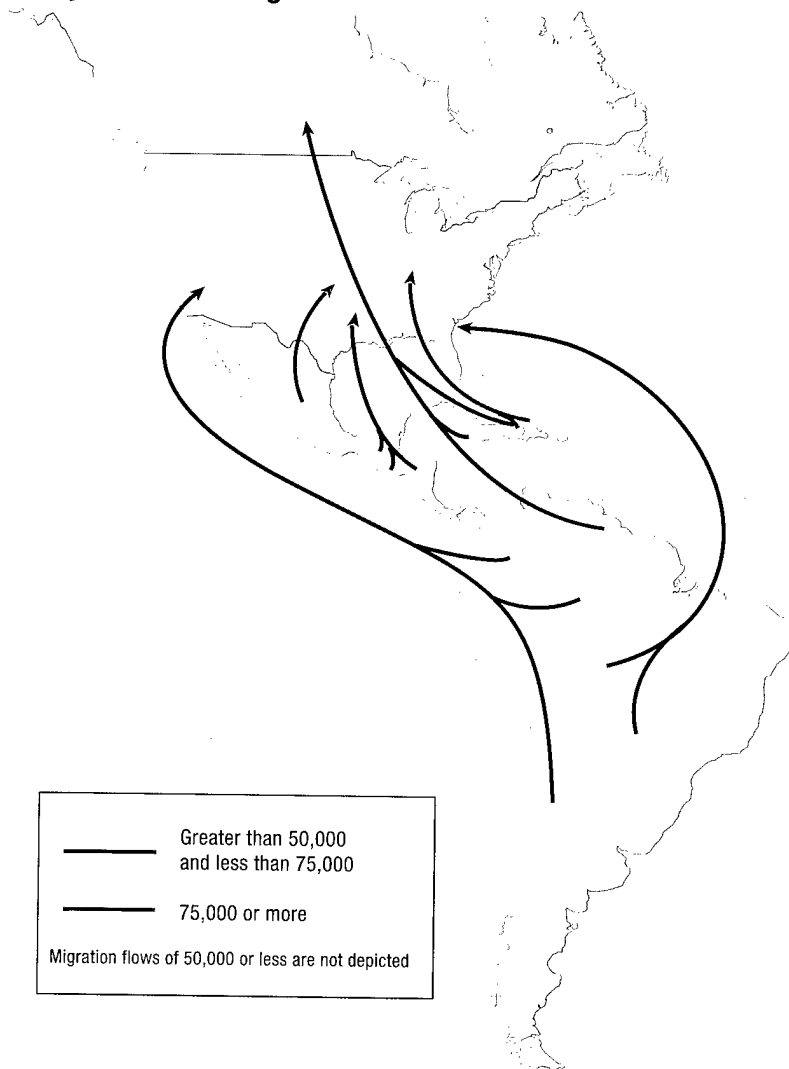
\$2 and \$3 billion a year, respectively, are provided by their "economic refugees" in the United States. The volume may be lower in the Caribbean, but the percentage of GDP is much higher, given the Caribbean's lower overall volume of economic activity. Every year about 275,000 illegal migrants manage to elude Immigration and Naturalization Service (INS) efforts to stop them and join the 5.4 million illegal aliens already in the country. States affected most are (in order) California, Texas, New York, Florida, Illinois, New Jersey, and Arizona. About 80 per cent of the immigrants come from within the hemisphere.

U.S. policy is linked closely to migration. People fleeing poverty or violence at home are motivated by "push" factors, while the U.S. policy on migration acts either as a "pull" or "stop" factor, inviting migrants to leave or preventing them from leaving home in hope of finding a better way of life. Without the pull factor, many would prefer to wait out push factors in hope of improving their lot at home. For instance, U.S. policy toward Haitian refugees during General Cedras' dictatorship was one of acceptance, so the number of Haitians taking to boats was high. When the administration changed its policy to one of either returning migrants to Haiti or sending them to holding camps in Guantanamo or Guyana, the number of refugees plummeted.

Maintaining a Secure Environment

During the Cold War, U.S. defense policy toward Latin America was oriented toward keeping the region a neutral security environment that required little attention from DoD. Containment of communism was a major mission, but U.S. policy recognized that national militaries within the region would dictate their own versions of just what constituted containment. With the end of Cold War, the goal of maintaining a security-neutral region is still difficult to achieve. Border conflicts (Peru and Ecuador), insurgent instability (Colombia, Peru, Mexico), and illegal drug production operations (Colombia, Venezuela, Brazil,

Yearly Patterns of Migration



SOURCE: United Nations



**U.S. Coast Guard intercepting
Haitian refugees**

Peru, Ecuador, Bolivia) are difficult to contain. What remains is the effort to maintain stability, a difficult enough prospect in a region struggling to define the proper balance of relations between civilian governance and armed forces. The traditional U.S. geostrategic view emphasizes a special relationship with the Caribbean Basin because of the traditional sea lines of communication (SLOC) between, for instance, New Orleans and Europe, or transiting the Panama Canal. Any threat to those SLOC directly affects U.S. trade with the world, increasing the threat to U.S. sovereignty. That nonstate actors use these same SLOC cannot be lost on Washington, given the tremendous cost and effort involved in locating the thousands of islands and shipping routes and protecting them from criminal activity.

Current Trends

Economic Integration

The economic trend of the region is toward increasing trade integration, though not necessarily regional integration. The Mercado Comun del Coro Sur (MERCOSUR) will remain the premier South American grouping, to which Chile may someday become a full member if accession to NAFTA is not forthcoming. But MERCOSUR has been showing signs of unrest: its principal members (Argentina and Brazil)

recently negotiated an increase in tariffs without consulting the smaller or associate members. Disintegration is not on the horizon, however, if only for fear of losing out in the global arena of trading blocs.

Groupings other than MERCOSUR and NAFTA will arise. There have always been plans to combine the Central American markets. Mexico recently began negotiating to open its markets to Nicaragua initially, and to the other Central American markets shortly thereafter. The Andean Group may attain viability, following the pattern of MERCOSUR; CARICOM and other Caribbean groupings will intensify efforts to expand and succeed. The main thrust of this trend is the 1994 Miami Summit declaration of intent to form a hemispheric free-trade bloc by the year 2005. Such subregional groupings are attempts to integrate and form stronger negotiating positions prior to joining NAFTA or any new regional arrangement with North America.

But not all is as idealistic as was expected after the Miami Summit. MERCOSUR, perhaps taking a cue from the U.S. Congress, now spends more in Europe than in the United States. Asian markets, despite the recent downtrend, have made significant inroads into South America as, for instance, Chile, Peru, and Colombia seek to increase relations across the Pacific. The failure of the Clinton administration to secure fast-track authority for Chilean admission to NAFTA was a major blow to the region's confidence that the United States was finally beginning to pay significant, consistent economic attention to its immediate neighborhood. Should fast-track authority fail again in 1998, the objective of the Miami Summit of a regionwide free-trade zone by 2005 will crumble and South American markets will seek to join agreements elsewhere. In other words, though the trend appears favorable to U.S. interests, economic interests have not reached their fullest potential.

On the other hand, the region's economies performed in 1997 at their best level in 25 years. The combined average

growth rate was 5.3 percent, with an inflation of less than 11 percent. Foreign investment totaled \$73 billion, though the trade gap with the United States grew to \$60 billion. Such growth spurred more export industries, especially in intraregional trade,

which increases economic interdependence and trade integration.

Exceptions: Cuba and Haiti

Cuba and Haiti will be the exceptions. Fidel Castro still sees no reason to change his statist economic policy and will continue to limp along, blaming the United States for his lack of success while relying on remittances from Miami and the black market to feed and clothe the Cuban population. Haiti, the region's failed state, also will continue to rely on remittances, drug money, and foreign assistance to remain marginally viable as a state. Barring a drastic change in the philosophy of governance in both states, there is no hope for integration with regional associations, let alone global trading arrangements.

Democracy in Transition

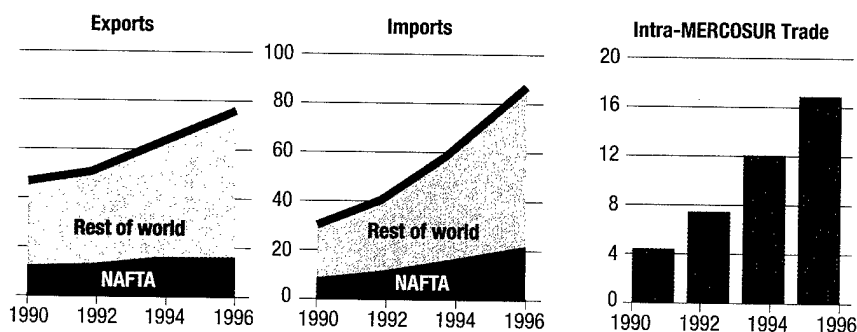
Numerous Latin American states have been characterized as democratic or as riding the "third wave" of democratization, but the use of the word democracy has led to confusion about the actual situation in these countries. Elections are regularly held, and opposition parties exist in most Latin American states. Nonetheless, politics are often largely elitist and based on clientelism and skewed patterns of income and wealth. Perhaps the gravest obstacle to true democracy is the lack of a comprehensive, coherent system of justice (including courts, police, and corrections) to deal with escalating problems of organized crime, violence, and corruption.

Some easily definable obstacles to the formulation of effective systems of justice are the problems they confront. Much of the success of a justice system depends on the methods the society employs to achieve social control and on whether these methods are compatible with one another. In Latin America, the traditional strategies of deterrence and retribution in law and order often conflict, rather than work in coordination: the demand for deterrence steadily increases, while the demand for retribution remains relatively weak. Retribution involves actively seeking out and punishing those who break the laws of the

Regional Trade Agreements



MERCOSUR Trade: Fast Abroad, Faster at Home in billions (U.S. \$)



SOURCE: World Trade Organization

Corruption

The problem of corruption, in which formal political organizations are steadily undermined in their capacity to operate efficiently, cannot be overstated. Briefly, corruption may be defined as the misuse of public office for private interests. Political corruption is widespread in numerous states in the hemisphere and is accompanied by violence that weakens the state's capacity to operate effectively. For example, bribery of officials has long been a successful method of operating in the political life of most of the region. It has been used to pay for immunity from criminal prosecution by the members of organized crime as well as to distort the workings of a variety of public offices. This situation is compounded by society's tolerance of illegality: respect for the law tends to deteriorate when exposed to blatant disregard. Colombian economist Dr. Francisco Thoumi describes corruption as an illegality and dishonesty trap: in a society in which dishonesty and corruption are rampant, behaving honestly becomes costly.

Where organized crime has made a significant inroad, as in Mexico, Colombia, Jamaica, Haiti, and Bolivia, corruption has so undermined legitimacy that these states have at times been unable to guarantee even the most basic order for their citizens. Coupled with the use of extreme violence, this has not only led to a crisis of legitimacy in the criminal justice systems but also has allowed criminal groups to operate with relative impunity for a long time.

One of the most prevalent forms of corruption in the region is *clientelismo*, or patron-client relationships, in which people are placed in positions of authority on a basis other than merit. Rather than being agents of government, in a region where an effective civil service does not exist such individuals are the government. Private individuals use public offices for personal aggrandizement or favorable advantage to themselves and their friends and associates. Many government offices tend therefore to be overstaffed with persons whose particularistic loyalties lie in roles and relations, rather than in rules and regulations. Nepotism, connections, petty bribery, and other means of acquiring private influence and advantage glut the public realm and do little to advance policies needed by the state. Official transactions abound with red tape, requiring seals and signatures to conform to detailed, archaic legal formalities. This practice slows the process of systems such as justice to the advantage of individuals who expedite matters for a fee.

In Colombia and Mexico (and formerly in Peru), there is the added threat of *plomo ó plata* (bullets or money), in which officials are forced at gunpoint to use their position to help criminals—making a bribe the more acceptable option.

society, but many who deserve punishment are so efficient at intimidating and suborning members of the justice systems that the fear of violence as well as the prevalence of corrupt personnel disrupt the system.

Such a setting is a magnet for private power brokers. Presumably, operating illegal businesses and bypassing a system are easier where order is lacking and public institutions are rife with patronage and graft. The problem for law and order is that whenever some brave and honest

government officials do attempt to halt the spread of illegal activity, broken links in the chain of command make extortion and bribery effective in countering such efforts.

When the instruments of coercion land in the hands of groups other than the government, communities are subject to still more arbitrary and personally motivated interests. An informal sector parallel to government institutions exists at lower levels throughout society in Latin America. Entire towns or portions of large cities do not exist on official government maps or tax rolls, having sprung up from squatters' rights movements on unused government or private land, e.g., Brazil's *favelas* or Colombia's *tuburios*. These informal governments have all the trappings of a formal sector, such as police, justice, services, medical institutions, transportation. In some parts of Colombia, Mexico, and Peru, insurgents and drug mafias have replaced the state as the governing authority. Drug barons have penetrated these countries' political and legal institutions to the point where they virtually form a "state within a state," fostering relations with the local government or providing the populace with housing and social services. However magnanimous the acts of these groups are, these self-appointed leaders were not democratically chosen by the people. Rather, they have insinuated themselves, using large quantities of money, operating with relative impunity, and using the "law of the jungle" to dispense their largesse and justice.

One unfortunate result of these systemic and insidious problems is that governments attempting to democratize are foundering. Their chronic inability to stop the escalation of violence and corruption has led to their legitimacy being increasingly brought into question. Not only must a government be constrained in its ability to carry out its policies by a constitution and the rule of law, and thereby held accountable for its actions; it must also fulfill the first duty of government—to maintain order. Equality and liberty, the essentials of a liberal democracy, can be exercised only in the presence of a peaceful social order.

When the state loses legitimacy, the government begins to fracture along personal or familial lines where persons or

Corruption Index (1997)

Rank	Country	Score*
22	Costa Rica	6.45
23	Chile	6.05
35	Uruguay	4.14
36	Brazil	3.56
42	Argentina	2.81
44	Venezuela	2.77
47	Mexico	2.66
50	Colombia	2.23
51	Bolivia	2.05

* Based on international perceptions; the lower the rank of the country, the lower the level of corruption (1=least corrupt).

SOURCE: Transparency International

parties jockey for position and control over diminishing resources. Such loyalties, in turn, take precedence over the commitment to public policies, even the constitution, diverting the energy and attention of those working in the public realm to a free-for-all.

Foremost consideration must be given to building on and preserving existing law and legal institutions. Antiterrorist policies in liberal democracies should not involve reprisals against segments of the population thought to be sympathetic to outlaws. Governments that respond to violence by using indiscriminate force will not only be resorting to the same practice as the terrorists but also strengthening whatever support the outlaw groups may enjoy. Security forces and police or military units given the task of combating violence should be closely monitored to ensure that they operate within the law to whose defense they are committed. Civilian control must be retained over their activities through executive policy, legislative oversight, and judicial constraints. All these are necessary: no one or two will suffice.

But all is not gloom and doom. NGOs have sprung up throughout the hemisphere, demonstrating the strength of democracy through grass-roots movements to demand proper governance. The

call for opening or liberalizing party systems is strong, raising the hope and expectation that democracy is not merely a periodic fad. Optimism is moderated by a healthy dose of realism. Democratic rule is bucking 500 years of authoritarianism, a tradition that will take more than a decade to overcome.

Civil-Military Relations

Implicit in the suggestion of increased oversight of the region's armed forces is the concept of civilian control over those forces. Latin America does not have a tradition of balanced civil-military relations, as understood by the core. The regional tradition of vesting the armed forces with the role of "savior of the state" and "guarantor of the constitution and the people's rights" flies in the face of the core definition of civil-military relations based on civilian supremacy and guidance, two factors marginally present in or completely absent from most of the hemisphere. Most of the region's armed forces are charged by national charter to be the final arbiter of state sovereignty, with a mission of preserving order from all threats, foreign and domestic, at the expense, if necessary, of the civilian government. U.S. guidance to increase professionalization—that is, to emphasize technical expertise, organization, and training in the arts of war—has been interpreted as increasing emphasis of traditional missions, including the military operating politically in a praetorian manner, taking power as an unaccountable political broker maintained through the use or threat of force. The standard answer of the Latin American militaries has been that they are indeed professional and always have been.

The trend in civil-military relations has been slowly changing as the militaries grow more comfortable with the concept of not retaining responsibility for guiding civilian governments, but the absence of civilian expertise on security issues remains a major problem. U.S. pressure to subordinate authority to the civilian government may succeed in form but not function, unless civilian expertise and guidance increase markedly. Thus far, not one defense policy in the region has been issued

EZLN insurgents in Mexico



Photo: AP/Wide World Photos

from a civilian ministry of defense or the presidency. The case of Argentina is illustrative: after five years of consecutive reductions in the defense budget, the Menem administration has yet to provide a defense policy on which the ministry of defense can base a credible reorganization to match what amounts to an 80 percent budget cut. Colombia's situation is worse; it is fighting a war on at least three fronts with no stated defense policy from either the ministry of defense or the civilian government. In a sense, past experience is at fault. Authoritarian regimes in Chile, Argentina, Paraguay, and Uruguay wrote defense policies later used to justify "dirty wars" and other depredations on the civilian population. This experience provides a disincentive for either civilian governments or military institutions: civilians fear a repeat of the misuse of such policy, and the military fears a repeat of the justice imposed after the fact for doing what it considered the ruling elites' dirty work.

There is no strong trend in the hemisphere toward improving civil-military relations, other than the inertia of getting used to dealing with each other in an environment of liberal democratic governance. Civilian demands to reform the military to curb human rights abuses negate the inability of the civil sector to reform the capacity of judicial systems for oversight or justice. Military complaints of civilian ignorance of defense issues is negated by the habit of ignoring civilian oversight or guidance. An optimistic scenario is for inertia to continue uninterrupted so that time can heal past wounds. In this area DoD can exert diplomacy, playing a key role as a model establishment, guiding by example, as well as providing training and education to both military and civilian personnel working on security issues. Brazil and Chile have produced "white papers" on security issues, an unprecedented step for the region. These papers' existence, together with an increase in the volume and quality of academic fora debating security issues, provides evidence of progress in

improving civil-military relations, and more should be encouraged.

Drug Mafias

The illegal drug market long ago achieved stability and, in some cases, saturation, and that situation is unlikely to change any time soon. Without a major change in counterdrug policy and methodology, the only measurable change in the market will be in methods of smuggling or in market taste. There are indications that cocaine is no longer the drug of choice; heroin and synthetics have been making headway against "king coca." But the basic market forces are the same and the risk factors and smuggling methods remain almost static, while the profitability of synthetics provides the only dynamic change, as different suppliers and smugglers rise and fall with their success or failure in capturing market share.

Thus far, the switch to synthetics has assisted the Mexican mafias' rise in importance, based on proximity to the United States and ease of production. Colombian mafias have increased their market share of

the heroin market, while U.S. producers have retained or gained some of the marijuana market. Extra-hemispheric groups are making inroads into the business almost in direct proportion to the loss of control by the Colombian groups. Nigerian, Russian, and Asian groups have begun to compete strongly for large shares in the smuggling and distribution networks. This dispersion of the market makes it all the more difficult for U.S. counterdrug forces (including DoD) to mount sustained successful interdiction.

The making of drug policy in the Americas, north and south, has to date been characterized by reactive and incremental initiatives. Decisions made during crises (including political crises or elections) are often not the best solution for resolving problems. States where illicit drugs are produced and transited in many cases make drug policies based on domestic pressure (e.g., labor unions, indigenous rights groups) and on retaliatory violence perpetrated by organized criminals. The result has been "quick fixes" (e.g., the certification process or nationalistic reaction to U.S. policy, transit vs. source interdiction operations, eradication) rather than long-term planning.

Canada as a Transit Zone

The increasing problem of drug trafficking largely by Southeast Asian, Eastern European, and Middle Eastern criminal groups through Canada has been largely ignored. Criminals have managed to gain Canadian passports under the Immigrant Investor Category requiring them only to invest in Canada and employ Canadians, guaranteeing them a Canadian passport or Landed Immigrant Status. The Royal Canadian Mounted Police (RCMP) maintains a post in Hong Kong to check the credentials of all migrants, although severe budgetary cutbacks hamper its efficiency.

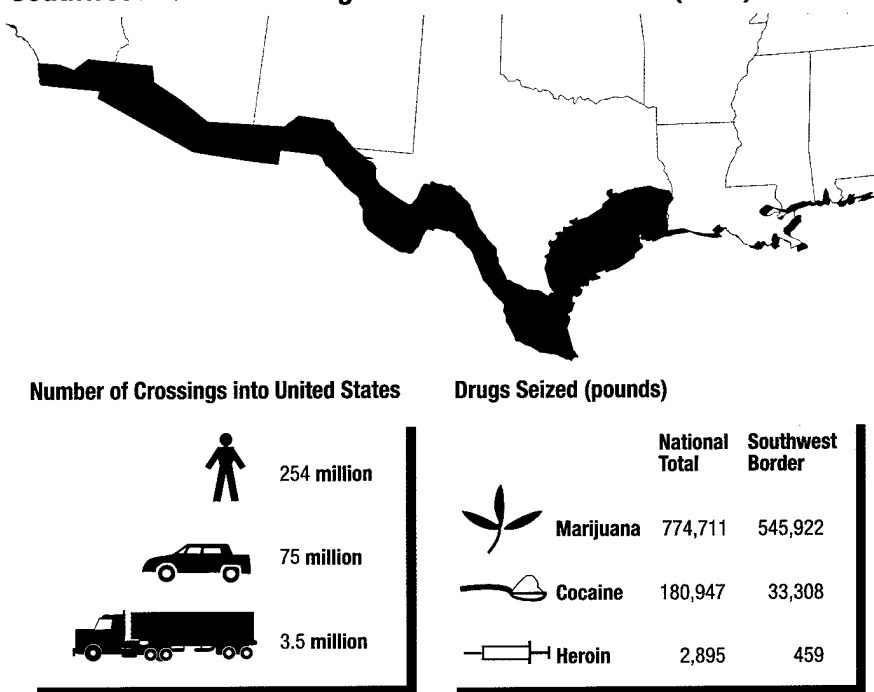
Organized crime groups in Hong Kong and Taiwan have traditionally trafficked in heroin from the Opium Triangle (Laos, Cambodia, and Vietnam) and are increasingly using the unprotected border the United States has enjoyed with Canada for the past century. Vancouver has become a focal point for these Asian Triads for the redistribution of heroin destined for other parts of Canada and the larger, more lucrative U.S. market. The Canadian Government, in its cost-saving measures, disbanded the Vancouver Port Police, leaving the task of patrolling Canada's most important Pacific coast port of entry to private security agencies and the already overworked and under-funded Vancouver Police. These private security firms have been involved in illicit contraband scandals; future use of the port as an entry point for illegal narcotics is only likely to increase.

Many criminals find that access to the United States is as easy as declaring the intention of going "shopping" for the day. Law enforcement officials have worked hard to coordinate efforts with the different police agencies in Canada, but diminishing resources on both sides hamper these efforts (e.g., the closing of the Drug Enforcement Agency office in Vancouver).

Toronto and Montreal also have become important transit points for drugs from Eastern Europe and the Middle East. Again, while the RCMP has been attempting to stop the flow of narcotics by cooperating with agencies in Europe and Interpol, its budget is well below those of well-funded, organized criminals.

Diplomatic pressure must stress the point that more cooperation among law enforcement agencies will go far in upholding Canadian sovereignty in the long run. The current trend of using Canada as a transit point for illicit drugs pushes that country into the drug war more than it wishes, even to the point of harming the important trade between it and the United States, and perhaps permanently damaging the good relations the two countries currently enjoy.

Southwest Border Crossings and Narcotics Seizures (FY96)



SOURCE: U.S. Customs Service

The primary security threat within the Hemisphere is international crime (e.g., arms and drug trafficking). DoD is not well suited to resolving these threats, which are best dealt with through issue-specific multilateral or bilateral frameworks where the military has a supportive role. These frameworks should be judicial in nature, with strong law enforcement cooperation. Continued assistance to Latin America in developing professional judicial systems and law enforcement throughout the region is paramount.

Hemispheric Security

The trend in the United States is to think of hemispheric security as an overarching framework (e.g., continuing or expanding the Defense Ministerial, improving the Inter-American Defense Board, or developing a new organization), but at the same time there is a trend also toward avoiding such comprehensive efforts, increasing subregional integration, and creating ad hoc groupings to deal with specific, time-limited issues.

From the Latin American viewpoint, the asymmetrical balance of power in favor of the United States has obstructed and will continue to hinder the formation of any multilateral military organization, for fear that the United States will dominate it. In a collective security framework such as the Rio Treaty or a cooperative framework such as the IADB, member states cede to that organization a measure of autonomy in military decisionmaking. States in the region have long viewed the military as a nation-building force and the final arbiter of national sovereignty, and they closely link national autonomy to national sovereignty. This link creates an almost insurmountable obstacle to the creation of coalition forces and implementation of the concept of shared command. An overarching multilateral framework in Latin America would be seriously undermined by the need of U.S. military strategy, because of its global responsibilities, always to reserve the right to act unilaterally. Military leaders throughout the hemisphere demand a similar right, thus reducing the credibility and effectiveness of any multilateral security organization. But the *idea* of a multilateral organization such as the OAS is attractive to Latin America, to reinforce international law and provide the possibility of a unified front against overwhelming U.S. influence.

Perhaps the most that can be accomplished is to strengthen subregional groupings. Latin America strongly adheres to the principle of nonintervention and respect for national sovereignty and has approached conflict resolution through limited military action, most involving only observers. During the Dominican Republic crisis of 1965, Latin American states viewed the OAS Inter-American Peace Force as a multilateral disguise for U.S. unilateral intervention. Since then, the only missions to include a substantial number of Latin American forces have been UN peacekeeping and enforcement operations, such as the UN observer missions in El Salvador and Central America. OAS participation was most successful during the 1969 Soccer War but reverted to minimal activity during the coups in Haiti (1991), Peru (1992), and Guatemala (1994). Even after the strong solidarity demonstrated by the

Declaration of Santiago (1991), the OAS resorted to generally ineffective political or economic action, eventually ceding authority to the United Nations.

Differing strategic and threat perceptions undermine U.S. efforts to form a collective security framework. Although U.S. military strategy involves reorienting traditional Latin American defense strategy away from a Cold War focus and toward cooperative security missions such as peacekeeping and counterdrug efforts, Latin American senior officers view these missions as secondary to protection of national borders and sovereignty. The political will might exist among the civilian leadership, but in nations where the military has gained a high level of autonomy and self-sufficiency, the military's prerogative to defend the nation's sovereignty cannot easily be changed. Military officers throughout the hemisphere (including the United States) have publicly expressed the feeling that multilateral operations within the region or outside (e.g., Croatia, Crete, Sinai) potentially weaken the military's ability to respond to primary security roles.

Naval Coalition Exercises

The navies of Latin America have led the way in establishing military-to-military contact, because they can do so without raising nationalistic issues such as sovereignty and constitutional bans on foreign military forces within state boundaries. The most successful coalition operation has been UNITAS, now in its 38th year. A U.S. Navy task force circumnavigates the continent, conducting bilateral or multilateral operations, practicing navigation, underway replenishment, gunnery, search and rescue, and occasionally missile-firing exercises. Similar naval operations include DRAGAO (Brazil, Argentina, Uruguay, and South Africa), ARAEX (Brazil and Argentina naval air), IBEREX (Brazil, Argentina, and Spain), Fuerzas Unidas (United States, Mexico, Guatemala, Honduras, and El Salvador), GREY GHOST (United States and Argentina), and FLEETEX exercises between the United States and Chile.

A major factor in the success of UNITAS is the absence of sovereignty issues, given that exercises take place in international waters. Were a method for adapting the UNITAS concept to army or air force exercises available, it could enhance military-to-military relations dramatically. But armies and air forces need land, which raises the sovereignty issue that so far has precluded anything more than occasional, temporary bilateral exercises.

Argentina, Brazil, and Chile have employed bilateral negotiations and confidence-building measures to diffuse any possible conflict. They have engaged, or have planned to engage, in bilateral military exercises: Brazil and Argentina have conducted joint naval exercises since 1976 and recently began joint peacekeeping and air force exercises; Chile and Argentina will conduct their first joint military exercises in 1998.

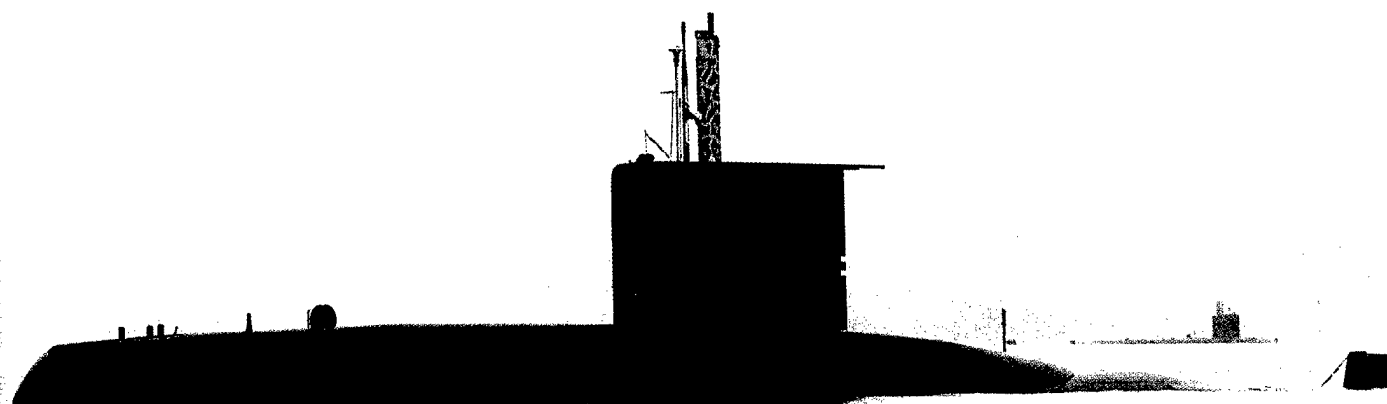
Shaping the Strategic Environment

Promoting Confidence

The best way to enhance regional confidence is to provide coherent, stable policy guidance and remain continually engaged in Latin America. At the same time the global role of the United States means that its strategic and security interests lie elsewhere. The concept of Latin America as a geopolitically secure area is still valid: as long as there is no overarching threat or lots of conflict, there is little reason to direct much DoD attention there.

The region's history has demonstrated that states will ultimately resort to resolving problems through ad hoc groups involving only the affected states. Such groups can be disbanded when their objectives have been met, leaving behind no framework that the United States (or anyone else) could use to push a unilateral agenda. Current security threats are localized and therefore viewed differently throughout the region. Localization can render attempts to create a formal multilateral organization ineffective owing to traditional concerns for sovereignty. Consensus will be reached only on the lowest common denominator and thus will produce an insufficient response to security problems. Without a common definition of what constitutes a security problem, frequent defections occur, further eroding consensus.

The solution is to concentrate on improving bilateral relations throughout the region while encouraging ad hoc groupings based on shared or common interests. Specific issues, which will probably be decided by events, are likely to include counterdrug operations (one group for source countries such as Colombia, Peru, Bolivia, and Mexico, and three groups for transit areas, including the Caribbean, Central America, and South America) and counterinsurgency (Colombia and its immediate neighbors). Other missions include containment of state failure (Colombia and its immediate neighbors and Haiti, Cuba, and their Caribbean neighbors), and border conflicts (Military Observer Mission, Ecuador-Peru, or MOMEPE). The principal difference between what currently exists



Chilean submarine *Thompson*

and what is proposed here is that ad hoc groupings, unlike overarching multilateral or bilateral arrangements, dissolve after the primary mission or objective has been met.

Although the United States has been reluctant to use current defense structures to address security issues in the hemisphere adequately, it has leeway for guiding the debate on security and influencing policy outside of these structures. Defense diplomacy need not be hemispheric in nature: it is possible to secure the U.S. objective of cooperation and stability through bilateral relations alone. But neither option is necessary, as experience has shown a hemispheric preference for subregional groupings with a mutual-interest agenda and short duration. U.S. policy, with a history of sporadic, short-attention-span incursions in the region, would need little to adapt to this style. For instance, defense diplomacy could focus on the Southern Cone to stress hemispheric cooperation in a global context (e.g., the free-trade area of the Americas by 2005). No comprehensive hemispheric policy need be written for counterdrug issues when only the Andean region is involved. The Caribbean is not cohesive either, and as a region for policy could be divided into at least

three groupings: Cuba, English-speaking, and drug transit zone. Central America, too, lends itself to division because of states' different experiences and security requirements. Under this type of defense diplomacy, a need to work toward gradual coordination of defense interests, policies, and cooperation would be unnecessary. Such coordination would be required only among states (or militaries) with similar conditions and interests.

That does not mean there is no use for forums such as defense ministerials, in which all parties coordinate general guidelines and debate broad-brush issues of general mutual concern. Moving relationships within the hemisphere to a more mature level will require the *patrón* to give up his absentee status and actually lead, where necessary, in a role the United States is naturally capable of filling. But security policy does not need to be conducted at the hemispheric level.

Diplomacy can be used to encourage bilateral agreements and promote confidence-building measures to foster understanding and to prevent regional conflicts. Joint exercises, like UNITAS, those taking place among Argentina, Brazil, and Chile, and those planned in Central America under the aegis of the Conferencia de Fuerzas Armadas de Centro America,

Revolutionary Armed Forces of
Colombia (FARC) insurgents



Photo: AP/Wide World Photos

should be encouraged. They will increase policy transparency and prepare neighbors for joint action, should the need ever arise.

Creating Complementary Capabilities

For ad hoc groupings of mutual interest to work, the armed forces of participant states must work well together, if not combine forces outright. In this respect, Latin America is closer to the Asian model of cooperation than to the European model. Interoperability is always a desirable objective to pursue in the hemisphere, though hard to justify in the absence of a unifying threat.

The principal reason for interoperability is to be able to combine complementary forces during operations conducted for mutual benefit, which include counterdrug actions, peacekeeping operations, containment of state failure, or border wars. Reduced defense budgets make shared responsibility for security an attractive option, although the current orders of battle in most cases require scrapping existing forces and buying new ones. As attractive as that is to weapons manufacturers, the initial driving force (budget reductions)

precludes interoperability through replacement. Thus a longer term approach is needed.

The new U.S. policy on high-tech arms sales in Latin America will initially benefit U.S.-Chile relations (through the possible sale of F-16s) but in the long run will benefit the United States and its friends in South America by increasing interoperability through the simple expedient of selling them U.S. systems. Critics argue that such sales undermine security by providing expensive systems that answer no specific external threat and yet increase the strength and economic power of the military. But as the armed forces modernize through new acquisitions (based on domestic requirements), the United States will assist in creating complementary capabilities and enhancing ad hoc coalitions. Mutual trust will increase, because high-tech sales indicate a willingness to trust the armed forces of the region to use such materiel in a manner consistent with core values.

Promoting Defense Reform

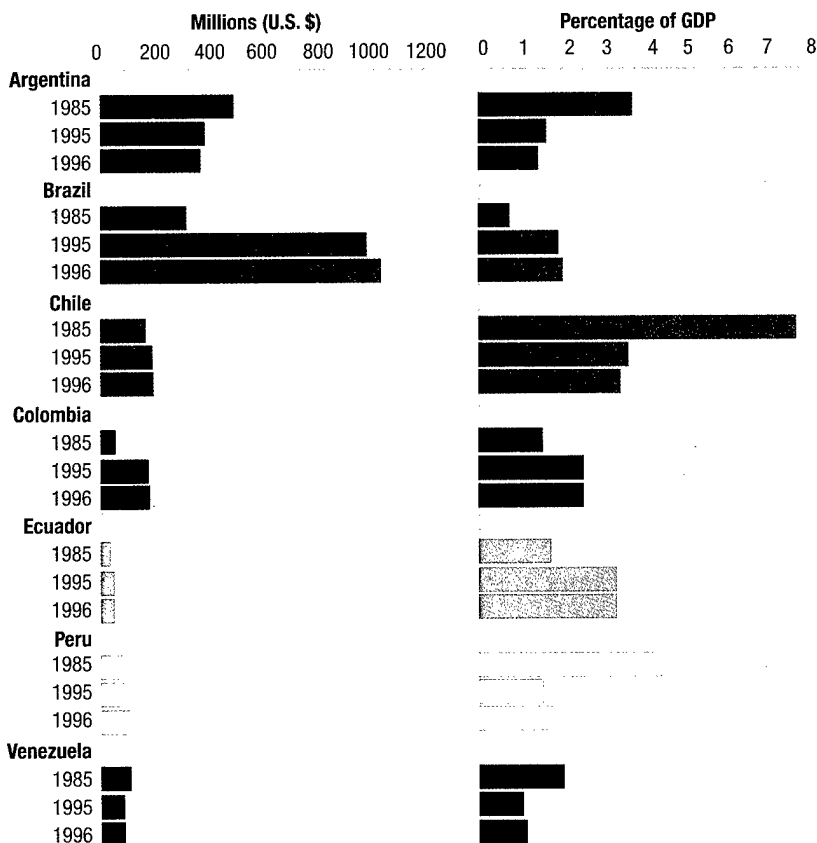
The critical defense reform in Latin American countries is in civil-military relations. Governments need assistance reconciling a strongly held corporate tradition in defense and military affairs with an unfamiliar, liberal tradition more supportive of democratic norms. A key factor in supporting a transition is the competence of civilian officials with defense responsibilities in the executive and legislative branches of government and in the private sector. Aside from demonstrating the subordination of militaries to civil authorities whenever possible, U.S. defense capabilities need to become associated with regional engagement. Examples include the education of military officers and defense civilians at the Inter-American Defense College and the Center for Hemispheric

Defense Studies, technical assistance establishing tailored defense management structures (use of contractors), and DoD-sponsored events (staff talks, conferences, seminars) in the region to facilitate civil-military dialogue.

A major deficiency is Cuba, where currently DoD is precluded from direct engagement. An indirect approach is needed, possibly using defense diplomacy by encouraging or financially supporting core partners to interact with Cuban officers, such as attending their professional schools and increasing U.S. participation in expanded multilateral operations or projects.

Fora for debating security commonalities at all levels, such as the Inter-American Naval Conferences, the Defense Ministerial, Conference of American Armies, and Conference of American Air Forces, should also continue to be encouraged. The IADB should continue its role as an important organization for cooperation, consultation, research, and advice to the OAS on security issues. All these fora will help create a sense of trust among neighboring military establishments, which will foster a friendly environment in the hemisphere for U.S. forces, if ever required.

Defense Expenditures



SOURCE: International Institute for Strategic Studies, *The Military Balance 1997-98*

Using Force

Because of the history of forceful intervention in the region, the projection of force in the hemisphere is a tough topic to tackle. There are, nonetheless, specific situations in which the use of U.S. forces could be brought to bear.

Contain expansion of instability

This scenario involves two situations: a loss of sovereignty and the war on drugs. Should Colombia's future involve the loss of state sovereignty to insurgents or transnational organized crime, it is feasible that U.S. assistance would be sought to resolve the situation. But the call may not come directly from Colombia: instability along the borders could spill over to neighboring states, to the point where a coalition could be formed to either contain the fighting or assist government forces in regaining control from the FARC, ELN, or drug mafias.

Policy to combat the traffic in illicit drugs requires a comprehensive multifaceted plan to predict possible outcomes and alternatives. Relying on reactive policy to combat the problem (e.g., measuring success in terms of price and seizures) will not produce a solution. For example, counter-drug agreements take years of laborious diplomacy and negotiation, but a fluid criminal trafficking group can alter its transportation and routes in mere days. More attention is needed to international cooperation, mutual legal assistance in criminal matters, extradition to a third country, and harmonizing legal systems. The posturing of sovereign governments contributes to a mentality of "form over function" and should be avoided.

This could be accomplished by training crime-fighting units to use common operating procedures, to recognize that the enemies of one are the enemies of all, and to harmonize command structures. NATO was an efficient vehicle for combating Cold War enemies; a similar structure would not be difficult to achieve to fight the common enemy in the war on drugs. Nationalism and diplomacy must be set aside in order

to acknowledge that the new threat is transnational criminal groups and that only concerted, planned policy initiatives will bring about their demise.

Control damage in Cuba

The principal scenario for force projection in Cuba involves a loss of state control caused by a sudden change in regime structure. In other words, Fidel Castro loses control or dies, causing a violent war of succession. The United States could be sucked into the power vacuum, most likely in a peacekeeping role, to separate warring parties and provide stability throughout a period of adjustment.

Contain damage of state failure

This scenario is a repeat of the 1994 involvement, restoring order from the chaos to which Haitian politics are wont to descend. As in the case of Cuba, the DoD role would be to separate the warring parties and provide stability so that other forces may work on restoring governance. This scenario would involve a heavy humanitarian component, providing food and clothing to the populace while the economic sector regained enough control to re-establish market forces.

Dramatically increase presence

The role of DoD in protecting the U.S. border by means of what is essentially a policing function remains highly debatable, but it is one that policymakers must at some point consider seriously if the effectiveness of the war on drugs is to be sustained in the future. The current emphasis on source and transit stage interdiction is not a complete plan, and stopping drugs at the border has not been effective. The drug smugglers are too sophisticated, fluid, and well armed for the existing border interdiction programs: DoD is an attractive option to policymakers to task with confronting this threat. This scenario involves using DoD assets to patrol all the U.S. borders (Canada, Mexico, the east and west coastlines, Puerto Rico, the Virgin Islands).

Patrolling the Border

DoD is increasingly under pressure about its policy of patrolling the 2,000-mile border with Mexico. Along the border the military has assisted by providing a force 170 personnel, conducting over 3,000 operations since 1990. The military's role to date includes operating listening posts to assist the INS Border Patrol in tracking drugs and migrants, building fences and barriers, repairing roads, and assisting law enforcement agencies in counterdrug operations.

Congress has proposed legislation authorizing the deployment of up to 10,000 troops to the border, but following a shooting incident in May 1997, when a marine shot and killed a young boy, DoD cut operations. It is a difficult mission for DoD, because the basic problem is one of law enforcement, not military operations. Yet law enforcement routinely finds itself confronting smugglers who have better weapons and greater manpower, which leads to requests for military support.

As the drug war continues to increase in complexity, so, too, will DoD support for law enforcement. The Navy is involved in Caribbean and Pacific operations but could be called on also to assist the Coast Guard in patrolling all the coastlines in search of sea and air infiltrators. This would involve writing rules of engagement for confrontations, possibly involving lethal force (e.g., shooting down aircraft that do not respond to requests for identification). Ground forces could be called on to support increased border patrol operations not only along the Mexican border but also the Canadian border, as smuggling routes change to meet the challenges presented by increased patrolling elsewhere.



The U.S. Presence in Panama

The Panama Canal Neutrality Treaty (1977) guarantees that "nothing in the treaty shall preclude the Republic of Panama and the United States from making further agreements or arrangements for the stationing of any U.S. military forces or the maintenance of defense sites" after the December 31, 1999, deadline.

In December 1997 the governments of the United States and Panama publicly acknowledged a tentative plan to establish a multinational antidrug center known as the Centro Multilateral Antidroga (CMA) or the Multinational Counter-Narcotics Center (MCC). Up to 2,000 U.S. troops will be stationed at the center, controlled by a civilian board chaired by a Panamanian official, to gather and coordinate intelligence in support of counter-drug operations. The question of what other nations are to participate in the MCC's operations has not been settled. Latin American representatives have voiced their concern to Washington that, although they regard the MCC initiative as a positive development, they feel that it places too much emphasis on detecting and halting production with little attention to curbing demand.

A concern facing the Panama Canal Zone is the management of the canal itself. Whether the Panamanian government will be able to handle the task of maintaining the canal's day-to-day operations remains in question. The importance of the canal to hemispheric trade cannot be stressed enough, and mismanagement could prove detrimental to many sectors of the Latin American economy. Further, the United States should not take lightly that Chinese companies continue to surface in the country and may gain important influence over the managerial affairs of the Zone.

Recent polls indicate that 70 to 80 percent of Panamanians would favor a continued U.S. presence in their country if base rent were paid, especially considering the direct contribution to the Panamanian economy by U.S. forces in the annual range of \$350 million. However, there is also an understanding among most Panamanians that a strong U.S. military presence provides a security and political stability beneficial to Panama and to the hemisphere as a whole.

But negotiators have proven incapable of discovering enough common ground for agreement on the many variables of force composition, number of U.S. troops, regional participation, command authority, jurisdiction, or mission. As of March 1998, negotiations on the establishment of an MCC continue, with the outcome still to be determined, and it appears that the Carter-Torrijos Treaties of 1977 are likely to be implemented with no residual U.S. presence in Panama after 1999.

Conclusion

The Americas continue to be a region of tremendous potential for cooperation and coordination of mutual interests, ranging from economic (integration, expansion of trade), to governance (democracy, civil-military relations, human rights, migration), to security (border conflicts, insurgency), to nonstate threats (drug mafias, arms trafficking). Most trends associated with these interests are on a positive path in relation to U.S. strategic goals. Economic integration and expansion are on the rise; democratic governance is at record highs; strategic security interests do not threaten sovereignty anywhere in the region. Only the nonstate threats have produced cause for worry. Nevertheless, these trends are relatively weak. U.S. and Latin American policies related to issues of mutual interests do not always coincide; policy responds primarily to domestic pressure, resulting in self-serving or introspective rather than realistic solutions to problems or threats.

Corruption and different definitions of governance also work against mutual interests; although the rhetoric matches, practical application of policy often runs counter to the intention of laws and governance.

Thus, policy and reality are often in contradiction. Although in the past the United States has chosen to ignore the contradictions between law and practice inherent in the corruption in the region, the increasing regional integration makes it difficult to continue turning a blind eye.

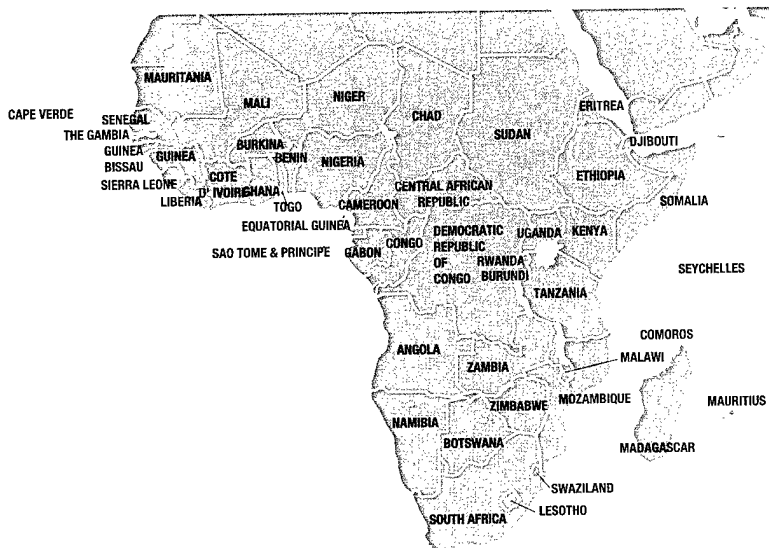
Security policy has changed dramatically in recent years. Gone are the days requiring a coordinated, hemispheric policy. Gone, too, are the days of requiring a global mission from the regional military. Today's security policies concentrate on national priorities, to a great extent ignoring global or nonstate threats in favor of an increased emphasis on border disputes and domestic threats, not issues of interest to or involvement for DoD. These changes require a change in thinking, because they involve increased communications and coordination throughout the region, in the form of defense ministerials, conferences, and issue-specific liaison.

These changes also mean a new type of engagement in the region, one that emphasizes ad hoc, subregional groupings, instead of an overarching security framework. Dealing with the four principal threats requires engaging DoD assets or resources and must be approached with a new paradigm involving new actors or groupings:

- Resolving the problem of state failure in Haiti will mean working with Haiti's neighbors (Venezuela, Dominican Republic, and Cuba), rather than invoking an OAS or UN force
- Dealing with increased regional instability in Colombia will involve Venezuela, Ecuador, Brazil, Peru, and Panama
- Dealing with the increased crisis of governance in Mexico will primarily be a bilateral issue, although Canada may be engaged through the NAFTA mechanism
- Confronting the nonstate challenge posed by illegal drug mafias will require two groupings, one involving source countries (Colombia, Mexico, Peru, Bolivia, and the United States), the other involving transit states and subregions (Venezuela, the Caribbean, Canada, Mexico, and Central America).

CHAPTER EIGHT

Sub-Saharan Africa



The United States views Africa today as a marginal security problem. No state or combination of states in Africa poses current or foreseeable threats to its key interests. Nor, with the end of the Cold War, is there a need to build coalitions against unfriendly external actors. Africa is of limited strategic importance to the United States. However the region's turbulence and recurrent crises, which have produced horrific violence and abuse of the local populace, demand frequent, costly external intervention. A sustained strategy for helping Africa cope with problems of conflict and underdevelopment is sorely needed to enable the continent to pull itself out of the misery and poverty besetting many of its countries. Action is

needed there to continue to curb international terrorism and the growth of international trafficking in narcotics, but whether the international community has the political will, or willingness, to commit resources and mount serious efforts to attain such objectives in Africa is not clear.

U.S. Interests

During the Cold War, U.S. strategic interests in Africa were linked to pressures outside the continent, from the Soviet Union and the Middle East. The collapse of the Soviet Union eliminated concern over Soviet incursions (especially in central and southern Africa) and reduced the need for active measures to protect sea lines of communication in the Atlantic and Indian oceans; the shift to satellite communications has eliminated the need for communications posts in north and east Africa; and since the Gulf War, new agreements with Saudi Arabia and other states have moved the forward positions protecting Middle Eastern oil fields from east Africa into the Middle East itself. The absence today of major strategic threats or requirements offers an opportunity to focus on the true issues in Africa: basic survival, food security,

peace, quality of life, and economic growth. The absence of vital interests does not in any way reduce the importance of historical, economic, social, and humanitarian interests in the African subcontinent.

Cementing Core Values

The main U.S. interest is to help Africa build stable, prosperous democracies that generally follow Western political and economic models and that will be open to and be major participants in international trade and investment. Attaining this general objective would enable the United States—and core partners—to meet their own national and commercial goals of expanded trade and investment, which include access to Africa's tremendous natural resources, in particular, minerals and oil. To focus on helping Africa accelerate its development, the United States would first need to address problems of security and stability, starting with the destabilizing activities of rogue states in Africa.

Containing Rogue States

Africa has had more than its share of rogue states, but the troublemakers have generally not posed serious, direct threats to U.S. security. Libya has been an exception, with its combination of support for terrorism, chemical weapons program, and military interference in neighboring states, but as those activities have diminished in recent years, the threat has dissipated. At present, continuing support of terrorist organizations and activities by the Sudan

regime and the spread of international trafficking in narcotics through the ineptitude or connivance of the Nigerian regime constitute the only threats to U.S. security. More generally, the fundamental and enduring interest of the United States lies in containing rogues so they will not frustrate the progress of neighboring states attempting to pursue policies more in line with those of the core.

Keeping Transition States on the Right Path

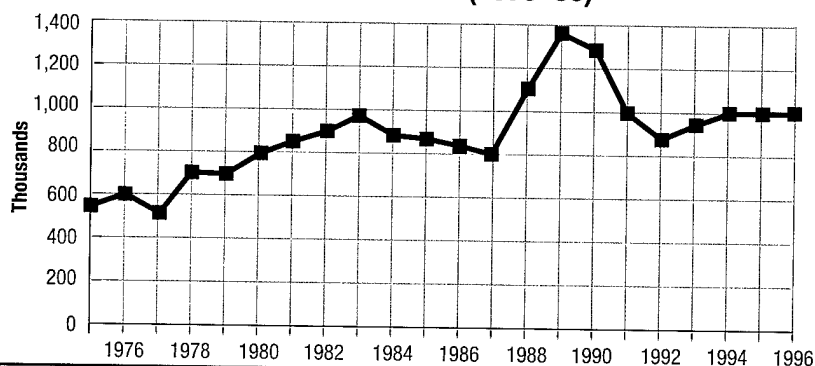
Transition states need support to make sure they get on (or stay on) the right path. They need firm, detailed, and consistent attention by the international community working in concert to minimize unhelpful deviation and to prevent the emergence of new failed states, which would only destabilize their regional neighbors.

Removing the Causes of Failure

Immediate, mid-, and long-term efforts to promote stability and security on the African continent are needed to end the endemic violence that frustrates development, creates conditions ripe for humanitarian disaster, and sometimes leads to new failed states. Conflict, planned and spontaneous, is the main enemy of political, social, and economic progress and remains widespread in Africa. Africans acknowledge this and want to put an end to it, yet there is no end in sight. Indeed, for many African states, achieving security and stability remains the top policy concern, taking precedence over all other objectives. The region desperately needs international assistance in this effort.

It is in the U.S. interest to address the root causes of failed states and humanitarian crises in Africa for several reasons. The American public is concerned that the people of Africa are poorly served, which increases public pressure on DoD to intervene. Such intervention after a crisis is more expensive—in terms of dollars, political capital, and human life—than averting one in the first place.

Military Personnel: Sub-Saharan Africa (1975–96)



SOURCE: United Nations and International Institute for Strategic Studies, *The Military Balance*, 1997–98



Evacuees from Liberia in Sierra Leone

Current Trends

No Decisive Socio-Economic or Political Trends

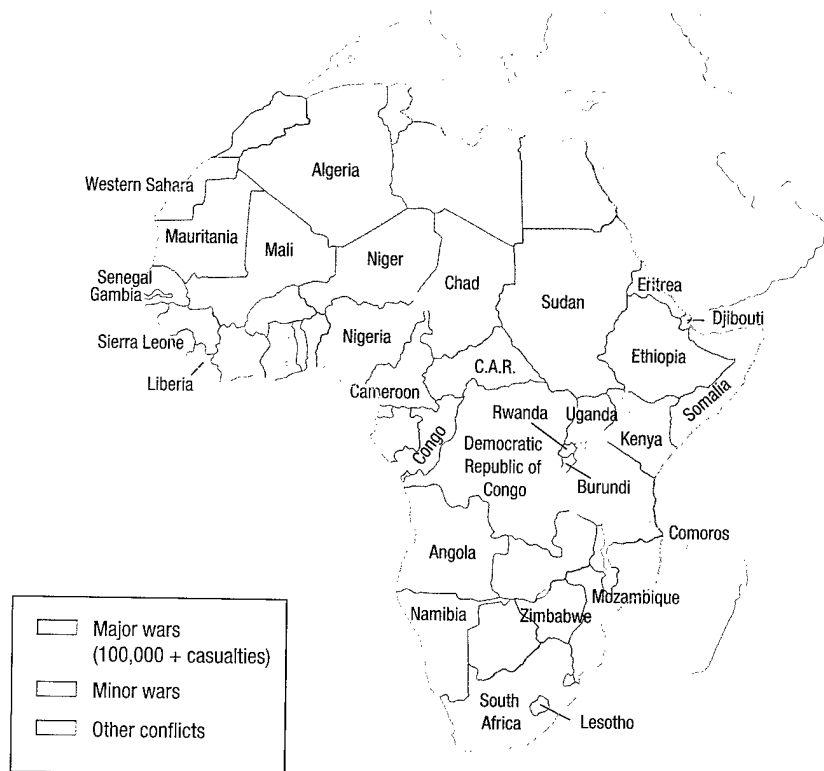
Africa today is in a state of high ferment. Strategic, political, economic, and humanitarian trends across the continent vary; more crises, more explosions and implosions, and yet new opportunities will undoubtedly occur as events cascade in unpredictable and sometimes breathtaking ways. For now, although there are promising signs, it is too early to claim that Africa is firmly and finally embracing Western core values and institutions. In some countries, the promotion of democratic practices and economic reform leading to new growth are apparent; in others, democracy and economic reform lag. As yet, there are no decisive political and economic trends across the continent.

Tottering Rogue States

One of the major regional rogues in Africa, Mobutu's Zaire, was overthrown during 1997, and there is hope that the new

regime can turn the new Democratic Republic of Congo onto a proper path as a transition state. Nigeria, with its antidemocratic practices, human rights abuses, and economy in collapse from corruption and mismanagement, is still a potential rogue, but the presidential election and return to civilian government planned to occur in 1998 may put it on the path to democracy and economic recovery. Sudan is the third major regional problem, and it arguably already has fallen into the category of rogue, owing to internal abuses, continuing support for terrorist groups, links to other rogues, and interference in the affairs of most of its neighbors. Containment of Sudan and encouragement of eventual installation of a responsible regime that would correct the abuses remain high priorities for the United States. Sudan's economic difficulties and recent military reversals in the south at the hands of the Sudanese People's Liberation Army indicate the possibility of a change in regime for the better in the near future.

Sub-Saharan Conflicts (1980–96)



SOURCE: Adapted from Raymond W. Copson, *Africa's Wars and Prospects for Peace*

Most Transition States on the Right Path

South Africa is both a state in transition and the pivotal state in southern Africa. The generally peaceful transition to a post-apartheid era has been encouraging, and a relatively smooth transition to a post-Mandela era is expected, in spite of concerns about possible rifts in the civil service and security services. The economy remains in the doldrums, with lagging foreign investment, making it difficult for the government to deliver on promises to expand social services to the disadvantaged sectors of society. The issue of the economy could prove explosive in the next national elections. Crime, particularly domestic and international narcotics trafficking, has grown to threatening levels. In general, however, South Africa remains a major success story. If it can raise its growth rate a bit, it could play its anticipated role as economic anchor for the entire subregion.

Other important transition states in Africa are Angola, the Democratic Republic of Congo, Mozambique, Liberia, and Rwanda. With the possible exception of the Democratic Republic of Congo, all these states appear to be moving away from war and economic collapse toward peace and development, although only Mozambique's transition is far enough along to seem relatively secure. Kenya may soon be added to the list, if its regime fully accepts the need to liberalize and democratize rather than pushing the country further into civil disorder, even conflict. Thus, on balance, most of Africa's states and societies in transition warrant a cautious optimism.

External Influence Declining

Some failed states in Africa—Somalia, Sudan, and possibly Sierra Leone if the current Nigerian-led intervention to oust the junta and restore democratic leadership falters—are still in decline and threaten to persist as regional rogues. Suffering in these cases has been great, from such basic humanitarian disasters as starvation and genocide to civil disasters such as harsh political repression and the imposition of martial law by failing regimes. Elsewhere in Africa, even though many nations wracked by violence seem to be emerging from crisis and getting onto the right track (e.g., Liberia and Rwanda), the long-term requirements for continuing international technical and financial assistance are substantial. The international community, however, exhausted by long and expensive efforts to deal with these regional crises, seems to have developed a severe case of compassion and donor fatigue that threatens to undermine essential efforts to support reconciliation and reconstruction in Africa.

In the face of continuing turmoil there, a tendency has developed for external actors—the United States included—to disengage from Africa's crises and yield the initiative to African actors. The United Nations has been reluctant to launch new UN operations, as is the United States to offer troops for African

interventions. Even France has announced a new policy to reduce its security forces in Africa and to stop intervening to resolve political and security crises of its client states. Since the 1980s, funds for military assistance have nearly dried up, and funding for developmental assistance has fallen very sharply. Increasingly, external actors are encouraging African states to create enabling political-economic environments to attract private investment, emphasizing that private capital will need to replace the substantial official aid flows of the past.

Africans Addressing Their Own Problems

The hesitation of the international community to deepen its engagement in Africa defies the reality of turmoil and humanitarian disasters expected to persist in various forms across the continent. In some

cases the disasters are natural, such as sub-regional drought. In most cases, however, the cause is human violence, and no downward turn in the scale of that violence is in sight. Throughout the 1990s, Africa has been plagued with 20 or more violent conflicts per year, many with the potential to drag down political institutions of states affected and sink their economies. As mentioned, the most serious problems are those of the subregional giants, Nigeria, Sudan, and the Democratic Republic of Congo, whose fortunes—for good or ill—will profoundly affect developments throughout those subregions.

Lessening tangible international support and growing disagreement on many policy issues have led more and more African states—including those giants, Nigeria, Sudan, and the Democratic Republic of Congo—to ignore Western advice and suggestions for dealing with

C-141B taking off from
Brazzaville, Congo



their political and security crises, whether advice is advanced through official channels or humanitarian and NGO channels. Focused violence has newly emerged as a tool to end abuse, anarchy, and tyranny. A new coalition of hard-eyed proto-democrats, having brought substantial stability by force of arms to Uganda, Ethiopia, Eritrea, Rwanda, and Angola, are eyeing tyrannical, chaotic, or meddlesome neighbors for possible corrective action. This aggressive tendency by new regional power brokers—already manifested in bringing the Congo (Brazzaville) civil war to an abrupt end—has left the West divided and in confusion regarding policy.

Emerging Mechanisms to Deal with Disasters

The international community—sometimes taking the lead, sometimes supporting African efforts—has begun to develop coping mechanisms to identify, head off, or minimize the effects of recurrent crises and disasters. Considerable progress has been made in developing effective early-warning systems to predict and help prepare for natural disasters, particularly famine from drought. Most notable has been the U.S. Agency for International Development (USAID) Famine Early Warning System (FEWS), which collects data from 16 African countries considered susceptible to famine as well as from the UN's Food and Agriculture Organization and the National

Oceanographic and Atmospheric Administration's Meteosat satellite, which orbits over Africa. Combining the collected meteorological, agricultural, and market data, FEWS publishes a monthly report updating the food security situation in vulnerable populations; that information is then used to devise appropriate responses for heading off or dealing with crises.

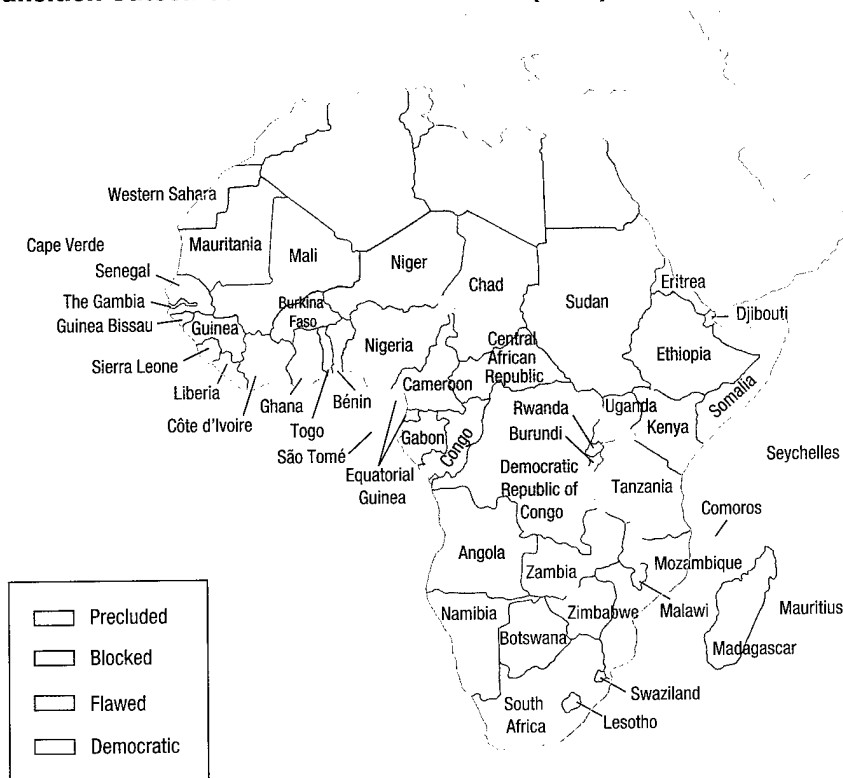
A number of African states are beginning to build an indigenous capacity to deal with humanitarian and other crises, to avoid the need to rely on external forces. In 1991, a summit of Heads of State and Government of the Organization of African Unity (OAU) acknowledged in its final communique that "there is a link between security, stability, development and cooperation in Africa." Leaders at the summit recognized that the problems of security and stability in many African countries had impaired their capacity to achieve the necessary cooperation to support regional integration and long-term socioeconomic development. Shortly after, OAU launched a program to encourage the prevention and resolution of conflicts. The program has dispatched monitors and observers to Burundi, Somalia, Liberia, Comoros, and has set up a Conflict Resolution Center within OAU headquarters in Addis Ababa.

Several African subregional organizations have taken on the task of planning and coordinating security matters. The Southern Africa Development Community (SADC) is by far the most advanced in capabilities, and in 1996 it established the SADC Political, Defense, and Security Organ to consult about and monitor crisis situations. In summer 1997, forces from SADC countries conducted a major training exercise—*Blue Hungwe*—in Zimbabwe, with technical assistance from a team of British military advisors. The lead has been taken, however, by the Economic Community of West African States (ECOWAS), which in 1990 authorized the creation and dispatch of a sizable all-African force, ECOMOG, to Liberia, where it has stayed. Although dominated by Nigeria, and limited in mission mainly to keeping the warlords out of Monrovia and some other coastal cities, it contributed to the stabilization of the situation and the conduct of the recent elections, won by Charles Taylor. In east

Night operations, Somalia



Transition Outcomes in Sub-Saharan Africa (1997)



Africa, the Inter-Governmental Authority on Development (IGAD) is seeking to mediate a peace agreement in Sudan, an on-again, off-again process. In each instance, the security function of this subregional organization was grafted onto an organization and charter that originally had a narrower politico-economic focus—a tendency that may be considered both a conceptual and political breakthrough for Africa.

Shaping the Strategic Environment

The Goals

The main U.S. goals in Africa include ending violence (wars, genocide, human rights abuses), promoting stability and security (robust democracy, trade partnership), and averting the need for costly humanitarian interventions. A serious attempt to shape the environment in Africa to these

ends would require the kind of total and massive U.S. Government initiative which has not been seen since the 1960s. Public and legislative support for such a comprehensive, multi-agency program probably is not attainable, but a more modest effort, imaginatively and actively pursued, may be possible. Specific goals include:

- Averting or minimizing conflict
- Fighting international terrorism, with special attention to Sudan
- Stemming narcotics traffic, with special attention to Nigeria and South Africa
- Supporting African capabilities to maintain peace and security
- Promoting defense reform.

Resources

Available forces

The United States has no forces—troops, ships, or aircraft—stationed in Africa. Its only ground presence there consists of about 200 Marine guards at U.S. embassies, and fewer than 100 defense attaché, security assistance, and other technical personnel. Only two small aircraft are stationed in sub-Saharan Africa to support DoD activities. Yet the United States has repeatedly shown it can deploy forces to Africa quickly when needed, usually to conduct a noncombatant evacuation operation (NEO) but also for humanitarian or peacekeeping tasks. Except for Somalia, such deployments have generally been small and brief.

Africans are well aware of—perhaps even exaggerate—the strength and reach of Washington's military forces. Although the main components of U.S. military power (power projection, lethal firepower, robust forces) have marginal day-to-day relevance, the reality of U.S. power offers a check on the behavior of rogues or would-be rogues. Recently, Washington's obvious and growing reluctance to make peace in Liberia, Somalia, and Rwanda has seriously eroded the credibility and thus the effectiveness of such a check. For actual and potential friends and allies, the important question is, why is the United States unwilling to use its assets to be more helpful on the continent? African militaries are well disposed

EUCOM Area of Responsibility: Sub-Saharan Africa



to benefit from professional collaboration with the United States and can appreciate advanced information technology and joint doctrine. As a model defense establishment, the United States is highly valued, and, when offered, its advice, training, and assistance are usually well received. But Africans are puzzled and, in some cases, resentful that when an African crisis looms, the United States is increasingly a source of diplomatic advice but only rarely a source of military assistance.

Two components of force structure are of particular importance and assure that Africa remains of interest while also providing a considerable cadre of well-informed Africa specialists: U.S. European Command (EUCOM) and 3^d Special Forces Group at Fort Bragg. EUCOM has become an invaluable intellectual locus for the

development and conduct of the DoD program of military activities in Africa. The special forces make available a standing, quick-reaction force with training and advisory as well as extensive operational experience on the ground in Africa. When operational deployments are required, however, the usual response force is made up of U.S. Marines from the Mediterranean or the Persian Gulf, depending on the location of the crisis. Special operations personnel also are frequently involved, although not necessarily from 3^d Group. For humanitarian missions, different forces or specialized units are required, which usually deploy from the United States, with necessarily much longer timelines.

The U.S. force structure to pursue national objectives in Africa is generally adequate for peacetime activities and more than adequate for any war or combat operations—although a serious lack of defense attaché presence on the ground must be noted as a persistent and troubling gap in recent years. As in other troubled parts of the world, operational tempo at times makes mustering the technical personnel and units (psychological operations, civil affairs, engineers, military police) difficult, not because of a shortage—quantitative or qualitative—of forces, but because of the political will needed to commit them and the financial support needed to cover the costs of such international operations.

Programmatic resources

The United States has diverse but often austere resources to work with in Africa. Most peacetime activities needed to address the root causes of Africa's insecurity are civil, primarily foreign aid and international financial assistance. But the level of grants and loans for traditional foreign aid is declining, and many overseas USAID offices have been closed or merged into regional offices. The bulk of remaining aid resources tends to be drained off into emergency and humanitarian assistance, with only small amounts available for developmental projects. Some funding is available for special activities in counterterrorism and counternarcotics, but it has been used sparingly. Policymakers and aid specialists seem to hope that the private

sector will pick up the slack, and major efforts have been made to convince both Africans and corporate interests that the role of trade and investment should be greatly expanded in Africa, even as official development resources disappear. Skepticism about the limits of this approach has often been voiced.

DoD, for its part, has units, programs, and activities that pursue its goals in Africa. These might be characterized as high quality and low capacity, because of either an absolute limit in capability or in the amount that can be directed toward African affairs. For policymakers and planners, assets of note include:

- Concerned CINCs. EUCOM has the major role; other force providers include CENTCOM, ACOM, and PACOM
- Special Forces. The key contributor is 3^d Group at Fort Bragg; other personnel are engaged in exercise or operational modes; SOCOM follows Africa closely
- The West African Training Cruise is conducted annually by the U.S. Navy
- The DoD Humanitarian Assistance Program contributes or transports excess humanitarian supplies to needy African nations on an "as available" basis
- The Foreign Military Financing (FMF) and Foreign Military Sales (FMS) programs, administered by the Defense Security Assistance Agency (DSAA), provide cash sales and grant transfers of defense equipment and services, although the scale is tiny
- The International Military Education and Training (IMET) program, also administered by DSAA, provides professional military training for hundreds of African personnel annually, usually in the United States

- Expanded-IMET (E-IMET) emphasizes the professionalization of foreign militaries and their responsiveness to civil control in the context of responsible, democratic government. E-IMET courses, both in CONUS and on the ground, include specialized training by personnel from the U.S. Naval Justice School, the Naval Post-Graduate School, and the Defense Equal Opportunity Management Institute

- Occasional security assistance funding for peacekeeping and conflict-resolution efforts includes the African Crisis Response Initiative to build a peacekeeping capacity in selected African battalions and, since 1994, assistance to the OAU Crisis Resolution Center in Addis Ababa

- Under consideration is the establishment of an "African Center for Security Studies," modeled somewhat on the Marshall Center in Germany. Its focus would be similar to that of the E-IMET program, but with courses for key military and civil leaders with responsibilities for defense matters.

Strategic Approaches

International community

To succeed in Africa, a challenge for the United States is to work closely with its core allies (mainly European) and with the United Nations. Close coordination with the ex-colonial powers—with which many African states have important and intimate ties—is particularly essential. For DoD, there is a specific need to draw on the doctrine and efforts of the United Kingdom, France, Scandinavia, and others in the common task of helping African states build their capacities to engage in humanitarian and peacekeeping interventions. Without such international cooperation and coordination, developing either a coherent approach or sufficient resources—monetary or political—for Africa is unlikely. The development and continuation of broad political and public support for Third-World initiatives are both heavily influenced by the perception that responsibilities are in fact shared within the international community. Such close coordination would also require focusing U.S. efforts, possibly through an interagency oversight mechanism. This would reduce redundancy, increase efficiency, and provide policy cohesion on which international policy coordination could be based.

Operation Restore Hope, Somalia



Long-term multiorganizational approach

Africa's problems require complex, long-term approaches. Many essential activities will remain strictly in the civilian domain, including active preventive diplomacy, the development of civil society, and advice and assistance (as well as pressure, if necessary) to achieve political and economic reforms. A key aspect of this strategy would be to provide strong links with the

United States and other members of the international community to Africa's political, military, economic, and civil society. Such activities would require a substantial, long-term commitment of both resources and leadership. Given the complex, multiorganizational (including public and private sectors) nature of the effort, new forms of coordination, information exchange, and orchestration would be needed.

Focus on major powers

The United States cannot pursue a coherent policy that will give equal practical weight to the fortunes of each of the 48 sub-Saharan African states; instead, it will need to focus on key states and regional powers. These are not identical, and unfortunately, most of the major continental powers are not in a position to serve as subregional leaders. Although there are many examples of encouraging progress in the smaller countries, only one of the major regional powers—South Africa—is on the right track. Several others—especially Nigeria, Sudan, and the Democratic Republic of Congo (Africa's most populous, largest, and most mineral-rich countries, respectively)—are more correctly categorized as rogues than leaders, and all are spectacular failures. Further, instead of being able to work with these subregional powers, the United States has either opted for confrontation (Nigeria, Sudan) or initially chosen to remain aloof (the Democratic Republic of Congo). Consequently, it has had to look for other possible regional leaders and of necessity seems to favor Ethiopia for east Africa and perhaps Ghana or Côte d'Ivoire in west Africa. No suitable substitute for the Democratic Republic of Congo exists in Central Africa, although Uganda may prove a candidate because of its current political stability and strong economic growth; however, Uganda remains on the fringe of the area, focused more on relations with eastern rather than central Africa.

In dealing with Africa's successful regional leaders, the fundamental interests for the United States are to solidify gains and prevent backsliding. These nations have achieved relative political and economic stability, providing models for other African countries, and have the potential to

Regional Issues in Managing Conflict

Level of conflict	Major policy preoccupations*	Specific regional concerns
Normal conflict level	Using regional economic cooperation and integration to attain the long-term goals of conflict management	Reducing conflicts inherent in: <ul style="list-style-type: none"> ■ Choice of strategies and organizational frameworks for regional cooperation ■ Economic polarization ■ Unsustainable crossborder labor movements ■ Production of regional goods ■ Sharing of natural resources
Escalating conflict level	Different parties to a conflict endeavor to have regional economic allies	<ul style="list-style-type: none"> ■ Factional arming and provisioning of parties to conflicts ■ Supporting conciliatory efforts aimed at forestalling escalation into violent confrontation
Violent conflict level	Ensuring the availability of adequate economic resources for purposes of the confrontation, including: <ul style="list-style-type: none"> ■ Repair, replacement, or expanded supply of arms ■ Provisioning of food, medications, and other essential materials 	<ul style="list-style-type: none"> ■ Coping with problems of refugees ■ Reducing the supply of materials that fuel conflict ■ Supporting peacekeeping and peace-observing activities ■ Supporting peace-brokering activities
Reconstruction phase	<ul style="list-style-type: none"> ■ Ability to show material benefit, actual or prospective, to the demand-bearing constituency ■ Maintaining the potential to revert to violent conflict 	<ul style="list-style-type: none"> ■ Supporting post-chaos activities, notably refugees, resettlement of displaced persons, military demobilization, and infrastructural rehabilitation ■ Military conversion ■ Supporting sustained peacekeeping and peace observing activities

*Viewed from the standpoint of the state and other domestic demand-bearing groups.



Loading supplies at Accra Airport,
Ghana

become both catalysts for regional growth and helpful allies of the United States on the continent. Washington's announced desire to develop Africa as a major market for U.S. goods will tend to be implemented first in the larger or stronger and more stable states.

In the 1990s, U.S. political involvement with South Africa has been substantial, and special initiatives taken will expand the role of the American private sector. Although military engagement has been slow to develop, recent important developments have tended to draw the two armed forces closer, including the July 1997 establishment of a Defense Committee to the Binational Commission chaired by Vice President Gore and South Africa's Deputy President Mbeki. Washington has made it clear that it has a substantial interest and will invest heavily in promoting South Africa's long-term development. For the other major powers that may become positive regional leaders, U.S.

interests are more immediate and starker. Specifically, these include creating "soft landings" for Sudan and Nigeria as they struggle to promote democratic and representative government, and supporting a successful transition in the troubled Democratic Republic of Congo. For the moment, however, the U.S. approach is necessarily focused more on trying to shape the behavior of rogues and potential adversaries.

Curb potential adversaries and rogues

Setting aside the special, continuing problem of Libya, Africa's rogues are all sub-Saharan: Sudan, Nigeria, and the just-ousted junta of Sierra Leone. Although several other states are in or near collapse or even failure (Somalia, the Democratic Republic of Congo, Congo-Brazzaville, Burundi), only these three rogues have been in



U.S. and Belgian medics,
Brazzaville, Congo

open defiance of the international community as they continue their various depredations on their own citizenry. In Sudan, the problem takes on immediacy for the United States because of the regime's continuing support for international terrorism. Nigeria is an urgent case because of its extraordinary involvement in international narcotics

trafficking, both directly and through intermediaries (including South Africa), which may thus become more deeply and dangerously involved.

So far, the international policy approach—consisting mainly of diplomatic dialogue and the threat or actuality of limited sanctions (limitations on issuance of visas, restricted military relations, air travel restrictions, some financial restrictions)—has not proved successful in changing either the thinking or behavior of any of the rogue regimes. Sudan is now faced with an increase in U.S. security assistance to several of its neighbors, which are involved in border conflicts and providing support to the Sudanese People's Liberation Army fighting against the Sudanese regime. At the time of this writing, the rogue regime of Sierra Leone has just been ousted and the elected President reinstalled by a dramatic military intervention led by Nigeria—a fresh reminder that occasionally military force will be required when diplomacy and sanctions fall short. Whether the positive effects of this intervention will persist despite continuing resistance by junta forces, and whether the Nigerian action will improve its standing with the broader international community, remain to be seen. In any case, actions against Nigeria have been mild, such as suspension from the Commonwealth. Given Nigeria's power and influence, the international community is not likely to increase pressure for substantial change.

The international community thus faces a crisis of self-confidence and credibility in attempting to deal with Africa's relatively few but dangerous rogues. Tough talk and weak sanctions have not succeeded and perhaps have only heightened defiance. Political support for either harsh sanctions (such as an oil embargo and a total freeze on investment and commerce) or military interventions is unlikely—even against a regime as weak as Sierra Leone. With official aid resources in decline, there is little prospect of substantial positive incentives to offer. This leaves diplomacy with neither carrot nor stick, a formula for continuing frustration and possibly failure. Clearly, new thinking is

needed, as well as approaches carefully designed for each unique situation. Also clear is that U.S. military muscle has no immediate relevance to these problems, although the possibility that a provoked United States might take some limited military action puts some bounds on state behavior; this is probably most important in the case of Sudan.

Avert crises and conflicts

Crisis and conflict will probably remain pervasive in Africa for years to come. Immediate, short-term efforts to try to avert, minimize, or terminate these disruptive affairs are needed. Some helpful mechanisms are emerging, addressing natural disasters (particularly famine) and providing early warning in order to plan emergency humanitarian relief efforts. Other mechanisms (especially at the OAU) address manmade crises, including early warning and plans for action.

The main problem in Africa is the huge discrepancy between required and actual African capabilities to confront crises. For necessary humanitarian activities, the international community can still be counted on generally to provide the essential response (food, medicine, transport, technicians). But when mass violence is present, recent events raise doubts about the willingness of this community either to intervene early and decisively or to stay the course when violence strikes at peacekeepers and humanitarian operations. A partial answer

would be to help build and improve African competence and capacity for dealing with such violence. This is particularly necessary for conflict resolution and peacekeeping: although basic technical capacity needs to be built at the state level, organizational and political capacity for crisis management needs to be established at the levels of the United Nations, the OAU, and the subregion. The tendency is growing within the international community to view and treat African disasters as African problems that should be left to Africans for solution, despite occasional expressions of moral outrage at, for example, genocide in Rwanda. Africans therefore need to be assured that measures aimed at capacity building are not inspired mainly by a desire for international disengagement.

DoD Contributions

Threatened and occasional use of force

Coping with Africa's disorder and stagnation will usually be attempted through active diplomacy and assistance for long-term development, but from time to time, sanctions and at least the credible threat of force will be required. In that sense, DoD must always be alert to events in Africa, for it is here that U.S. forces are most often deployed operationally, albeit generally on a small scale. The likely missions include NEOs, supporting or leading humanitarian or peacekeeping missions, and shows of force against a (temporarily) hostile African power.

Such activities are unusual. The use of force is quite common in Africa and is likely to remain so over the next decade. Certainly, most of the rogues and troublemakers of Africa have shown little tendency to submit to anything except the use, or credible and immediate threat, of force. The source of that force has changed in the 1990s, and for the near future it is likely to be Africans themselves using force, rather than accepting the settlement of disputes through the intervention of French, American, mixed, or even UN forces. In any case, whether the force is African or external, the

The African Crisis Response Initiative

In 1996, the United States proposed this initiative, to build capacity, through military training at the battalion level, for peacekeeping operations under Chapter VI of the UN Charter. Six countries (Ghana, Mali, Malawi, Ethiopia, Senegal, and Uganda) have so far agreed to participate, and training by 3^d Special Forces Group has been completed in Senegal, Uganda, and Malawi. Accompanying the training, limited amounts of equipment are donated, primarily communications gear, so that future deployed forces will be able to communicate horizontally and vertically across the force. In due course, preparations may be made to identify the components of a force brigade headquarters with all its specialized supporting units and staff sections. Or, owing to bureaucratic and political sensitivities, this task may be left to other organizations or initiatives, or to the Africans to do for themselves. The hard questions will come still later: when, for what purpose, with what mission, for how long, and by whose authority (and funding) would the force, with its component battalions, actually be deployed?



U.S. trainer in Uganda

U.S. military will sometimes have a key role on behalf of the Nation.

Beyond careful observation and analysis and planning and directing occasional operational deployments, sometimes eventuating in the use of force, DoD can affect the military environment in Africa mainly by focusing on building capacity and shaping regional security forces and institutions.

Building local capabilities

The elements needed by Africans to build and support their capabilities range from supporting specific peacekeeping and peacemaking operations at all levels to building conflict-resolution capabilities. These capabilities can be found primarily at the level of the OAU and several sub-regional organizations and include initiatives

to build technical and managerial skills and unit and staff capacity. Two specific U.S. initiatives, listed below, are of interest for what they have already accomplished or targeted and for the models they offer for future initiatives:

- \$11,650,000 in financial support for the development of the OAU Conflict Resolution Center (1993-97)
- The African Crisis Response Initiative (ACRI) to build capacity, at the battalion level, for peacekeeping operations.

Such initiatives must be strongly encouraged. Funded only modestly up to now, they could well serve as the basis for expanded programs in the future. Helping Africans to prepare to help themselves, then helping them fund and execute specific missions, should be a central component of a new U.S. approach to Africa in the late 1990s and beyond. The African Crisis Response Initiative would not be merely a

matter of building military capacity but, more important, of enhancing confidence on the part of the Africans that they have both the tools and techniques to handle most of their problems. This point, it should be emphasized, does not represent a desire in the West to disengage and leave the Africans to their own devices. Rather, emphasis would fall on the mutuality of responsibility and the cohesiveness that a common approach, with common doctrine, will lend to future combined operations.

Shaping institutions and promoting reform

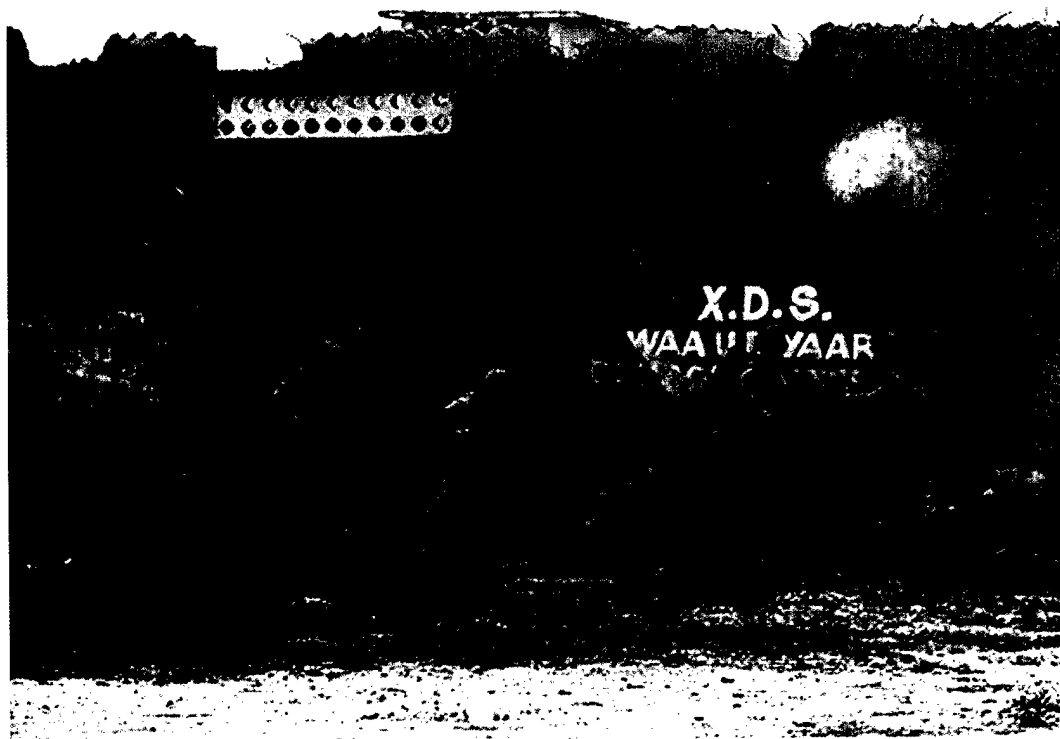
A broader but perhaps more critical objective, for which DoD has the lead, is to encourage and shape African security institutions to embrace Western concepts of military professionalism and the role of the military in a democratic society. To a large extent, the effectiveness of shaping African military institutions is not possible to measure. In contrast, one of the most effective techniques may be one-on-one, military-to-military contact, in which Africans can observe and experience the commitment of

U.S. military personnel of all ranks to professionalization, democratic practices, and respect for human rights. This kind of contact involves participation in combined exercises or operations (including peacekeeping), observing U.S. forces in operations or exercises, and exchange programs (including these between military educational institutions).

Training, whether under IMET, E-IMET, or as part of exercises with Special Forces teams deployed to Africa, is another powerful tool, but one with a cumulative impact that needs time to mature. Because it emphasizes professionalization and values, E-IMET should be particularly effective over time, especially for reaching senior ranks, and should promote such aspects as civilian control of the military, the military as guarantor of the constitution, respect for democratic processes and for the rule of law, preservation of human rights, and removal of the military from a country's economic life.

These programs are intended to encourage defense reform measures, to improve the behavior of the military toward the populace, and to curb irregular and corrupt financial practices endemic to both civil and military sectors. If the proposed

U.S. forces in Somalia



Qualities of U.S. Power Accentuated in Africa

Power Projection	C ⁴ ISR	Joint Doctrine	Lethality	Robustness	Model Establishment

☐ very important
☐ important

African Center for Security Studies comes to fruition, it will underscore all these efforts, because it will be dedicated to and focused on professionalization and on principles governing military conduct in a modern democracy, and it will be available to serve the most senior levels of Africa's military institutions.

Given the low cost and long-term potential impact of these programs, all deserve to be supported energetically and imaginatively for the foreseeable future. Realistically, however, great changes should not be expected in the near term, because changes in attitude and behavior, which often may go against ingrained earlier training and experience, may therefore be profoundly countercultural. The difficulties inherited and now experienced by the new government of the Democratic Republic of Congo offer a poignant case in point.

Conclusion

Africa provides a difficult but not at all hopeless case. Positive as well as troublesome forces are at work. The need now is for the international community to face Africa's problems squarely and, working in concert with emerging regional leaders,

to develop and pursue sound, long-term approaches. Washington's main interests in Africa are not great, but attaining them would have substantial political and economic benefits, be consistent with humanitarian values, and eliminate the need for frequent wasteful and often bloody interventions.

Given a sustained commitment, and using programmatic and force structure elements already in place, DoD could play a leading role in a national effort to help Africa achieve stability and security and, given such stability and security, to implement sustained development. The U.S. military could also play an important role in encouraging Africa's critical security institutions to assist and support the emergence and preservation of an environment in which democracy and human rights are broadly and sincerely observed.

With such achievements, within another generation Africa could be a far more peaceful and productive continent. Absent that level of stability, the typical DoD mission in Africa would in all probability be the evacuation of noncombatants during a crisis.

Major Theater War

The ability to respond to operational military contingencies is the keystone of American defense policy. This chapter assesses the capability of U.S. forces to fulfill the Quadrennial Defense Review's (QDR) requirement of a posture to excel at combat operations and thereby prevail in contingencies liable to be encountered, especially major theater wars (MTWs) against rogue states.

Although risks undeniably exist, U.S. forces today offer confidence in their capacity to fight and win wars. Because of adequate size and high quality, they are superbly effective at operating on the modern battlefield. Current threats may be less severe than in the Cold War, but now is no time for complacency. Existing contingencies could pose serious challenges, and tomorrow's threats may be more dangerous than today's. U.S. forces must remain ready for near-term wars while constantly improving so they can win future conflicts. As argued elsewhere in this volume, the capacity to win MTWs is not the only consideration in U.S. defense strategy but it would require the United States to use force in order to achieve decisive victory.

Current U.S. Forces

In the event of war, American military strategy calls for decisive operations aimed at quickly defeating the enemy, attaining key political-military objectives, and minimizing casualties to U.S. and allied forces. The QDR calls for sufficient forces to handle two MTWs in distant theaters in overlapping time frames, in addition to many kinds of operations other than the event of two MTWs. For example, large forces are needed to carry out normal peacetime operations—including peace support missions and limited crisis interventions—in the three theaters of Europe, the Persian Gulf, and Asia. Similarly, sizable forces would be needed to wage a single MTW while also meeting normal requirements in the other two theaters. U.S. defense strategy is more complex than only being prepared for two MTWs, and U.S. force requirements are judged accordingly.

Principal Combat Forces

The QDR retained a force posture similar to that adopted by the 1992 Bottom-Up Review (BUR). This posture is about two-thirds the size of the Cold War posture and costs less than the big defense budgets of the late 1980s. The QDR cut overall DoD

manpower by about 8 percent: active military personnel is to be 1.36 million by 2003; one Air Force wing will be shifted to reserve status; 35 Navy surface combatants and submarines will be retired; and up to 12 Army National Guard brigades will be eliminated, while other brigades will be transferred to logistic functions.

These combat forces are supplemented by important support assets. Army divisions are backed by large combat support (CS) and combat service support (CSS) units—at corps and higher echelons—which provide such essential services as artillery, helicopters, supply of ammunition and petroleum, oil and lubricants (POL), maintenance, and engineers. Air Force fighter wings are similarly supported by aircraft that perform several missions (e.g., command and control, reconnaissance, electronic warfare, and defense suppression). Navy carrier battle groups are accompanied by an underway replenishment group of logistics ships. These support assets play an unseen but critical role in making U.S. forces strong.

Why U.S. Forces Excel

Some observers may question whether the QDR has chosen the right force posture, but practically no one quarrels with the notion that U.S. forces excel at carrying out combat operations and waging war. Why is this the case? What accounts for their military excellence? Clearly, the pillars are good people and effective technology, but even excellent personnel must be organized and used effectively. Excellence is relative. Today's forces may suffer shortfalls and deficiencies, yet they are better at

modern combat operations than their potential enemies. The future challenge is to preserve and enhance excellence.

Attributes of High Quality

U.S. forces are large enough to meet warfighting requirements postulated by the QDR but not far larger than everybody else's. The United States has a large military posture and defense budget to meet global responsibilities, but in numerical terms its forces do not dominate the military balance in the three key theaters. Other countries have large forces; indeed, recent enemies have made a specialty of assembling quite large forces. In peacetime, the principal effect of U.S. forces is to shift regional balances at the margin in ways that have a high-leverage, stabilizing effect. In wartime, U.S. forces can concentrate, but even so they ordinarily aspire to defeat the enemy not by swamping it with large numbers but by outfighting it. Their excellence thus is not based on quantity but on quality. The following attributes account for this quality:

Global power projection

U.S. defense strategy is focused on protecting overseas interests and requires *the capacity* to project military power to key theaters. The United States has a good power-projection capability because of major improvements since the 1970s. Four reasons account for this capability. First, large U.S. forces are deployed in three theaters on a peacetime basis: 109,000 personnel in Europe; nearly 100,000 in Asia; and 25,000 in the Persian Gulf. U.S. overseas combat forces total eight Army and Marine ground brigades, six and a half fighter wings, three carrier battle groups, and three Navy Amphibious Readiness Groups (ARG) or Marine Expeditionary Units (MEU). This presence provides not only deployed combat forces available on short notice in key locations, but also well-developed military infrastructure and reception facilities. Initial defense operations can begin almost immediately, and reinforcements from the continental United States (CONUS) can begin to contribute on arrival in these theaters. The effect is to reduce vulnerability to surprise attacks while

Principal Reasons for High Quality of U.S. Military

- Ability to project power globally
- Superior intelligence, planning, and information dominance
- Capacity for joint and combined doctrine
- Ability to wage decisive battlefield campaigns using modern operational concepts
- Robust forces with balanced assets and component strength

enabling the United States to amass large forces for decisive operations within a few weeks or months, not years.

The second reason is that most U.S. forces in CONUS are designed for overseas expeditionary missions. They are equipped with strong combat forces and large logistics assets that allow them to deploy overseas on short notice, operate for lengthy periods in austere environments, engage in intense combat, and conduct a full spectrum of defensive and offensive missions. No other nation has configured such a large portion of its military for this purpose. Indeed, most focus on their immediate regions and, consequently, can deploy only small forces (e.g., a single brigade or division, one to two air wings, and a few ships) far beyond their borders. The United States surpasses all of them in expeditionary capabilities.

The third reason for U.S. power-projection capability is that it has strategic mobility forces. These are important because of the vast tonnages that must be moved in deploying large forces: e.g., a three-division corps has thousands of vehicles and can weigh nearly a million tons. Without good mobility, moving large forces overseas would be very time consuming. Although current U.S. mobility assets may still suffer from shortfalls in some areas, even so they can deploy forces overseas far more rapidly than 10 or 20 years ago.

Mobility assets come in the form of pre-positioned equipment, intertheater airlift forces, and sealift forces, each important in the mobility equation. The United States has sizable pre-positioned assets in the three theaters: 10 ground brigade sets ashore and afloat, plus fuel and ammo stocks for ground and air forces. Its airlift forces include 314 heavy military transports backed up by civilian transports.

Sealift forces include about 100 DoD-owned cargo ships plus access to commercial ships. Provided these assets are available, the United States could deploy a force of two to three divisions, four to five air wings, and one to two carriers to a distant overseas location within one to two months. Within several months, it could move virtually the entire available U.S. force posture of 13 divisions, 24 fighter wings, and 8 to 10 carriers. Further, it could distribute these forces among several theaters or concentrate them all in one.

The fourth reason is that the United States enjoys control of the air and sea lines of communication to the three key theaters—control provided in part by U.S. forces and in part by allied forces. In Europe, for example, NATO allies provide military bases and escort forces as support for transit through the Mediterranean toward the Persian Gulf. In the Persian Gulf and Northeast Asia, allies provide local air defense and sealane defense for arriving forces. In consequence, enemy forces would be hard pressed to interrupt the flow of U.S. forces to key theaters threatened by war.

This capacity for global power projection is the foundation of defense strategy and all other capabilities are built on it. The United States is a Western Hemisphere nation faced with the task of protecting interests in three widely separated theaters in the Eastern Hemisphere. It is also a maritime nation that must be able to conduct demanding continental campaigns in each theater. Power projection allows the United States to be an effective superpower in Europe, the Persian Gulf, and Asia at the same time.

Intelligence, planning, and information dominance

Large operations require intelligence, planning, and information dominance—areas in which U.S. forces excel.

Within the Pentagon, civilian and military staffs develop coordinated plans, programs, and budgets for each service component and theater. Regional commanders in chief develop operational plans (OPLANS)

U.S. Strategic Forces

Land-Based ICBMs	550
Heavy Bombers	110
SLBMs	432

NOTE: U.S. posture contains strategic forces that, while smaller than during the Cold War, are important to the deterrence equation.



B-1 bomber

and associated time-phased force deployment data (TPFDD) for coordinating the flow of forces overseas. They also develop detailed campaign plans for employing forces in a variety of operations. The effect is to enhance the speed with which forces are deployed overseas and increase their effectiveness upon arrival. In addition, the U.S. intelligence community provides better information on each region than is available to any other nation, thereby giving U.S. forces an important advantage as they deploy and begin operations.

As has been the case since the late 1960s, U.S. forces enjoy information dominance because of superior C⁴ISR assets. No other nation comes close to matching the United States in these assets, in strategic terms or on the battlefield. New intelligence assets and digitized communications systems are accelerating information processing and increasing the speed with which far-reaching decisions can be made and complex military operations launched. Such data systems permit commanders to

blend the operations of several divisions, wings, and CVBGs into a coordinated, swiftly moving campaign. They permit delegation of authority and initiative to lower echelons, enhancing force effectiveness. And they provide commanders with knowledge of enemy forces and operations. The effect is to create major advantages in concentrating U.S. forces and using maneuver and firepower, increasing the likelihood that U.S. forces can win critical engagements decisively.

Joint and combined doctrine

Successful warfighting requires bringing the service components under the control of a single theater commander. The capacity to perform joint operations is key to combat effectiveness, because it means that separate service components can work together on behalf of a common plan. Nations lacking this capability inevitably have

weaker forces. Nearly all military establishments encounter trouble in trying to blend the operations of their land, sea, and air forces. The United States, although not immune to this problem, has by a wide margin made the greatest strides toward fostering joint doctrine, enhancing the capacity of its force components to work together. This progress started in the 1970s, when efforts were begun to better coordinate U.S. air and ground operations. In particular, air assets and operations were tailored not only to win the air battle but also to assist the ground battle. This emphasis on jointness has been expanded in the form of reorienting naval forces toward littoral operations. The Navy and Marine Corps now are increasingly capable of working with both the Army and Air Force in continental campaigns. For example, naval forces now perform air defense and deep-strike missions, and Marine units can operate alongside Army units in defensive and offensive operations.

The benefits of jointness were demonstrated in *Desert Storm*, when all three service components worked closely together to carry out a truly joint campaign. Critics point to the difficulties and deficiencies encountered, but, overall, the effort was a major success. U.S. forces decisively defeated a large, well-armed opponent with few losses to themselves. A victory this large would not have been possible in the

past and was significantly influenced by joint operations. In particular, the early air campaign so eroded Iraqi forces that it set the stage for a sweeping ground campaign, which was conducted by the Army and Marine Corps working together and supported by the Navy and Air Force that speeded the advance.

The services currently have overlapping capabilities that foster joint operations. Critics charge that the effect is unnecessarily to inflate force requirements and have urged greater specialization of roles and missions as a way to trim budgets and forces. A common allegation, for example, is that the United States has four air forces, three air defense systems, and two armies when presumably only one of each is needed. If total assets match total needs, however, overlapping capabilities do not translate into unnecessary redundancy. Too much specialization may result in loss of jointness in ways that might sacrifice the synergy of all components working closely together. In earlier decades, the services specialized to the point of largely ignoring one another, to the detriment of their overall capability to wage war. The lesson of the recent past is that properly planned joint operations reduce, rather than inflate, force requirements, because they enhance force effectiveness. For this reason, emerging U.S. military doctrine emphasizes jointness.

The capability to conduct combined operations with allies and coalition partners is also quite important. It may determine the capacity of a multinational force to carry out a single, integrated campaign. U.S. forces are often viewed as operating by themselves, whereas in reality they work closely with foreign military forces in all three theaters. This is true not only in peace but also in crisis and war. In Europe, U.S. forces are embedded within the NATO integrated command and multinational formations in order to conduct a full-spectrum of missions. The Implementation Force/Stabilization Forces (IFOR/SFOR) mission in Bosnia is a classic example of a NATO operation in which the United States provided only about half of the forces or less. In the Persian Gulf, *Desert Storm* was a combined operation in which

Soldiers boarding C-130



U.S. Combat Forces for MTWs (Illustrative)

	Persian Gulf	Korea
Army Divisions*	5	5
Navy Carrier Battle Groups (CVBG)	4-5	4-5
Marine Expeditionary Forces (MEF)	1.5	1.5
Air Force Fighter Wings	10	10

*Ground deployments could be supplemented by 8 to 9 Reserve component, high-readiness brigades and other specialized assets.

Arab and European coalition partners provided up to one-third of the total forces. Another Persian Gulf War might witness a similar pattern. In Asia, a new Korean War might find the United States providing only one-fourth of U.S.-ROK ground forces, albeit the bulk of air and naval forces. Recent developments suggest that Japan will have an increasing role in providing forces and bases to support the deployment of U.S. forces, thus increasing the emphasis on combined planning in Asia.

The trend toward combined operations is likely to grow in all three theaters, especially if global requirements increase while U.S. force levels are held constant or decline somewhat. Critics point to the problems and barriers that hamper progress. The capability for these operations has greatly improved in all three, but more needs to be done. In the future, one problem will be to encourage allies and partners to improve at power projection and to encourage the more willing to participate in missions in distant areas, so that the burdens will be fairly shared. Another problem will be how, as U.S. forces improve through the ongoing revolution in military affairs (RMA), they can remain interoperable and compatible with foreign forces. These are important challenges, but they are not reasons to scale back the combined planning compelled by military and strategic realities.

Decisive battlefield campaigns

Success in combat requires mastery of the "operational art"—the ability to wage a decisive battlefield campaign that takes advantage of U.S. strengths and capitalizes on the enemy's weaknesses. This especially is the case when American and allied forces are fighting outnumbered yet must win quickly with minimal losses. This trend seems destined to accelerate as warfare becomes increasingly driven by agile forces, high technology, and swift operations. Most likely, victory will go to the side that can best concentrate forces through fast-paced maneuver and apply lethal firepower. U.S. forces are developing the new doctrines, weapons, and other assets that will allow them to increase excellence in this arena, yet enemy forces, too, have learned from *Desert Storm* and also will be improving.

A successful campaign requires the orchestration of many missions with many different forces, coordinated to have a strong combined effect in unraveling and defeating the enemy. Air forces must perform the missions of gaining control of the battlefield airspace, close air support destroying the enemy's air force and logistic support structure, and disrupting its efforts to reinforce front-line troops. U.S. ground forces must block the advance of enemy forces, destroy them through direct and indirect fire, and launch counterattacks to eject them from key terrain. Naval forces must seize control of key ports and waters, launch amphibious flanking attacks, and contribute air defense and strike forces to the battle. This combination of missions, conducted in synchrony at high tempo, is the basis of a successful wartime campaign.

Desert Storm demonstrated the professional skill that the Armed Forces have acquired. Improvement began in the late 1970s, when the emphasis in U.S. doctrine started to switch from linear defense and stationary firepower to nonlinear concepts, maneuver, and long-range fires. New weapons such as the Abrams tank, the Bradley infantry-fighting vehicle, combat aircraft with better avionics and munitions, and cruise missiles greatly aided this transition. In recent years, U.S. forces have begun to acquire new assets such as Joint

Surveillance and Target Attack Radar System and Army Tactical Missiles (ATACMS) that allow them to fire deeply and effectively into enemy rear areas. The consequence is a steadily improving capability to blend nonlinear operations and deep strikes.

The QDR process and *Joint Vision 2010* called for using technological innovations and information superiority to help carry out four key operational concepts: dominant maneuver, precision engagement, focused logistics, and full dimensional protection. These concepts make effective use of existing weapons and prepare the way for new weapons and systems in coming years. The goal is to make U.S. forces even more effective at carrying out decisive battlefield campaigns against potential enemies who themselves will be improving.

Robust forces

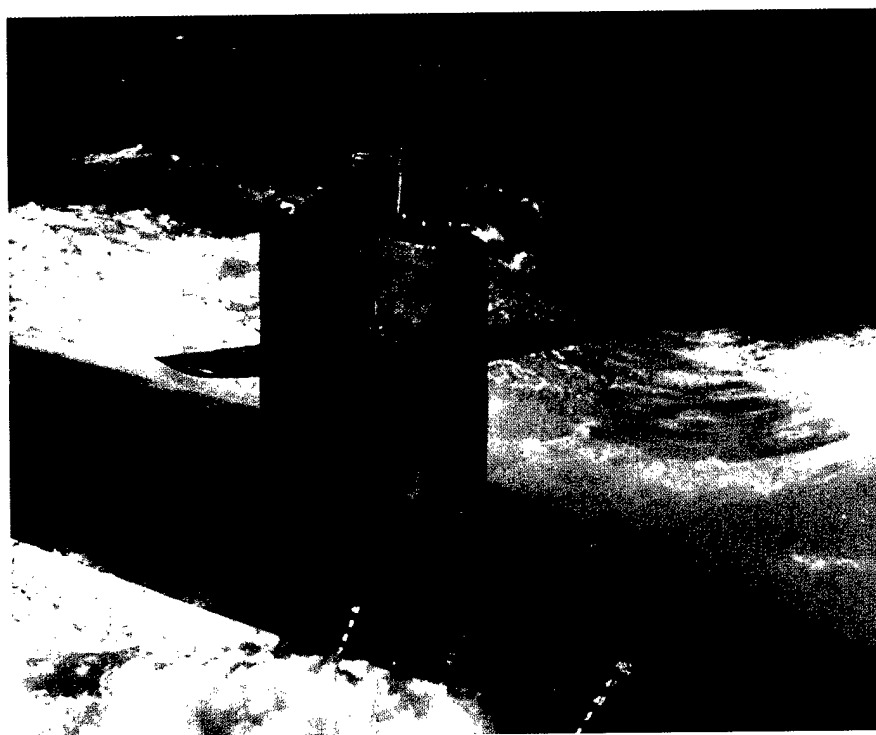
Demanding battlefield campaigns and their missions can be successfully mounted only by robust forces. The more ambitious the campaign, the more robust must be the forces. Four pillars of strength are required: scale (i.e., sufficient numbers), readiness,

modernization, and sustainment. Developing all four is difficult: most military establishments are strong in only one or two. U.S. forces today excel at all four.

Sufficient personnel is partly a product of mass: the presence of enough combat and support units to carry out the required missions in adequate strength. But it is also a product of balanced and diverse assets. For example, air campaigns require a mix of combat aircraft that can fly air superiority, deep strike, interdiction, and close-air support sorties. Ground campaigns require a mix of armored, mechanized, infantry, airborne, air assault, artillery, and attack helicopter formations. Naval campaigns require not only carriers but also other surface combatants (such as cruisers, destroyers, and frigates), submarines, and amphibious assault ships. The exact combination of required triservice assets will vary from one campaign to the next. *Desert Storm* was a classic armored battle, but a Korean War would include major infantry operations. An entirely different campaign might require fewer ground and air forces but more naval and marine forces. The U.S. force posture is marked by its diversity; it possesses enough forces to conduct almost any mission, or combination of missions, with considerable strength. It can carry out many different types of campaigns, a critical requirement for a nation with global responsibilities and many operating environments.

Readiness is a product of many factors: e.g., high-quality officers and enlisted personnel, full staffing by active troops, extensive training and exercises, well-maintained weapons, efficient procedures, and the capacity to operate at a fast tempo. Because U.S. forces emphasize all these factors, they have higher overall readiness than any other forces in the world. The consequences on the battlefield are immense. For example, Air Force and Navy pilots conduct training missions at an average of 220 hours per year. The NATO average is 170 hours. Air forces of potential enemies often train only about 50 hours per year. U.S. pilots are far better at flying the full spectrum of air missions and thus

USS *Maine*



better prepared to win the air battle decisively. Another example is ground operations. A U.S. Army heavy division can fire over 1,000 tons of ammunition per day, and its battalions can perform complex combined-arms operations at a high tempo. A typical enemy division might be able to fire and operate at only half this rate. These differences translate into U.S. dominance in ways numbers alone cannot suggest.

Modernization requires high-tech U.S. weapons and munitions that match or exceed those of an enemy in certain key features:

- Tanks will need high levels of firepower, mobility, and survivability
- Combat aircraft will need excellent range, payload, avionics, and maneuverability
- Ships will need to survive in a high-threat environment and to deliver lethal payloads at long ranges.

Since the early 1980s, when the defense buildup gathered full steam, U.S. forces have benefited from a sweeping modernization program that has given them the world's best weapons across the board. Critics debate the extent to which U.S. weapons are better than those of others—West European weapons are often of comparable quality—but *Desert Storm* suggested that U.S. models are superior to Russian-made weapons, more than had been realized. In recent years, the United

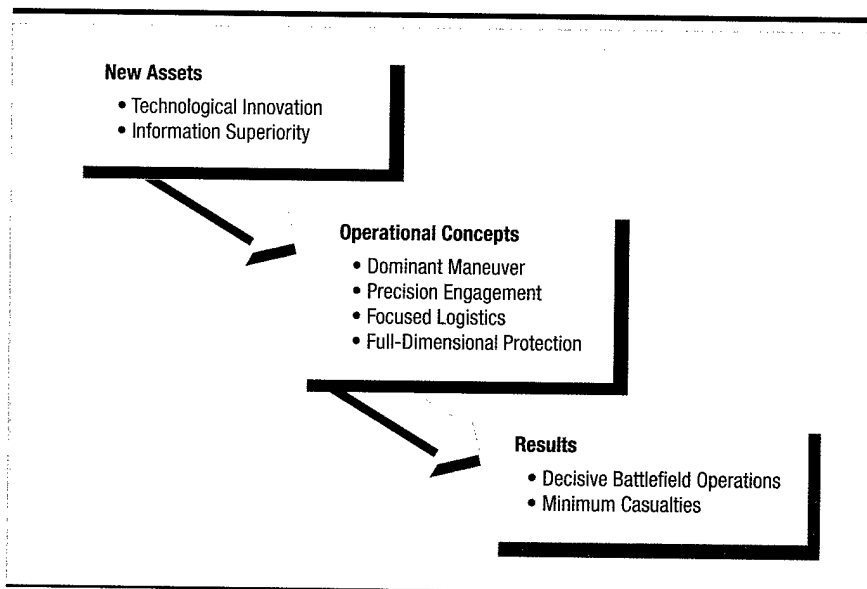
States has not been acquiring new weapons in large numbers but has been developing better munitions, C⁴ISR assets, and other technologies. The effect has been to preserve a clear margin of superiority in overall modernization.

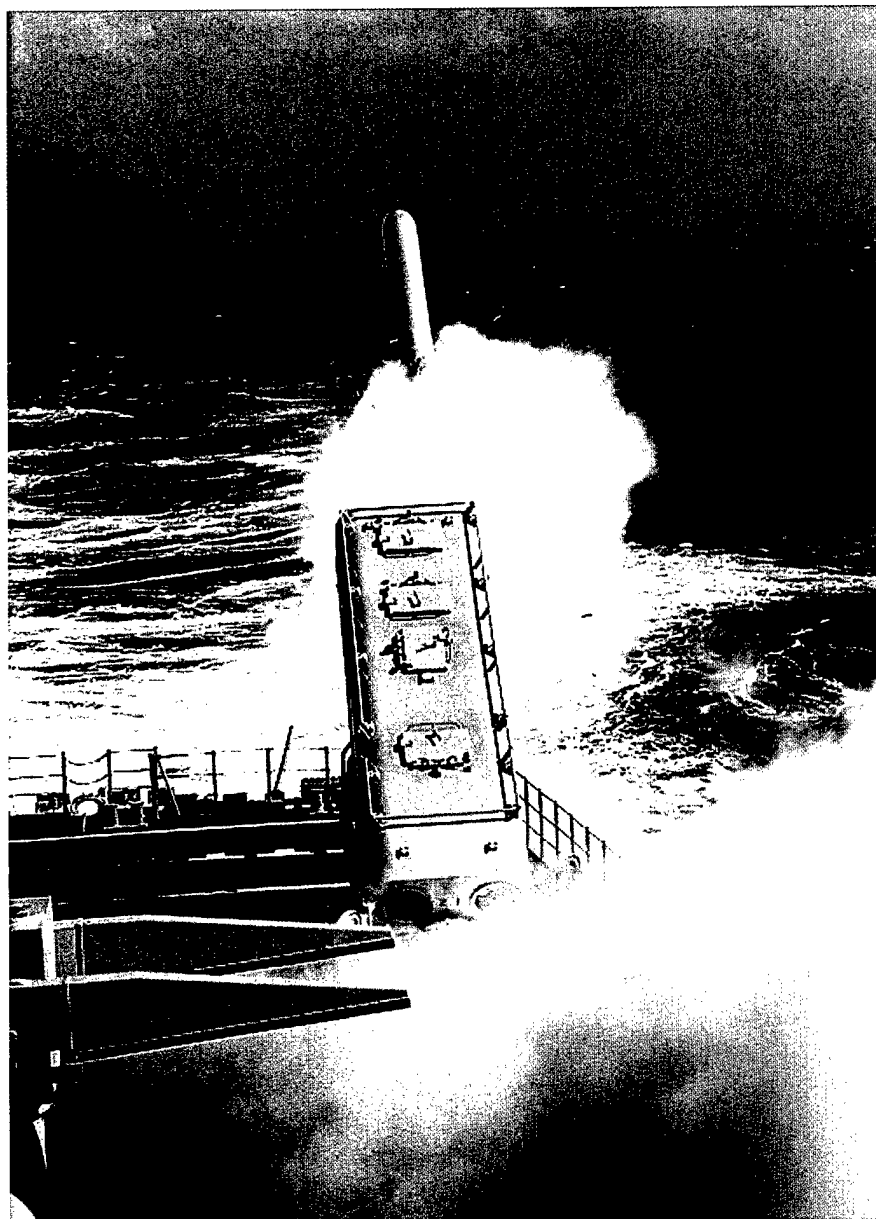
Sustainment is often overlooked as a determinant of power, but it ordinarily determines which side wins a prolonged slugfest and can be surprisingly important even in short wars of a few weeks. An air force that can fly each aircraft at a rate of one to two sorties per day for an extended period will have a large advantage over an enemy that can sustain fewer than one sortie per day. Similarly, an army's effectiveness is heavily influenced by whether it can supply its combat forces with fuel and ammo, repair damaged vehicles, keep roads open, and replace casualties with fresh troops. An army with capable assets in these areas will have the advantage over one less endowed. At the risk of simplifying a complex subject, U.S. forces are well known for their impressive sustainment. Some support assets may be too large, others too small, but specifics aside, the overall conclusion is that U.S. forces have better sustainment than almost any other military establishment.

Not One Factor, But Several

The reputation of U.S. forces for superb quality is due, therefore, not to any single standout factor but to several that work together cumulatively. U.S. forces excel today, but 25 years ago their readiness, modernization, and sustainment were by comparison low, and their strategic mobility assets were not nearly as capable. The huge transformation that took place in the intervening years is a product of adequate funding, careful planning and programming, innovative thinking, procurement of new technologies, development of new doctrine, and a great deal of hard work carrying out sweeping changes. These factors are the underlying reasons for the excellence of today's U.S. forces and they will determine whether they remain excellent tomorrow.

This qualitative superiority is not necessarily permanent. The effect of even minor changes in technology, doctrine, and





Tomahawk missile

training can be profound. For example, the ground battle could be transformed if enemies were to acquire new kinetic energy and high explosive, antitank (HEAT) munitions which could penetrate U.S. tank armor. The air battle could be transformed if enemies were to acquire air defense radars that could resist U.S. jamming and suppression and surface-to-air missiles (SAM) that could reliably shoot down U.S. aircraft. Enemy progress in developing better doctrine, higher readiness, and more effective structures also could narrow the U.S. margin of superiority. In the past,

armies that triumphed in a war often found themselves defeated only years later—by the same enemy, who had learned from past mistakes. Vigilance is the best guarantee that U.S. forces will retain, and improve on, their excellence.

Dealing with Rogues

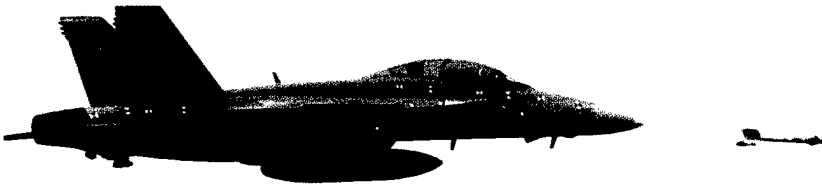
These U.S. military capabilities provide basic assets for fighting wars, but the exact manner in which they are used will depend on the specific situation. Excellence in combat operations does not in itself guarantee victory in war. Mounting decisive interventions to defend U.S. interests requires deploying to the scene with the right forces at the right time, and then employing them effectively. An MTW could occur in several places. The QDR called for a U.S. posture that can respond to expected events while preparing for the unexpected.

Persian Gulf and Korea

The litmus test is the capability to win regional wars in the Persian Gulf and the Korean peninsula, where the possibility of conflicts exists today. How would U.S. and allied forces probably respond to these contingencies, and what would be the prospects for success?

Any attempt to examine these contingencies should take into account several factors that might affect the outcome: force commitments on each side, warning time, mobilization and deployment rates, strategy and doctrine, operational effectiveness, lethality of the weapons, and morale. Neither contingency can be viewed as predetermining a single, irreversible outcome. In each instance, many options are possible—for good or ill—but some are more probable than others.

In both theaters, the threats posed by possible adversaries are less severe (though potentially nastier) than a few years ago. Even so, were these contingencies to take the form of short-warning attacks, both could pose serious challenges to U.S. and allied forces. The principal requirement would be to mount an initial defense while rapidly deploying large U.S.



F/A-18 firing Sidewinder missile

reinforcements from CONUS. The principal risk would be that some territory might be lost in the initial stages that might be hard to regain. Although U.S. and allied forces would probably win both wars, it might be after a costly struggle. Continued improvement to U.S. and allied forces, to reduce vulnerabilities in the initial defense, will reduce the risks remaining today.

U.S. Commitments

This defense strategy is predicated on handling both these MTWs nearly at the same time. In all likelihood, only one war would erupt in any single moment, but, even then, the United States would be compelled to withhold sufficient forces to deter a second war, and to win should it occur. The United States would probably deploy only about half its available combat posture to each theater.

For both wars, separate or simultaneous, the outcome would hinge on the ability of U.S. reinforcements to deploy in a timely fashion. In event of a single conflict with no worry of a second one, U.S. mobility forces could be concentrated on that theater, thereby easing the task of responding. In event of concurrent conflicts, the task would of course be harder. But even then, U.S. air forces, light ground forces, and local naval forces could converge on the scene quickly. Larger forces would follow later, strengthening U.S. or allied defenses, or both. The principal challenge would be to defend successfully while such building is in progress.

Phases of Combat

In both contingencies, U.S. forces would join allied forces to mount a campaign likely to consist of three phases. Phase 1 would aim to halt the enemy invasion in forward areas and protect key assets and terrain features. Once the attack was halted, Phase 2 would be characterized by operations aimed at destroying enemy forces and pursuing related battlefield objectives while building large U.S. forces through reinforcement. Phase 3 would be a decisive counterattack aimed at destroying enemy forces, restoring borders, and achieving key political goals. In the aftermath, U.S. forces would withdraw in a manner reflecting postwar requirements.

During all three phases, U.S. forces would attempt to gain information dominance of the full breadth and depth of the battlefield. They would then employ the doctrinal principles of dominant maneuver, precision engagement, focused logistics, and full dimensional protection. Forces from all components would work together to carry out a coordinated, fast-tempo campaign of deep strikes and close engagements that take advantage of superior U.S. weapons and munitions. Using a combination of firepower and maneuver, their overall goal would be to fracture the enemy's cohesion and then defeat it.

A campaign depends on the war being fought. The Persian Gulf and Korean contingencies are similar in that both potential adversaries are medium powers that could pose short-warning attacks by large, well-equipped forces. But they differ in important ways. In the Persian Gulf, the terrain is flat and open; in Korea, it is rugged and closed. In the Gulf, an unyielding forward defense is a flexible goal; in Korea, it is imperative. In the Gulf, airpower and deep strikes would dominate the initial defense; in Korea, ground power and the close battle would dominate. In the Persian Gulf, U.S. forces would provide about two-thirds of the total ground and air assets; in Korea, they would provide only about one-third.

Data show that both Iraq and North Korea have enough forces to contemplate aggression with a multipronged attack.

Their equipment may be less modern than that of U.S. forces, but it is serviceable, and both countries would enjoy numerical advantages over local U.S. and allied forces in the initial stages. Overall, the Persian Gulf contingency seems the more menacing, because so few U.S. and allied forces are deployed there in peacetime. But owing to Seoul's proximity to North Korea, war would pose serious dangers. Each conflict thus mandates an effective U.S. military response.

Although Iraq today has fewer forces than in 1990, its posture of 23 divisions and 316 combat aircraft provides enough strength for a well-focused attack, assuming readiness is adequate. This posture permits a swift-moving, comprehensive offensive with limited but effective forces. In 1990, Iraq attacked with larger but ponderous forces, which paused at the Kuwait-Saudi border, giving the United States the time to respond. Since *Desert Storm*, Iraq may have developed better mastery of the operational art.

A Persian Gulf contingency might begin with a surprise attack by local Iraqi forces, but a full Iraqi mobilization would take days, allowing some warning. An Iraqi attack might aim not only to sweep through Kuwait but also to advance far southward in order to seize Gulf oilfields and major parts of Saudi Arabia. Such an attack would be conducted across flat

desert. The initial battlefield would probably be up to 300 kilometers wide and 250 kilometers deep, but many Iraqi forces might be strung out in column formations on key roads. Iraq presumably would seek to rush southward, to defeat outnumbered U.S. and allied forces before U.S. reinforcements could arrive in strength, and thereby attempt to set the stage for a political settlement favorable to itself.

U.S. and allied defensive operations would be influenced by the open terrain, which invites mobile ground warfare and aggressive use of airpower. Because so few U.S. forces are ordinarily deployed in the Persian Gulf in peacetime, prompt deployment of large U.S. tactical air forces from CONUS would be key to Phase 1. These forces would try to defeat Iraq's outclassed air forces and then to inflict major destruction on enemy tank columns. Deep-strike operations, including near real-time targeting of armored forces, would thus be the centerpiece of Phase 1. Ground forces would establish blocking positions on key axes of advance while conducting a mobile defense in depth. Steady deployment of U.S. ground forces would strengthen the defense, broaden options during Phase 2, and permit a decisive counterattack in Phase 3, which could aim at destroying enemy forces and occupying enemy territory.

In Korea, the Democratic People's Republic of Korea (DPRK) possesses larger forces than Iraq, and they are already deployed along South Korea's border. A war could explode after a warning of only a few hours or days, not weeks. Unlike in the Persian Gulf, this attack would be prosecuted along a narrow peninsula on mountainous terrain. It would probably be accompanied by massed artillery fire, commando raids, and chemical weapons. Initially, the primary battlefield would be only about 125 kilometers wide and 100 kilometers deep. The DPRK attack would be conducted against well-prepared ROK forces in fortified positions and against larger U.S. forces than in the Persian Gulf. Most probably, the DPRK attack would aim at seizing nearby Seoul by advancing down

Force Balance in the Persian Gulf and Korea (M-Day)

	Persian Gulf	Korea
Adversary Forces		
Division equivalents	23	40
Tanks	2,700	3,400
Combat aircraft	316	611
Allied Forces		
Division equivalents	4	25
Tanks	1,100	2,050
Combat aircraft	300	461
Deployed U.S. Forces		
Division equivalents	0	.67
Combat aircraft	24-72	250
Carrier battle groups	1	1

the Kaesong-Munsan, Kumwa, and Chorwon corridors. If successful, North Korean forces might also try to conquer the entire peninsula before large U.S. reinforcements arrive.

The U.S.-ROK defense plan would be shaped not only by the threat but also by the mountainous terrain. Korea is commonly regarded as rugged infantry terrain that invites neither mobile ground warfare nor heavy air bombardment, but North Korea has assembled large armored forces that are critical to exploiting breakthroughs, and these forces would pass down narrow corridors that are potential killing zones for U.S. airpower. A new Korean War would bear little resemblance to the conflict of 1950-53.

During Phase 1, U.S.-ROK forces would conduct a vigorous forward defense aimed at protecting Seoul. Their campaign would be dominated by combined-arms ground battles waged with infantry, artillery, and armor. U.S. air and naval forces would conduct close air support, interdiction, and deep strike missions. After Phase 1, U.S.-ROK operations in Phase 2 would probably focus on seizing key terrain, inflicting additional casualties on enemy forces, and rebuffing further attacks. Phase 3, to start when the U.S. ground buildup was complete and ROK

forces were replenished, would be a powerful counteroffensive aimed at restoring the ROK's borders and destroying the DPRK's military power.

Prospects for Success

Either war could pose serious challenges that would stress U.S. responsiveness. In both, the length of the conflict and its ultimate cost would be influenced by fighting in the early stages. If initial enemy attacks were halted without serious losses, success might be attained quickly. If not, both wars might prove prolonged and difficult.

Prospects are good that U.S. and allied forces would win both wars. A principal reason is the ability of the United States to rush large reinforcements to these theaters and to mount decisive operations with its superior forces, which possess major qualitative advantages over an enemy. Both wars, nonetheless, could be costly, bloody affairs, although U.S. operations would aim to minimize casualties.

Both wars pose risks that are inevitably part of combat, almost irrespective of the quality of defensive preparations. One risk is that both conflicts could erupt at the same moment, not a few weeks apart. This development could strain the U.S. airlift and sealift capacity in the initial stages and could result in early shortages of specialized capabilities (such as combat service support). The effect might slow the U.S. buildup in one or both theaters, thereby weakening the early defense effort. The buildup could be further delayed if some U.S. forces were already committed to operations outside the two MTWs when a conflict erupts.

Another risk is political and more prevalent in the Persian Gulf than in Asia. It is that Iraq might recruit allies to its side and that Saudi Arabia and other Gulf countries might not respond adequately. This development could prevent the United States from deploying forces as quickly and efficiently as envisioned in current plans. In Asia, a lukewarm stance by Japan or opposition by China and Russia might have a similar effect.

U.S. and Russian Nuclear Warheads by Delivery System¹

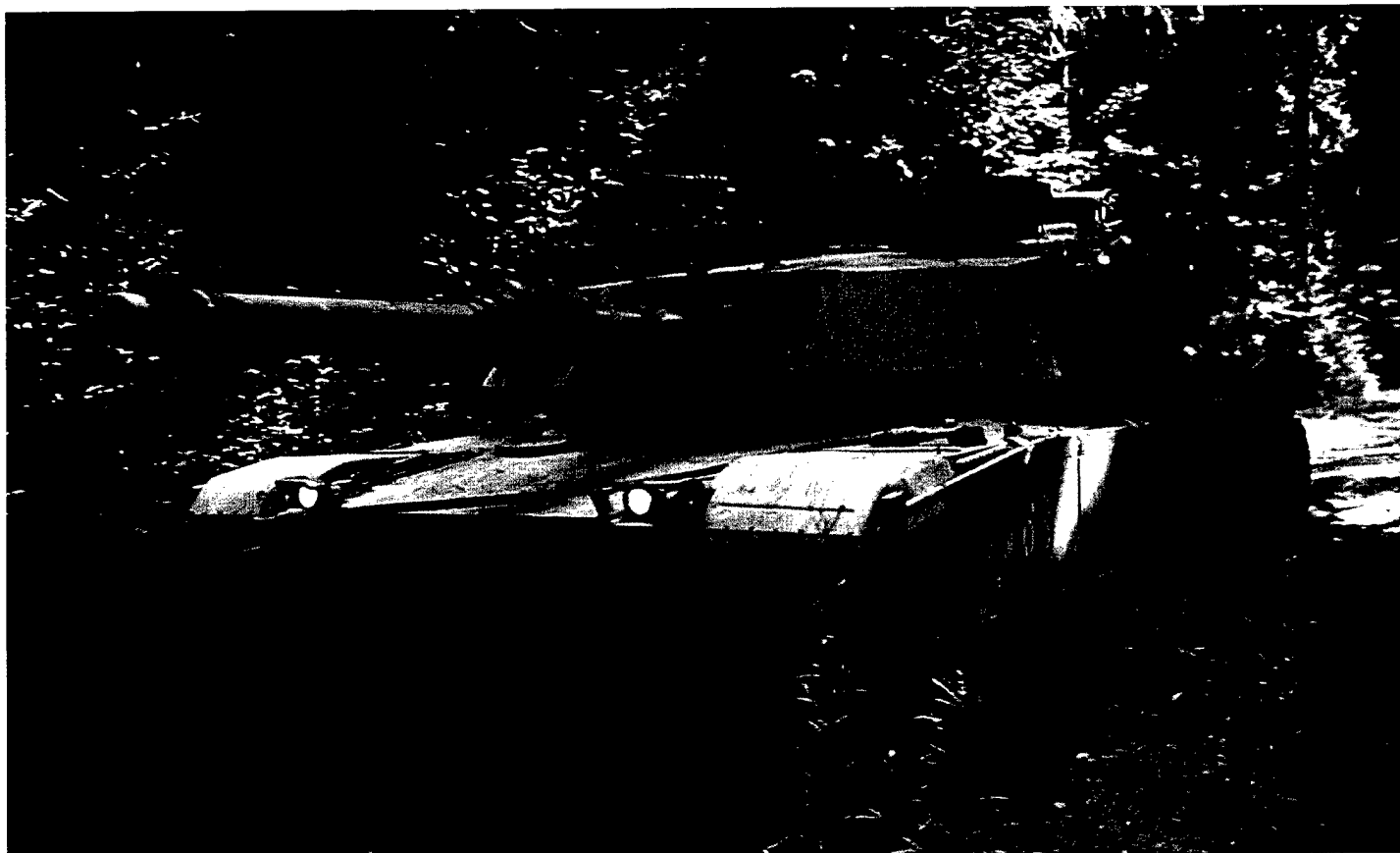
U.S. Strategic Forces	September 1990	July 1997
ICBMs	2,450	2,400
SLBMs	5,760	3,776
Bombers	2,353	1,781
Total Warheads	10,563	7,957
Soviet/Russian Strategic Forces	September 1990 ²	July 1997 ³
ICBMs	6,612	3,700
SLBMs	2,804	2,480
Bombers	855	570
Total Warheads	10,271	6,750

¹ Warhead attributions are based on START I counting rules. This results in bombers having fewer warheads attributed to them than they actually carry. On the other hand, even though all nuclear warheads from Ukraine have been removed to Russia, they remain START-accountable until the delivery systems have been destroyed.

² Includes weapons in Belarus, Kazakhstan, Russia, and Ukraine.

³ Weapons in Russia only.

SOURCE: START I Memorandum of Understanding, July 1997.



M-1 Abrams tank, Bosnia

A third risk is military and comes in several guises. Iraq or North Korea or both might use weapons of mass destruction (WMD), if not nuclear weapons, then chemical and biological weapons (see chapter eleven). Even in purely conventional war, both enemies might show unexpected skill in employing asymmetric strategies that exploit vulnerabilities in the U.S. reinforcement plan (e.g., by destroying key airfields and mining ports). Another military risk is that allied forces, which are key in both theaters, might not fight so well as expected. Beyond these risks, war is inherently dynamic and unpredictable. The offense has the advantage of seizing the initiative, and sometimes the breaks go against the defender. Even a well-planned defense can be rocked back on its heels.

Although the United States will base its plans on expected events, it will need flexibility to respond effectively to different

events, including the unexpected and unwelcome. Provided it retains such flexibility, the United States will be justified in having confidence in its capacity to prevail against today's rogues. It does not, to be sure, enjoy certainty, especially of quick and easy victories. But given the risks cited above, the principal danger is not that U.S. forces might be defeated but that early reversals might occur (e.g., Kuwait or Seoul might be temporarily lost). Phases 2 and 3 could then prove prolonged and high casualties could be incurred. Barring a calamity, the United States and its allies would eventually win—although at a higher cost than otherwise, because the arrival of large U.S. reinforcements would tip the warfighting balance decisively.

The prospect of eventual success does not diminish the importance of continuing to work hard at reducing the serious risks that still exist in both theaters. The dangerous situation in the Persian Gulf particularly requires ongoing efforts to reduce vulnerability to short-warning attacks, to



AH-64 Apache

ensure entry of U.S. forces against opposition, and to upgrade U.S. and allied capabilities for the initial halt-phase of operations. Continuing improvements to U.S.-ROK defenses on the Korean peninsula also are needed. Both situations are volatile, and there is a difference between a confident defense and a perfect one. "Confident" defenses have done poorly or even lost on more than a few occasions when the unexpected occurred. Events may turn out better than expected or worse. Moreover, past "better than expectations" (i.e., the 1991 Gulf War) are not the best basis for gauging future wars. The case for improvement in the Gulf and Northeast Asia lies in

Operation Desert Storm



the ability to help safeguard against the improbable while further enhancing the capacity of U.S. and allied forces to win the most probable wars.

Conversely, today's rogues are not justified in having confidence at all. Their prospects of gaining early victories are low, and they face the near certainty of eventual defeat. By a wide margin, their best strategy would be to avoid war with the United States. For this reason, even though the Persian Gulf and Korea may remain dangerous places, wars in these locales seem unlikely to occur. The likelihood that deterrence will remain intact is based on the premise that U.S. forces will remain adequate to win both conflicts, singly or in combination. A weakened U.S. defense posture could produce less deterrence. Because the Persian Gulf and Korea are not the only places where major wars could erupt, the requirement for a powerful U.S. warfighting capability probably will not disappear, even if in the coming year one or both of these contingencies were to erode significantly.

Other MTW Conflicts

Although wars in the Persian Gulf and Korea are the principal focus of current U.S. defense planning, unexpected conflicts plausibly could occur in other places. Europe is one possibility, as are other regions. Although these areas seem peaceful today, the rapid pace of global change makes them candidates for conflict not only for the long term but also, to some degree, in the next five years. After all, few people in early 1990 could foresee war breaking out in the Persian Gulf any time soon. But the unique features of these conflicts must be recognized in preparing U.S. forces for wars that might have to be fought.

There are several possible contingencies. One is an MTW conflict in a different place, that is, a regional war with a medium-size power that would require the use of U.S. forces similar to those planned for Korea and the Persian Gulf. A second possibility is a bigger war with a large state turned hostile or a large coalition of

medium powers. A third possibility is a lesser conflict (i.e., a small MTW) that would require deployment of smaller but sizable U.S. forces on unfamiliar terrain.

For the near term, the prospect of a lesser MTW on unfamiliar terrain may be a contingency worth worrying about. Such a conflict could require commitment of up to two to four divisions, three to six fighter wings, and two to three CVBGs—a small but significant portion of the QDR posture. Deploying this force would be easy if the conflict were to occur at a location where the United States has been building a military infrastructure for many years, such as Western Europe, the Persian Gulf, or Northeast Asia. Deploying these forces to locations where an infrastructure does not exist would be a different matter. Possible sites might be Eastern Europe, Turkey, North Africa, the Middle East, Southeast Asia, or Cuba. The United States could deploy naval forces to locations along a sea-coast but would be hard pressed to deploy large ground and air forces quickly if the necessary bases, facilities, and supply lines were not available. A small-scale contingency (SSC) of this sort might pose a serious challenge, not because the enemy threat would be large but because the United States would not be able to bring its combat power to bear in a timely fashion.

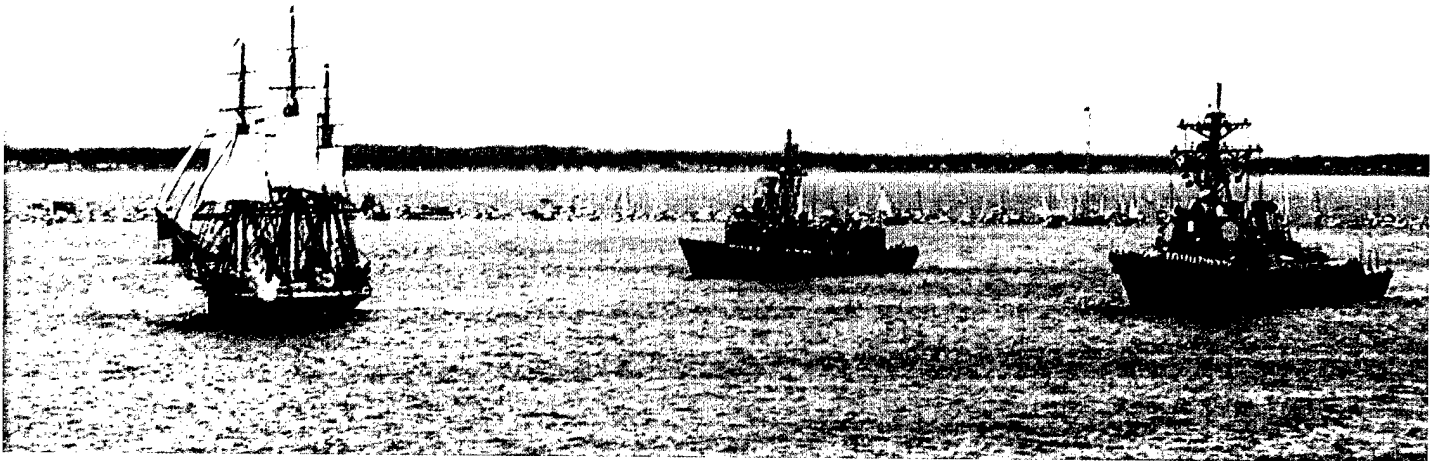
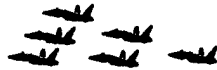
Each of these contingencies may be highly improbable, but the combined probability of one of them occurring is higher. Together they may not elevate requirements for U.S. forces, but they illustrate the importance of not becoming fixated on the Persian Gulf and Korea. At a minimum, they require military plans so that the DoD is aware of the force commitments that might be needed. They also call attention to the need to be prepared to deploy different packages of U.S. and allied forces from those envisioned for traditional scenarios. For example, one conflict might call for mostly ground and air forces, but another might require mostly naval and marine forces. Finally, they illuminate the importance of building a better military infrastructure in outlying regions, e.g., Central and Eastern Europe and Southeast Asia.

Preparing for the Future

Although this chapter has dealt with the near term, a brief mention of the future is appropriate for the simple reason that actions taken today can have a major impact on how the long term is handled. While current threats exist, they mandate continuing efforts to reduce vulnerabilities, particularly to surprise attack and resistance to entry of U.S. forces in both the Persian Gulf and Korea. Additional pre-positioning of ground equipment and air stocks would be a good way to lessen the risks in the Persian Gulf, for example. Improvements in allied readiness, modernization, and sustainment also make sense. The severity of both threats may increase because of ordinary modernization and unexpected breakthroughs in such areas as air defense, antiarmor weapons, offensive missiles, and WMD. These breakthroughs might allow enemy forces to pursue "asymmetric strategies" aimed at weakening U.S. and allied defensive capabilities. Such developments will need to be offset by commensurate improvements in U.S. forces not only in the distant future but also in the near term.

Beyond this, current threats may diminish or even disappear, but contingencies that appear improbable today might be quite real tomorrow. The change could happen by 2010, even by 2005. Success in confronting such threats depends on near-term actions to begin preparing for them. Better planning, more outlying infrastructure, and allied improvements can matter hugely, even if U.S. forces do not change a great deal. Steps to improve U.S. capabilities for the Persian Gulf and Korean contingencies also are important—for example, reducing vulnerability to asymmetric strategies—and can help U.S. forces prepare for other conflicts.

The overall size of U.S. forces may not change much, but major changes may occur in the U.S. overseas presence. The future might produce fewer forces in Europe, more forces in the Persian Gulf, and different forces in Asia if Korea stabilizes but trouble emerges with China. These changes may occur mostly in the long term, but initial steps in the short term can



**USS *Constitution* underway
in Massachusetts Bay**

help set the stage. A dynamic stance toward overseas presence can induce allies to develop better power-projection capabilities. It can also help close the growing gap between high-technology U.S. forces that can carry out modern doctrine and allied forces that cannot.

Equally important, the next few years will witness the initial stages of what may prove a major transition in the U.S. force posture. The QDR said that future U.S. forces will be different in character from those of today. They will rely on enhanced information dominance, new technologies, and new doctrines to increase their capability to carry out modern warfare significantly. The biggest changes will be felt by 2010, when such weapons as the F-22, the joint strike fighter, Commanche helicopters, and new C⁴ISR systems arrive in quantity. In the next few years, moreover, U.S. forces

will be developing new doctrine, experimenting with new force structures, and absorbing digitized communications and other technologies.

The manner in which these changes are handled will have an important bearing on U.S. military capabilities five years from now. Equally important, such changes will lay the foundation for how the long term will be handled. They will determine whether the transition to a new U.S. defense posture is a success or failure. Thus they underscore the theme of this chapter that although the United States can be confident of its warfighting capability, it cannot be complacent.

Small-Scale Contingencies

Although small-scale contingencies (SSCs) are not precisely defined in the 1997 Quadrennial Defense Review (QDR), they encompass a wide range of combined and joint military operations beyond peacetime engagement and short of major theater war (MTW). The primary rationale for SSC plans is to protect American citizens and interests, support political initiatives, facilitate diplomacy, promote fundamental ideals, or disrupt specified illegal activities. SSCs may include:

- Strikes and other limited intervention
- Noncombatant evacuation operations (NEOs)
- Counterdrug operations
- Shows of force
- Maritime sanction and “no fly” enforcement
- Peace accord implementation and other forms of peacekeeping
- Support for humanitarian operations and disaster relief (e.g., preventative deployments).

Such stability operations vary in size and duration (e.g., 100 to 30,000 personnel, from a few weeks to several years) and often are coalition operations that involve core states and other foreign forces,

as well as U.S. and nongovernmental organizations.

The QDR report explicitly establishes SSCs as a new mission for military operational requirements and a major consideration in deciding on force structure:

In general, the United States, along with others in the international community, will seek to prevent and contain localized conflicts and crises before they require a military response. If, however, such efforts do not succeed, swift intervention by military forces may be the best way to contain, resolve, or mitigate the consequences of a conflict that could otherwise become far more costly and deadly... Therefore, the U.S. military must be prepared to conduct successfully multiple concurrent smaller-scale contingency operations worldwide, and it must be able to do so in any environment, including one in which an adversary uses asymmetric means, such as NBC weapons. Importantly, U.S. forces must also be able to withdraw from smaller-scale contingency operations, reconstitute, and then deploy to a major theater war in accordance with required timelines.

This approach resulted from several studies showing that deployment of U.S. forces for SSCs has put heavier demand than anticipated on selected combat, combat support, and combat service support forces. For this reason, SSCs are specifically

considered for force planning and force structure.

The QDR approach recognizes international political, military, and economic trends since the mid-1980s. In that time, U.S. (and international) action has been required to resolve or limit lesser conflicts, sometimes totally internal upheavals, and to respond to humanitarian emergencies, even when no vital interests of the United States were threatened directly. The use of military force as only one element of response was predicated on the belief that inaction can be costly over the long term or unacceptable to U.S. ideals, broad interests, and public opinion. SSCs have been facilitated by the availability of certain military

forces no longer required for the Cold War or actual MTW operations. The frequency of SSCs and their demands on military forces have led to rethinking military doctrine, force structure, and training by many countries and regions, such as the United Kingdom, Canada, Italy, France, Scandinavia, Asia, Latin America, and most recently East Europe and Africa.

In the view of the United States, SSC plans have helped shape the international security environment, as well as the U.S. response to crises. Military activity, combined with political and diplomatic activity, can yield positive results, whereas alone, all activities are liable to fail. Failure allows a crisis to continue, risking the danger of expansion, and may damage the U.S. ability to influence those countries directly concerned.

As a general rule, participation in SSCs by other countries alongside the United States is seen as a distinct benefit, improving those nations' military capabilities and generating closer military-to-military relations with the United States. The U.S. public also strongly approves participation by other nations. The numerous exercises and training programs that the United States conducts with European, Asian, Latin American, and African military establishments to prepare for such contingencies (e.g., peace operations, humanitarian operations) are examples of positive effects on the international security environment.

Military Operations Other than War (MOOTW) or Small-Scale Contingencies

Various phrases and acronyms have been used to describe the long history of U.S. involvement in operations of this nature. U.S. Navy and Army actions in Mexico, Cuba, the Caribbean, the Philippines, and China in the latter part of the 19th century and between the two World Wars that then had no particular name now come under the heading of today's SSCs. The Marine Corps *Small Wars Manual* of 1940 contained a doctrine, based on experience in the Caribbean and Central America in the 1920s and 1930s, for what are now called SSCs. Examples during the Cold War were support for anti-Communist governments in the Dominican Republic in 1965, Vietnam and Central America in the 1960s and 1980s (first called counterinsurgency, then low-intensity conflict), and the Lebanese Multi-National Force (MNF) in 1982-83. Starting in 1993, operations of this kind were variously called peace operations or operations other than war (OOTW) and now are known as military operations other than war (MOOTW), as well as support to civil authorities.

UNPROFOR

The United Nations Protection Force (UNPROFOR) offered a prime example of U.S. nonparticipation among ground forces that led to reduced U.S. influence and less effective operations in Bosnia. The perception that the U.S. was using British, French, and Dutch troops to take greater risks while unwilling to do more than fly air strikes led to serious political problems, aggravating bilateral U.S. relations, creating strains within NATO, and risking an expansion of the Bosnian conflict into the Balkans. U.S. participation in Implementation Force (IFOR), by contrast, substantially enhanced the effectiveness of operations and increased U.S. influence while relieving tensions within NATO and generally enhancing relations with Russia and other Partnership for Peace nations that had contributed military contingents.

Background

What is Small Scale?

It is difficult to define SSCs because they include subcategories that vary according to the type of mission, size, and type of forces deployed and the rules of engagement (ROE). Yet they share some characteristics that distinguish them from MTWs. Decisions to intervene tend to be made quickly and unpredictably, often with little time for planning, preparation, and deployment. They can extend well beyond the initially envisioned duration, increasing projected strains on military forces. Operation *Provide Comfort* in northern Iraq (1991 to present), for example, was



U.S. troops in Somalia

projected to last two to three months; Implementation Force/Stabilization Force (IFOR/SFOR) in Bosnia (1995 to present) was projected to last for one year. Few established facilities in the deployment area may be available at the same time that the operation may need to rely on lighter forces organized in a less-than-conventional manner—greater mobility, less firepower, and less use of airpower and standoff weapons. The commanders' objectives and the ROE emphasize avoiding casualties on all sides, along with a need, when possible, for dialogue and cooperation with local power groups.

SSCs are not "fight-and-win" operations designed to inflict maximum damage on the enemy, and the "enemy" is often ambiguous in its attitude and actions. This calls for a distinct change in attitude, conduct, and interpretation of the ROE, with

an emphasis upon restraint whenever possible, while ensuring force protection and carrying out a more limited mission. One particularly difficult decision is whether or not to use deadly force and, if so, against what target. Given the high level of public and political attention focused upon theater operations, there is a potential for individual incidents (e.g., inadvertent killing of unarmed civilians) to undermine U.S. domestic support for military operations, as well as to create a much more dangerous indigenous environment. This is one of the motivations behind increased interest in developing and using non-lethal weapons. To achieve success, SSCs must stress understanding local culture and politics and the combined use of political, diplomatic, humanitarian, economic, and information programs. Often they require significant cooperation with civilian organizations of the United States and the international community.

Two Different Businesses

Major Theater Wars	Small-Scale Contingencies
Vital Interests	Interests and Responsibilities
Power Projection	Not Necessarily
Highly Destructive	Restrained or Constructive
Independent (must do)	Multilateral (should do)
Joint Operations	Combined and Civil-Military Operations
Clear Missions	Ambiguous Missions

The variety of the challenges posed by SSCs in the number and type of forces required and the relevant foreign policy considerations often results in the involvement of combined or coalition military forces and civilian personnel from nongovernmental organizations (NGOs) and regional and international organizations (IOs).

- Some SSCs may require only a handful of military personnel for noncombat military observer missions [e.g., the Military Observer Mission, Ecuador/Peru (MOMEP), during the Peru-Ecuador border conflict of 1995 required only 50 personnel].
- Some require military forces ready for combat, on a widely varying scale (e.g., from 500 personnel for the Somalia NEO in 1991, to the Taiwan Strait show of force in 1996—18,000 personnel).
- Some are basically nonmilitary (that is, humanitarian intervention and disaster relief as in Bangladesh, 1991), with, on occasion, limited military forces supporting and assisting large-scale civilian operations (as in *Provide Relief* in Somalia, 1993, and *Support Hope* in Rwanda, 1994).
- In operations supporting large-scale civilian efforts, international and nongovernmental relief organizations [e.g., United Nations High Commission for Refugees (UNHCR), World Food Program (WFP), International Committee of the Red Cross (ICRC), CARE, Doctors without Borders, Oxfam, International Rescue Committee (IRC)] were present before, during, and after military intervention. Considerable liaison and coordination are required, much of it ad hoc since there are no firmly established U.S. procedures for C³I in combined military-civilian operations and even fewer internationally codified procedures.

Peace operations are complex contingency operations that require the commitment of sizable military forces ready for

possible combat, in addition to supporting civilian activities (as in *Provide Comfort* in Iraq-Turkey, 1991; *Restore Hope* in Somalia, 1992–93; *Restore Democracy* in Haiti, 1994–95, and IFOR/SFOR, Bosnia 1995–98). The most adaptable forces for SSCs, including coordinated civilian activities, may be Marine expeditionary units (MEU), special operations forces (SOF), and civil affairs and psychological operations (PSYOP) units.

SSC Demands on Forces

The Department of Defense's Bottom-Up Review (BUR) of 1994 based its operational requirements on fielding forces sufficient to win two nearly simultaneous major regional conflicts (MRCs) and to provide for overseas presence. In determining force requirements, SSCs were not considered a separate mission; the BUR assumed they could be handled as lesser cases by forces earmarked for MRCs (now called MTWs), without any negative effect on their capabilities for the primary mission. Since 1989, however, the number of small-scale conflicts, humanitarian emergencies, and other similar contingencies rapidly grew in number, from 16 (1947–89, the Cold War period) to 45 (1989–97). The prospects for continued internal and regional unrest are clear, as discussed elsewhere in this book. Although decisions for U.S. response will probably be more limited than in the recent past, this cannot be assured. The U.S. military involvement in these contingencies must be assumed and prepared for; failure to prepare can hamper the successful completion of an SSC operation as well as the capabilities of U.S. forces to conduct MTWs.

Of course, the United States has the option of not responding to situations that do not affect its strategic or vital interests. Improvements in situation analysis have reduced the number of peace operations approved and participated in by the United States by allowing realistic assessments of the nature of the mission and of capabilities versus costs to achieve it for various situations. Limits on UN peacekeeping or peace enforcement capabilities, and to a lesser degree on those of ad hoc coalitions outside



Americans in Haiti

the UN framework but mandated by the Security Council, are now understood by the UN Secretary General, the Security Council, the United States, and other governments. As a result, fewer large peace operations have taken place than in 1990-93. But other SSCs (such as NEOs) have increased, and the demand for use of special operations forces (including civil affairs and PSYOP) and other army combat and combat service support units draws heavily on Reserve forces.

The longer an SSC lasts, the greater its negative effect on preparedness of forces that must be ready for MTW operations. This is particularly true for such units as light infantry and helicopter squadrons, which are deployed more frequently than other forces for peace operations, as well as combat support and combat service support units. These forces are usually engaged away from their home base at the outset of an MTW, and after SSC duty, most of them will require considerable retraining prior to deployment to an MTW. An inexact rule of thumb has been that 6 months of retraining are needed after SSC operations lasting 6 to 12 months. The time required to retrain is an important consideration in force planning and force structure, as well as in deciding initially whether to engage in an SSC.

Public Support

Because SSCs do not call for a major commitment of military force and often may not visibly serve vital U.S. interests, such operations require of any U.S. administration a sustained effort to mobilize and maintain public and political support at home. Because they are of small scale, limited duration, and low expense, and are visibly directed at an accepted U.S. interest (e.g., protecting U.S. citizens), NEOs usually command such support. Similarly, short-term disaster relief operations tend to gain positive public support. In contrast, large, long-lasting, potentially dangerous, and expensive peace operations in remote regions with limited apparent relationship to U.S. vital interests have difficulty gaining such support, although support is stronger for coalition operations where core states are seen to be doing their fair share. The likelihood of U.S. casualties and high cost can determine public and political support, or their lack thereof. An excessive preoccupation with the public fear of casualties—rather than proper concern for prudent force protection—can constrain the response of commanders in the field facing unpredictable and rapidly evolving

situations. Such vacillation encourages potential enemies to conclude that by inflicting casualties, public opinion will force the United States to withdraw (e.g., Vietnam, 1974; Lebanon, 1983; Somalia, 1993). With proper justification and explanation, public and political opinion can be brought to support prudently conducted continuing operations for important objectives, despite some casualties (e.g., Iraq's attack on the USS *Stark* in 1987; the Khobar Towers bombing in 1996). Public information provided by the media is a major consideration in sustaining indispensable support at home, which requires, as a vital element, careful planning and execution in the field.

Flexible Use of Force

The U.S. military is often called on to participate in SSC operations that involve civilian organizations or basically civilian tasks and to participate in multinational forces (MNFs), either in ad hoc coalitions or UN peacekeeping missions, for two main reasons: its ability to deal with dangers posed by local military, militia, or armed gangs, and its unmatched lift, logistics, planning, and command, control, communications, and intelligence (C³I) capabilities for rapid, large-scale operations. These capabilities not only protect and support

civilian activities but also enhance them by reducing time requirements, hastening the delivery of relief supplies, and improving coordination of disparate organizations. When large-scale humanitarian disasters strike, a combined national and international civilian response often is not adequate, and military assistance becomes critical. Extensive experience in training and exercising with almost all the world's armed forces makes U.S. forces very important in coalition management. Skills honed for preeminence on the battlefield are readily adjustable to the needs of various missions and cultural settings and to the nuances of particular operations.

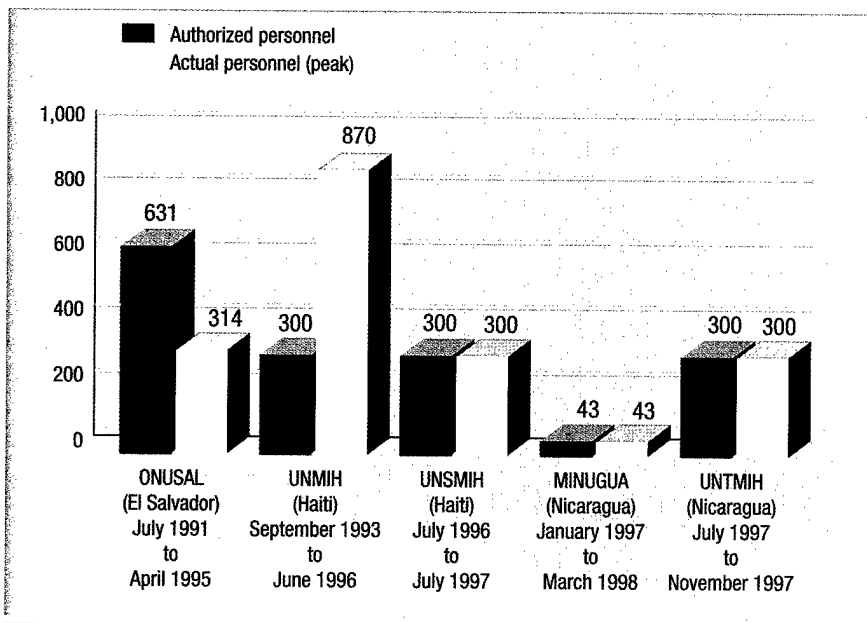
The modern U.S. military, although developed essentially in response to the Cold War, has the personnel, weaponry, and supporting equipment to satisfy basic operational military requirements for all SSCs. In combined military-civilian operations, it has displayed a remarkable ability to adapt and improvise, often in an unplanned manner and in an unfamiliar operating environment, including the following (1994-97):

- To enforce naval embargoes simultaneously on Bosnia, Iraq, and Haiti
- To enforce no-fly zones over Bosnia and northern and southern Iraq
- To carry out a show of force in the Taiwan Strait, with two aircraft carrier battle groups
- To maintain an essential carrier presence in the Mediterranean Sea, Persian Gulf, and Indian Ocean
- To organize and provide a core of highly capable multinational forces in Haiti and Bosnia
- To use Marine expeditionary units and special operating forces for NEOs in Liberia, Sierra Leone, Zaire, Central African Republic, and Cambodia.

Some specialized U.S. units have proven themselves at least as valuable for SSCs, particularly peace and humanitarian operations, as for regular combat. Specifically, operations in Somalia, Haiti, and Bosnia used:

- Civil affairs, psychological operations, and special forces
- Combat engineers and Seabees
- Logistics and communication units
- Military police.

UN Civilian Police Contingents in the Americas



Restore Hope, December 9, 1992 to May 4, 1993

During operation *Restore Hope* in Somalia, some 30,000 U.S. forces (plus 10,000 friendly forces under U.S. command) planned and initiated a military-humanitarian support coalition operation within 10 days after President Bush approved the basic idea. Within three weeks, it achieved its basic objectives of ending a major conflict and providing large-scale food and health assistance to millions of Somalis. In nearly all aspects of this operation, U.S. forces were central to coalition C³I and logistics, also coordinating effectively with civilian agencies and nongovernmental, regional, and international civilian organizations.

By the use of special operations forces, including civil affairs and psychological operations, units, engineers, military police, and Marine Corps units, the U.S. military has been able to contribute effectively to civilian programs critical to the success of the overall operation.

In the Haiti operation, including the UN force (United Nations Mission in Haiti, UNMIH), U.S. forces provided much of the coalition C³I and logistics. They also played a critical role in UN mechanisms for cooperation among the military force, U.S. civilian agencies, nongovernmental, regional, and international organizations, and the government of Haiti.

For the strictly humanitarian operation *Provide Hope* in Rwanda in 1994, the U.S. European Command provided essential airlift for food, water purification equipment, and medical supplies. It also coordinated the urgent, large-scale assistance delivery and distribution with the UNHCR, WFP, ICRC, and numerous NGOs and provided these organizations with limited engineering and logistics support. In all three instances—Somalia, Rwanda, and Haiti—the United States developed and adapted the Humanitarian Operations Center/Civil-Military Operations Center (HOC/CMOC) concept to civilian and military-humanitarian operations and communications.

This broad range of military capabilities, particularly effectiveness in supporting and conducting essentially civilian missions, constitutes a potential downside for the Armed Forces. Given the weakness of most U.S. and international civilian organizations in rapid mobilization, surge capacity, planning, and logistics, it is all too easy for civilians to pass the burden onto the

military, not only at the outset of an operation but even as it continues. Such an approach by civilian organizations places an unnecessary demand on military forces and delays the substantial effort required to increase local civilian capabilities.

Capabilities**Unit-Level Assets**

Current and projected total forces have adequate capabilities for the anticipated number and types of SSCs in the near future. However, as the QDR recognizes and as has been stressed in this chapter, continued deployment over the long term at the 1990s rate, with the existing force structure and organization, training, forward presence, and other requirements, will diminish capabilities to conduct SSCs as well as readiness to conduct MTWs. Since 1990, SSCs have imposed unexpectedly high demands on operations tempo, personnel tempo, and deployment tempo on several units, e.g., Fleet Marine Force and Special Operations Forces, with specific capabilities such as the Army modified table of organization and equipment (MTOE). These demands are expected to continue into the next century, with potentially negative effects on readiness, morale, personnel retention, and MTW capabilities. The units experiencing most of the demand are combat support, combat service support, light infantry battalions, and specific materiel such as helicopters and Airborne Warning and Control System (AWACS) aircraft. Given that roughly one-third of combat support and two-thirds of combat service support units are in the Reserves, an additional strain is put on those units particularly and the Reserves generally.

Studies have shown that deployable forces in all four services have spent close to or more than 50 percent of their nights away from home, involved in a variety of activities such as SSCs, formal presence, and training for MTW. This figure has not been precisely quantified by the individual services nor broken down by unit, but it is the most recent, most accurate measure of a key element of this much-discussed stress factor.

Other studies projected that light infantry and military police would exceed expected deployment by a rough average of 20 to 25 percent and 30 to 35 percent, respectively. Deployment times must be taken into account with such factors as entitlements, quality of life, care for families when personnel are away, and training for force rotation by each service. These factors together have clearly had a stressful impact on the retention rate of the all-volunteer force as well as on readiness for MTW operations.

Training, Doctrine, and Planning

Since 1993, the U.S. military has made an intensive effort to develop doctrine, publications, and training programs for operations such as NEOs, limited intervention, and shows of force. The doctrine, training, and policy for these operations have now been standardized and are well-understood, and troops are regularly trained in them. Over those four years, for operations with a major civilian dimension, military professional schools, training centers, regional commanders in chief (CINCs),

and lower level commands have all instituted programs and manuals to meet the challenge of SSCs, including the following:

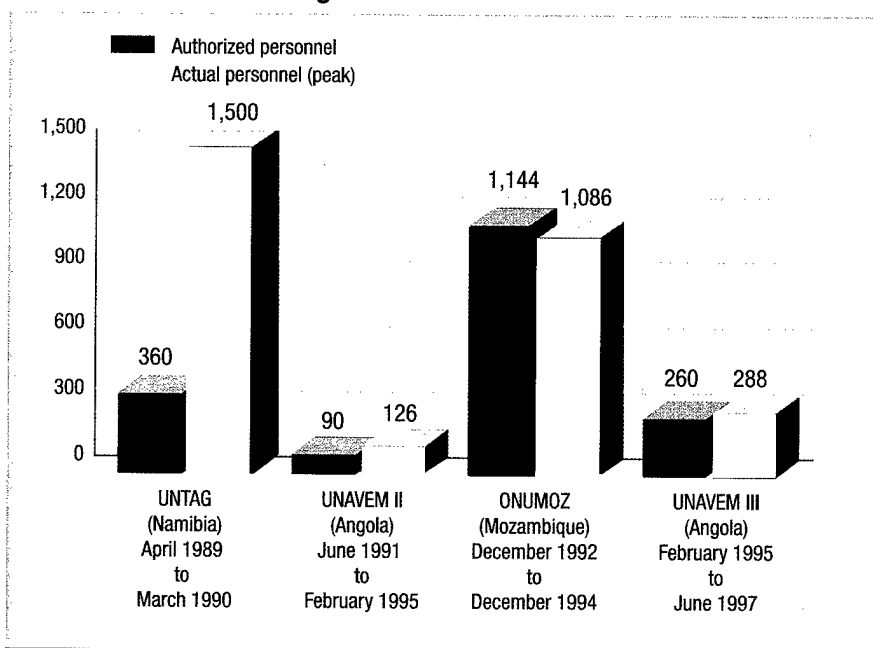
- *Field Manual 100-23, Peace Operations* (U.S. Army Training and Doctrine Command), 1994
- *First Joint Task Force Commander's Handbook for Peace Operations* (Joint Warfighting Center) 1995 and 1997
- *Joint Doctrine on Civil Affairs* (Joint Pub 3-57)
- *U.S. Army Civil Affairs Manual*
- *Joint Publication on Inter-Agency Operations* (Joint Pub 3-08)
- *USMC Small Wars Manual* (under revision).

Many other training manuals, lessons-learned reports, and related materials have been produced and are now actively used for training.

On May 20, 1997, President Clinton created an explicit doctrine (PDD 56) for interagency management of "complex contingency operations" such as major peace operations and humanitarian emergencies, both of which fall under the category of SSCs. PDD 56 contains policy guidance for planning and training for use by civilian agencies and the Armed Forces and aimed at systematizing and significantly improving preparation for and execution of these operations. This directive came at a particularly opportune moment, given the QDR's emphasis on the same issue.

One of the document's major components is the requirement that a plan for political-military implementation be developed as an integrated tool for coordinating U.S. Government actions in a complex contingency operation. The burden of the plan is to write an overall mission statement, to include individual agency objectives, an exit strategy, and an integrated concept of operations for all agencies, covering major functional tasks, agency responsibility, and availability of resources. In practice, this approach has been used only once, in preparing for the Haitian intervention (September 1994). The planning process proved very useful, particularly for civilian agencies, even though a final, approved plan was never completed and many functional tasks and timelines for civilian agencies were only partially met or had to be revised. The Haiti "process" revealed large "culture gaps" between the outlook and capabilities

UN Civilian Police Contingents in Africa





Treating Somali citizen

of military and U.S. civilian agencies, and even larger gaps in relation to U.S. NGOs and international civilian organizations. IFOR/SFOR in Bosnia, neither of which had a political-military plan, showed that such gaps remain, constituting a major obstacle to coordinated action.

Considerable time and effort will be required before the May 1997 PDD becomes standard operating procedure for training and planning. Even so, two problems remain unresolved: first, it does not apply to regional CINCs, at whose level

much of the operational planning takes place. Second, it does not address the difference between military and civilian material resources, planning and deployment capabilities, and organizational effectiveness (e.g., the much greater relative capability of the military compared to the civilian and how this affects planning and operation).

The emphasis and time devoted to training for peace and humanitarian operations vary considerably among the various commands and fluctuate depending on perceived priorities. New programs for SSC training compete for time and availability of units for training with many other programs, including those directed toward preparing for MTWs, which are always given higher priority. Publications, school curricula, and training and exercises have not yet been fully thought through or homogenized. Except for the *Joint Task Force (JTF) Commanders Handbook for Peace Operations*, most publications devote inadequate attention to preparing for combined military-civilian planning, training, and conduct of operations and to coalition military operations—particularly coalition operations when the United States may not be in command.

The new look at training applies even more to civilian agencies of the U.S. Government, as well as to finding methods of including NGOs or IOs more frequently and systematically in training for SSC operations.

Standardized Procedures

Standardized military procedures can enhance communication and coordination among U.S. forces, systematic cooperation among U.S. and coalition military forces, and between them and participating civilian organizations. So, too, will procedures for dialogue and cooperation with indigenous power centers (e.g., governments, factions, militias, NGOs), even though their application inevitably differs for each SSC and civilian agencies may not necessarily be responsive to them. For these reasons, standardized procedures are best discussed with the larger international organizations

and NGOs such as UNHCR, WFP, and ICRC before adoption and must be adapted for each individual operation. Another important area requiring systematic attention and procedures is the major enhancement or re-creation of an indigenous law enforcement capability (i.e., police, judiciary, penal system). This includes procedures for military cooperation with civilian assistance programs and personnel, and for improving the means whereby the United States and other countries can strengthen the capabilities of United Nations Civilian Police (UNCIVPOL) and provide coordinated bilateral assistance.

Force Structure

On the basis of a troops-to-task analysis, the greatest demand on combat forces that SSCs make is for flexible, rapidly deployable forces, such as SOFs, amphibious readiness groups, Marine expeditionary units, light infantry, and military police. But not all maintain adequate levels of training for peace operations, and often all are in short supply relative to demand. They are not always assigned in sufficient numbers to the geographic region where an SSC takes place, so the regional CINCs are predisposed to use forces already available, even if ill suited to the particular mission. Planning for specific forces at specific locations in a crisis is difficult, especially given that SSCs can happen almost anywhere, and especially difficult in regions where U.S. forces are not ordinarily based.

There are also problems with the size of individual components, which may not be suitable to SSC missions (i.e., too large, too small). For example, engineering units usually are important for such operations, but the smallest standard component, the battalion, often is more than what is needed. Similarly, combat service support units for aviation are sized for a squadron and are too large when only a few aircraft may be needed. In the case of headquarters components, the reverse is often true: SSCs put greater demands on and require more personnel for headquarters activities, such as communications, command and control, and coordination and

liaison with civilian organizations, coalition forces, and local governments or factions. In Operation *Support Hope*, for example, the commander of the U.S. Army Europe stressed the need for what he termed "modulization of standard units" and for these smaller units to have a larger-than-standard headquarters staff (e.g., a battalion-size headquarters for a company of engineers).

Somalia, Haiti, and Bosnia made clear the special importance of civil affairs, PSY-OPs, and military police units to the success of SSCs. But, as already emphasized here, these units are in short supply, and repeated, even simultaneous, calls for their mobilization from the Reserves, which incur problems of delay and expense, strain both units and personnel. Special forces units and personnel with a high ratio of active to Reserve components have been under similar, if less severe, constraints. The large preparation requirements of the Army and its different rotational concepts, which differ from those of the Navy and Marines—they are programmed for six months away from station every year—leave the Army more stressed than its sister services. In 1996, 10 percent of Army forces were deployed away from station in 100 separate locations—for an unacceptably high rate of deployment given the overall level of basic demand (e.g., forces stationed abroad, on maneuvers, or for other commitments).

Intelligence and Information

Collection and, even more importantly, analysis of information about local culture and politics need substantial attention, along with the character and *modus operandi* of local military, paramilitary, and militia or irregular forces. Improved procedures can enhance sharing of intelligence and information with coalition military forces and participating civilian organizations. Experiences in Somalia, Haiti, and Bosnia have shown that civilian organizations often have valuable specific information along with a general understanding of the local scene; this can complement what can be obtained and analyzed by regular intelligence procedures and may even prove vital to the success of an operation. Civilian organizations include international, regional, and

Legend

- MTW
- Intervention
- Show of Force
- No Fly
- Maritime Sanctions/ Migrant Operations
- Peacekeeping
- Humanitarian Relief/ CONUS
- NEO
- BEF
- Standing Forces
- Large Operation
- Small Operation

Operations

Desert Storm, Desert Falcon, Sierra Leone, Haiti, Macedonia, Sharp Guard, Somalia, Rwanda, Bosnia, Kuwait, Taiwan, Philippines Volcano, Operation Provide Relief and Restore Hope, Fires Western, Somalia, Liberia, LA Riots, Korea, Zaire, Kuwait, Southern Watch

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1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006

The role of information operations for SSCs warrants a high priority, on location and at home, with modification and adaptation for what is in most instances a low-tech environment. PSYOP is particularly important when the potential exists for violent clashes with local power groups. The

SSCs that involve coalitions or civilian organizations seldom are tightly knit, highly technical operations with good C³ (and are rarely equipped with computers for C⁴). In several operations (e.g., Unified Task Force, UNITAF, in Somalia, or the MNF in Haiti), by ensuring that interoperable communications equipment and procedures were available, along with extensive use of liaison and coordination center arrangements, the United States assured effective coalition operations. It was also able

to achieve a reasonable degree of cooperation and coordination with civilian (especially non-U.S.) organizations outside the command structure. In *Provide Comfort*, *Restore Hope*, and *Support Hope*, civil-military and humanitarian operations centers progressively improved to reach a high level of effectiveness in coordinating military and civilian humanitarian operations. Still, greater effectiveness can be achieved with more work on communications compatibility and coordination.

Ad hoc success ought not mask serious problems in establishing satisfactory communications, cooperation, and coordination for coalition military-civilian operations. Communications equipment and procedures vary widely among different military establishments, more so among different civilian organizations such as WFP, ICRC, UNHCR, United Nations International Children's Fund (UNICEF), United Nations Department of Humanitarian Affairs (UNDHA), and various NGOs, and even more widely between the civilian and military components. The "culture gap" between civilian relief organizations and military forces makes the former particularly resistant to taking orders from the latter. A technological gap also exists between NATO and non-NATO military forces, adding to the difficulty of coalition command and control. U.S. military communications equipment and procedures are much further advanced over those of even other NATO countries, and the emphasis on encryption aggravates the complicated problem of communications commonalties.

Materiel Shortages

Shortages are projected for certain types of equipment in high demand for SSCs, while other types of equipment need either to be developed or modified for this use. Operations that involve civilian organizations or coalitions make extra demands on both the amount and nature of materiel required. U.S. forces, interoperable with other participants, and can supplement participant capabilities by providing them with additional essential equipment (e.g., communications and helicopters), but any inability to do so may jeopardize the success

of the overall operation and prolong deployment of U.S. forces. The growing technological asymmetry between U.S. and coalition capabilities and between military and civilian agencies needs to be addressed so that future operations will not be inhibited.

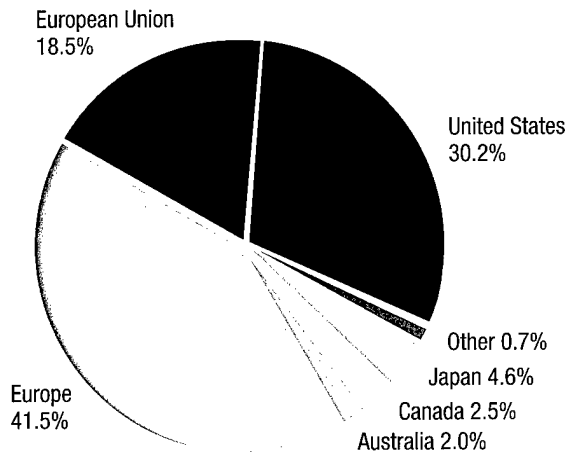
Improving Operations Overall Capabilities

This section offers specific suggestions for improving the capabilities of military forces to conduct SSCs, while also taking into account these forces' simultaneous need to be ready to participate in MTWs at short notice and the problem of increasing costs within a fixed budget. These suggestions are not presented in detail and are not considered definitive, but they do take equally into account costs, effects on MTW operations, and readiness.

- Perhaps the single most important action that could enhance overall SSC capabilities would be to give a higher priority to training, planning, and equipping for an increased number of general-purpose forces (those trained for MTWs) for a variety of operations. Mission success also requires stressing agility, flexibility, knowledge of area and culture, and on-the-spot decisionmaking. The QDR states that "U.S. forces must be multi-mission capable... [and] able to transition from peacetime activities and operations to enhanced deterrence in war," and that "this standard applies not only to the force as a whole but also to individual conventional units."

Current military training programs, planning procedures, and equipment are now adequate—except in the general area of military-civilian coordination. However, without substantial predeployment training, only the Marines and SOF are truly capable of meeting the QDR standard of being "multi-mission capable" for SSC operations as well as their role in MTWs, although Army light infantry divisions are close to it. Such an assessment means revisions in training for both active duty and reserve forces, including a decision on how and to what extent Army mechanized and

Humanitarian Assistance for Complex Emergencies (1996)



NOTE: The term "complex emergencies" does not encompass natural disasters. Total for the European Union does not include aid accorded by member states (amounting to approximately U.S. \$922 million) independent of their EU allotment. Total for Europe includes aid accorded by European states not members of the EU and by member states independent of their EU allotment.

SOURCE: United Nations Department of Humanitarian Affairs, "Total Humanitarian Assistance in 1996 (Global) as of 1 January 1997."

armor divisions and other units will undergo regular (as opposed to predeployment) training for peace and humanitarian operations and limited interventions. Revision would not mean providing intensive peace operations training for entire mechanized and armor divisions, but it could mean, for example, designating elements of larger units (e.g., one regiment of a division), "SSC-ready units" for six or nine months, and giving them the extra resources that would make them more SSC-capable. It would also mean training for asymmetric conflict—facing an opponent willing to use NBC weapons, terrorism, exploitation of women and children, and urban warfare. Many SSCs, from NEOs to peace operations, will occur in cities, which will require special training and skills for U.S. military personnel.

● A second measure of great importance would be to reorganize the Army Reserve and National Guard in a direction already suggested but not specifically recommended by the QDR. This would be to increase the number, readiness, and rapid mobilization of combat support and combat service support units for such specialties as civil affairs, psychological operations, special forces, combat engineers, and

military police. Reorganized Reserve or National Guard units could be structured and trained for rapid mobilization to supplement, and later replace, regular units with the same skills.

An alternative would be to increase the number of combat support and combat service support units and personnel in the active Army. Although this move might be less expensive and more effective, it might appear to undercut the National Guard or Reserve and therefore might be more difficult for Congress to approve. Either way, the need for greater strength in these areas is clear and immediate.

● A third general proposition would relax congressional, doctrinal, and accounting restrictions on shifting the allocation of funds or providing for a contingency reserve, in order to respond to unforeseen, unbudgeted contingencies.

Policy, Doctrine, and Training

Almost all categories of SSCs would benefit from improved coordination between U.S. military and civilian agencies in preparation and execution, with particular emphasis on the operational level (i.e., the regional CINC). Current procedure (after PDD 56) requires systematic training of and planning by civilian agencies, with the military, but implementation could be extended to the CINC level. Standardized procedures developed for use by both civilian agencies and the military in training for and conducting contingency operations, including civilian agencies, could enhance planning, readiness, and logistics capabilities. Increasingly systematic, combined military-civilian training and planning—including NGOs and international organizations—could be conducted in military schools and training centers and at the CINC level. Civilian agencies could designate personnel to participate in this training and then be on standby to be immediately available for contingency operations. A standing or on-call Inter-Agency Task Force Headquarters at the CINC level could expand the permanent joint task force headquarters units that already exist in some commands, with civilian agencies

SECURITY ACCESS POST TASK FORCE EAGLE



The Chairman visiting Tuzla

represented in order to ensure the proper training and regular exercising of their personnel alongside military colleagues.

Readiness of civilian agencies is essential to the success of several categories of SSCs and to enabling the agencies to carry out their functions without excessive reliance on military capabilities. The need for readiness goes beyond training, and includes such issues as the capability to rapidly mobilize and deploy personnel and equipment needed for an operation and to provide rapid, adequate lift and logistics support. It further includes an almost total revision in concepts, organization, training, and resource availability by civilian agencies to respond to sudden contingencies.

A model for civilian agencies to study in improving capabilities is the Federal Emergency Management Agency (FEMA), although it still has shortcomings.

Another need is for more systematic SSC coalition preparations—especially for peace and humanitarian operations—which might be accomplished by more intensive exercises with forces from other countries. Some regional CINCs are already doing this (e.g., U.S. Southern Command and the U.S. Pacific Command), and it has been a critical element of Partnership for Peace programs conducted by both U.S. Atlantic Command and U.S. European Command. These ad hoc methods can be studied and their best features emulated, especially for learning doctrine, tactics, techniques, appropriate weaponry and equipment, and for improving interoperability, small-unit operations, civil affairs, and psychological operations. A specific need for language-capable personnel is key to successful interaction with coalition troops, local organizations, and the populace in general. Such training takes time and planning, though use of civilian agencies or contractors is a possible (but expensive) option.

The number of exercises for regular military units might be examined to reduce those not considered essential. This might take into account the QDR recognition that certain SSC deployments—particularly those shorter than six months—are less debilitating to readiness for MTWs and can even be a plus for certain skills, such as small-unit operations and civil affairs. During SSCs, commanders can try to make provision for any specialized MTW training that deployed units are missing. For instance, during IFOR in Bosnia, Major General Nash was periodically able to cycle 1st Armored Division units to Hungary for gunnery training. During UNITAF in Somalia, Lieutenant General Johnston set up a firing range for Marine and Army units, as well as a range to practice amphibious operations.

The type and number of units covered by Global Military Force Policy should be increased to provide greater flexibility and ease of movement among CINCs, to ensure that the most capable units are available for SSC deployment. Careful consideration

Coordination in Haiti

Haiti offers perhaps the best example of coordination, which in its first phase was built into the operations based on the leadership of the MNF commander and the U.S. Ambassador, and in the second phase, on that of Special Representative of the UN Secretary-General. In Bosnia, the loose coalition of IFOR, the UN High Representative in Bosnia-Herzegovina, Organization for Security and Cooperation in Europe (OSCE), UNHCR, and other organizations without a clear command or coordinating structure proved inadequate.

should be given to preplanned phasing of redeployment for U.S. combat units and others designated for MTW response, replacing them in whole or in part after the initial deployment, as soon as military and psychological dominance have been established and the security threat has diminished. Replacements can be either Reserve, National Guard, coalition military forces, or in some cases civilian personnel (e.g., police mentors/monitors and logistics support). Substitution of units is another useful approach to greater flexibility in deploying for SSC duties (e.g., Seabees vs. army engineers; air expeditionary force vs. carrier battle group or MAG). Related to this is cross-training for substitution (training and deploying light infantry trained as military police, or mechanized troops as light infantry). Another means of providing proper forces for SSCs while minimizing the demand is to tailor or "modulize" the forces deployed (e.g., send a platoon of combat engineers rather than a battalion).

Cooperation and Coordination

Communications among U.S. military, coalition military units, and civilian organizations can be increased by several methods. Among military units, the United States and NATO, or the United Nations, or both, can designate types of radios (and computers) as well as frequencies and channels for use in the field during coalition operations, and can recommend all troop contributors be thus prepared. At deployment, the United States (or NATO, or the United Nations) could provide missing

communications equipment and fill in the gaps of any units not fully prepared. In the same manner, civilian organizations can coordinate closely with the UN Department of Humanitarian Affairs, UNHCR, ICRC, WFP, and the UN Children's Fund, all of which have substantial communication capabilities and coordinate with most NGOs. During deployment, an agreed-on communication center for unclassified information (e.g., the Humanitarian Operations Center/Civil-Military Operations Center or HOC/CMOC) and procedures and could serve coalition forces and civilian organization personnel in the field with a designated communication link. Thus coalition forces and civilian organization personnel could report nonmilitary information to their headquarters and organizations. The UNDHA "relief net" (available on the Internet) provides a good example of ways nonmilitary information can be shared. Another approach might be for the United States and other willing governments, plus the UN and its agencies, ICRC, and NGOs, to purchase the same or fully compatible low-cost radios, which then would be available for major complex contingencies to set up a common net on the ground, separate from most military communications.

Shared communications, with central and regional HOC/CMOCs, go a long way toward adequate operational coalition cooperation and coordination between military and civilians, but these could be reinforced with mechanisms to coordinate policy at the appropriate level. Such mechanisms would usually include senior military and civilian representatives of the most important governments and organizations, with frequent regularly scheduled as well as ad hoc meetings, and would have clearly designated personnel in charge of integrated coordination and cooperation on the ground, if not military-style command and control. On the military side, liaison officers and linguists already required for coalition command and control would have interoperable communications equipment and procedures.

To handle the increased coordination functions, the headquarters component of combat units deployed for SSCs with civilian participation might be strengthened substantially (e.g., battalion headquarters

component for a company, division headquarters for a brigade) and configured for joint operations.

Words and Deeds

Experience has demonstrated the overriding importance of both psychological operations and public information in the conduct of almost all categories of SSCs. Both can be, and have been, critical to the success or failure of the mission, and both can be planned for as integral to an SSC operation.

PSYOP components can be provided for deploying forces as well as in training headquarters components for their proper use. In many SSCs, because civilian and military personnel of U.S. embassies often can add important information through their greater knowledge of the local situation, they should be integrated into the PSYOP process. Public information is a separate activity, but should be treated similarly, to ensure that well-staffed joint information bureaus become components of deploying forces and that embassy personnel are integrated into the process. Intensive media coverage before, during, and for a few weeks after deployment can be prepared for, with easy access to senior officers, to stress openness and cooperation with the media as long as they do not interfere with operational activities. Mishandled public information can have a negative impact on domestic support for the mission. In Haiti and Bosnia, for example, PSYOP units were designated Military Information Support Teams to accommodate coalition sensitivities. Public affairs was redesignated public information.

A great deal of intelligence can be learned from local sources—embassies and selected international organizations—NGOs and indigenous personnel to which are particularly useful for analyzing intelligence and putting it into context. Informal information exchanges often are best and can be provided for in advance and partially implemented in the planning stage, leaving

full implementation to the deployment phase. There should be an emphasis on intelligence and PSYOP, with both focused on urban warfare—particularly on how to anticipate, deter, or defuse moves by an actual or potential adversary, using absolutely minimal violence—and on how to avoid alienating of the urban population.

Weapons and Equipment

The existing process of improving and developing new weaponry and equipment can satisfy the needs for materiel required for SSCs, particularly if it emphasizes the rapid deployment of nonlethal weaponry and techniques. Other requirements include equipment for reconnaissance, intelligence, and information operations in urban areas (e.g., various types of unmanned aerial vehicles). Nonlethal weaponry can be made available to units deployed for SSCs in sufficient quantity and for properly trained units, although the United States may need to make up for shortages in coalition military contingents. Similarly, in developing and providing communications equipment to U.S. units for SSC operations, interoperability with the equipment of other countries and with key civilian organizations is essential to the success of the operation.

Asymmetric Threats

During the next decade, the United States plans to maintain superior if not unique capabilities in the face of any potential military opponent. This capability, as described in chapter 9, has the following features:

- Global power projection
- Superior knowledge, planning, and information dominance
- Deep-strike capacity
- Joint and combined doctrine
- High-performance combat units.

However, present and future opponents may expend considerable intellectual and material resources to develop political-military responses designed specifically to upset or counter the great strengths inherent in the force posture advocated by the QDR. The Nation's great capability in high-technology power projection forces may lead future opponents to devise a variety of "asymmetric" counters or stratagems to frustrate, if not defeat, the U.S. military advantages.

Defining Asymmetry

Put simply, asymmetric threats or techniques are a version of not "fighting fair," which can include the use of surprise in all its operational and strategic dimensions and the use of weapons in ways unplanned by the United States. Not fighting fair also includes the prospect of an opponent designing a strategy that fundamentally alters the terrain on which a conflict is fought.

Historical examples of such strategies include the following:

- NATO's Cold War doctrine of first use of nuclear weapons to compensate for the nonnuclear superiority of the Red Army
- Operation *Anadyr*—the Soviet deployment of medium-range ballistic missiles (MRBM), and intermediate-range ballistic missiles (IRBM), and tactical nuclear weapons to Cuba in 1962
- Terrorism by proxy, used by various Islamic states against U.S. and European interests
- The Serbs taking UN personnel hostage to deter military escalation by NATO forces during 1994-95
- Exploitation of major nuclear-armed allies, such as the Soviet Union and China, by North Korea and North Vietnam to limit options for military escalation by the United States during their respective MTWs.

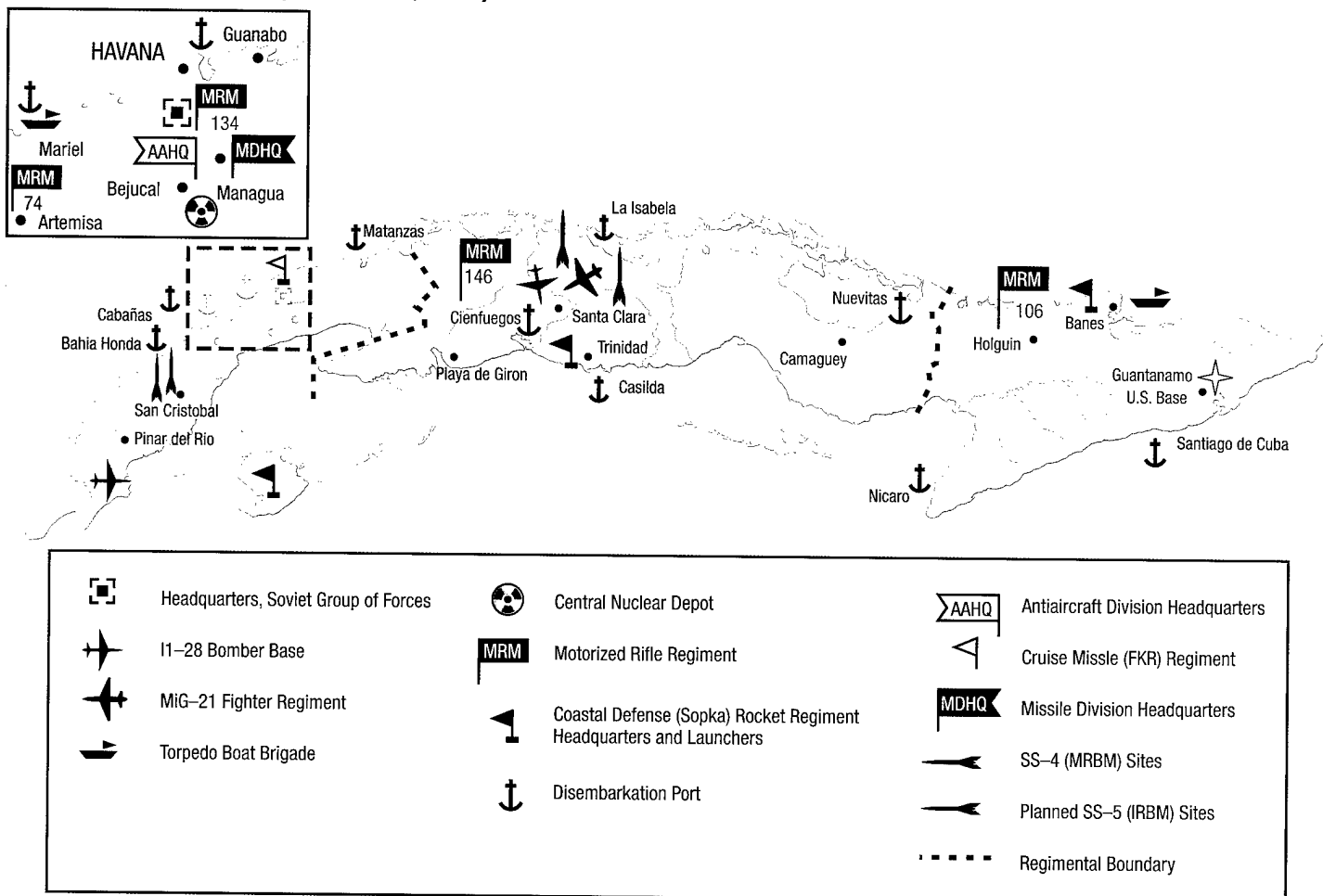
Future opponents will have many options for attempting to deter, disrupt, or

Operation *Anadyr* (Cuban Missile Crisis)

In 1962, the Soviet political military leadership decided to shift the global geo-strategic correlation of forces and provide Cuba with a credible defense against an invasion by the United States. With limited air- and sealift assets, the Soviet military decided to deploy an expeditionary force that would rely heavily on the new revolution in military affairs nuclear weapons and long-range missiles. Operation *Anadyr* called for deployment of ballistic missiles—the SS-4 MRBM and SS-5 IRBM—to rapidly upgrade the Soviet transoceanic range nuclear arsenal in order to buy time for the delayed SS-7 ICBM program. A second feature—undetected by U.S. intelligence for some 30 years—was the deployment of tactical nuclear weapons for use by the relatively small Soviet expeditionary force as high-firepower, anti-invasion weapons. Recent revelations indicate that the Soviet political-military leadership designed *Anadyr* as an asymmetric response to the clear military nonnuclear superiority of the United States in the Caribbean region.

defeat U.S. use of military power. Four broad options could be part of an asymmetric response to current and foreseeable U.S. superiority in regional combined-arms warfare capability. The first option is the acquisition of weapons of mass destruction (WMD) and long-range ballistic or cruise missiles. A future regional opponent could threaten U.S. and allied forces with a dramatic form of military escalation. Even without operational use, the mere presence of such capability would act as a regional-strategic shadow and might weaken the commitment of key allies to any future U.S. military response to regional aggression. The second is the selected acquisition of high-technology sensors, communications, and weapon systems. This is the strategy of

Soviet Forces on Cuba (October 22, 1962)



SOURCE: Central Intelligence Agency

the niche player. The third, the exploitation of cyberweapons, could be used to disrupt the next generation of information-technology (IT) military logistics systems or to bring the war home by attacking the national strategic infrastructure (NSI), itself rapidly exploiting IT in the name of economic efficiency. And in the fourth, opponents could choose to fight in environments, such as large cities or jungles, that degrade the U.S. capacity to find and attack militarily significant targets. This could include conducting acts of aggression that purposely blur boundaries between actions considered crimes and those viewed as warfare.

U.S. and allied efforts failed to neutralize the threat of the Iraqi theater ballistic missile (TBM) during the Persian Gulf War. Saddam Hussein's only military success, and a limited one, lay in the failure of the American-led coalition to find and destroy mobile theater missiles. For potential opponents of the United States, developing long-range unmanned bombardment systems is a very high priority. Many nations have active programs for the development and deployment of ballistic missiles with a range of up to 3,000 kilometers. The SS-1C SCUD represents the 50-year-old technology of the V-2 TBM. New generations are in development or have been deployed, such as the Chinese M-9 series. Upgrades in accuracy and effectiveness of TBMs are likely during the next decade. All contemporary and future TBM launchers will be able to find their geolocation with high accuracy and convenience, owing to the global positioning system (GPS).

The theater-range, ground-launched cruise missile may mature as an alternative means of long-range bombardment. At present, the threat of long-range cruise missiles is less visible than that of TBMs. The use of the *Tomahawk*-class cruise missile during the Persian Gulf War highlighted the new role of nonnuclear armed land-attack cruise missiles—a technology that matured in the last decade of the Cold War. Future theater peers and regional powers will probably develop their own

versions of the *Tomahawk*. Some of these states may choose to mass-produce cruise missiles on a scale similar to that of the German V-1 program, which led to the production of thousands of weapons. Relying on GPS guidance and made of inherently low-observable materials (fiberglass), a new generation of V-1 may appear in many potential MTWs. By using ballistic and cruise missiles in a combined-arms campaign, a regional opponent could place U.S. and allied expeditionary forces in danger of very long-range artillery fire.

Adding to the danger to U.S. military capabilities in an MTW is the prospect of a regional opponent developing and deploying an array of WMD warheads for delivery on their ballistic and cruise missile arsenals. Even without accurate terminal guidance, both ballistic and cruise missiles armed with WMD present U.S. and allied forces with the potentially horrific threat of mass military and civilian casualties.

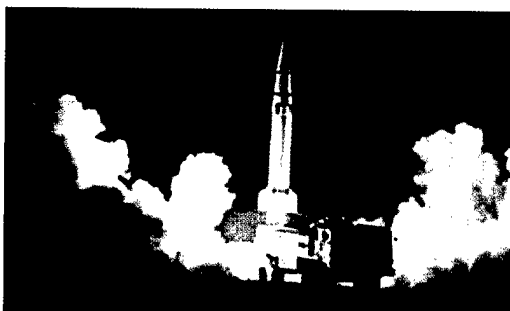
The lowest cost and heretofore apparently the most effective response to the threat of WMD weapons has been the threat of massive reprisals, including the use of nuclear weapons. This concept of extended deterrence has appeared to work well, especially during the Cold War standoff between NATO and the Warsaw Pact nations. In the context of future MTWs in Eurasia, deterrence through the threat of retaliation could prove less effective prior to and after the use of WMD weapons. It is possible to imagine that a future opponent might brandish WMD weapons to intimidate one or more regional allies into dropping out of a pro-U.S. coalition. WMD could also be used as weapons of mass "disruption." Biological weapons might prove an attractive means of disguised warfare that in some future contingency might be used to induce widespread illness without mass fatalities. Developments in antimaterial, less-than-lethal chemical weapons, could lead to use of cruise missiles equipped with wide-area antimaterial aerosol warheads. Finally, nuclear weapons could be used in a less than lethal information-warfare mode. After acquiring even a small (fewer than 20) arsenal of nuclear weapons, some regional opponents might conclude that several could be used to generate wide-area electromagnetic pulse

(EMP) effects during a critical phase of a military operation in order to damage a wide array of C⁴ISR assets deployed by the United States in an MTW.

High-Tech Weapons

Potential military opponents of the United States may conclude that there are major political, strategic, and military risks in relying too heavily on nuclear, biological, and chemical (NBC) weapons as an answer to U.S. power-projection capabilities. Some of them may believe that they can acquire key elements of the systems associated with the RMA from the open arms market. And some may even have the high-technology wherewithal to develop and use indigenous production. This last capability may loom as a major difference in the capability of a theater peer and a regional power or rogue.

Chinese M-9 (*Dong Feng-15*) SRBM



SCUD missile



The GPS navigation satellite constellation is an attractive global asset that many military powers can exploit in all of its dimensions, as revealed during the Persian Gulf War. In the next decade, several alternatives, such as the Russian GLONASS system, are likely to be deployed as backups to the U.S.-owned and -operated GPS.

By 2002, the space-based elements of cyberspace will have undergone a major upgrade with the deployment of several satellite constellations that provide high-bandwidth mobile communications, among which Iridium, Globalstar, and Teledesic offer the leading edge in the rapid proliferation of space-based mobile telephone and data systems.

Also by 2002, several 1 meter resolution commercial imaging satellites will be operational. These commercial reconnaissance systems now rely on electro-optical sensors, but by 2008, one or more such systems may offer all-weather and night surveillance based on the use of active sensors such as synthetic aperture radar (SAR).

In a future contingency, U.S. forces will be monitored during any crisis by a wide range of players, including international news organizations and nongovernmental organizations (NGOs). The U.S. military will operate in a global fish bowl. At a minimum, future opponents may gain invaluable strategic and operational information about the location and disposition of U.S. and allied forces.

In most SSC or MTW contingencies, the U.S. military option to degrade these space-based assets will be very limited. Except in extreme military emergencies, the U.S. regional commander in chief is very unlikely to gain authorization to use physical violence to disable such global assets. Disabling EW or IO attacks may be authorized, but the military may face the possibility that in future military operations, including combat, U.S. and opposing forces may simultaneously be exploiting the same space-based infrastructure.

Any U.S. expeditionary force engaged in a future MTW along the global littoral will rely on the Navy to provide early reconnaissance fires, active missile defenses, operational surveillance, amphibious capability, and seaborne logistics. Air and

ground units will simultaneously rapidly deploy by way of the large airlift fleet of wide-body jets. One of the responses of a regional power to this U.S. strategy will be to acquire sufficient RMA-type capabilities to be able to challenge the U.S. air and sea rapid deployment capability. Several of the following niche options will probably be available in the global arms market:

- Enhanced reconnaissance strike systems, including long-range ground- and air-launched antiship cruise missiles and a variety of UAVs, Maritime Patrol Aircraft, and space-based surveillance platforms
- Advance conventional munitions (ACMs), to upgrade strike-aviation assets that might include high-performance aircraft, such as the SU-34
- Ground-based ACMs, including mobile surface-to-air missiles, guided munitions for multiple rocket launchers, and fiber-optic-guided munitions
- Nonnuclear EMP and high-powered microwave (HPM) munitions.
- Intelligent, if not brilliant, land and sea mines

Detering Saddam

Seven years after the end of the Persian Gulf War uncertainty remains, and no little controversy, about whether the threat of nuclear retaliation by the United States and its nuclear-armed allies, the United Kingdom, France, or Israel, deterred Saddam Hussein from authorizing the use of Iraq's extensive chemical weapon arsenal.

"The President had decided, at Camp David in December, that the best deterrent of the use of weapons of mass destruction by Iraq would be a threat to go after the Ba'ath regime itself. He had also decided that U.S. forces would not retaliate with chemical or nuclear weapons if the Iraqis attacked with chemical munitions. There was obviously no reason to inform the Iraqis of this. In hopes of persuading them to consider more soberly the folly of war, I purposely left the impression that the use of chemical or biological agents by Iraq could invite tactical nuclear retaliation. (We do not really know whether this was the reason there appears to have been no confirmed use by Iraq of chemical weapons during the war. My own view is that the calculated ambiguity regarding how we might respond has to be part of the reason.)"

—James A. Baker III, *The Politics of Diplomacy* (New York: Putnam's, 1995), 359.

"The other thing that occurred to me was the lack of military utility of nuclear weapons. In the Gulf War, we took inordinate measures to preclude unnecessary casualties. Nuclear weapons are such a gross instrument of power that they really have no utility. They work against you, in that they are best used to destroy cities, and kill women and children. Now first, that's morally wrong; second, it doesn't make sense; and then, of course, there is the real threat of nuclear weapons in the hands of irresponsible or desperate powers. If you own them, you legitimize them just by your own ownership."

—General Charles Horner, in Jonathan Schell, "The Gift of Time," *Nation* (February 2/9, 1998).

- Advanced, low-observable platforms, including UAVs, antiship missiles, air-independent (AIP) submarines, and wheeled armored fighting vehicles.

A central feature of the strategy of the niche regional power will be to deploy sufficient regional capabilities to increase substantially the entry price to any U.S. expeditionary force without recourse to WMD weapons. Such an approach will be reinforced by the synergistic effect of a complementary WMD shadow.

Aside from exploitation of RMA-type systems in the theater of operation, one or more theater-peers or regional rogues might choose to bring the war home to the United States by exploiting cyberspace.

More conjectural, but not necessarily more controversial, is the prospect of MTWs becoming simply major wars in which targets in the United States could be attacked from cyberspace. The QDR calls for exploitation of the Revolution in Business Affairs (RBA), and of the concept of *focused logistics*, according to which all four services will move toward a "just-in-time" logistics system. From the perspective of the U.S. military's history, a shift away from the current logistics concept of "just in case" would be revolutionary. As posited by the QDR, the shift to a "just-in-time" logistics system could lead to major peacetime savings by reducing inventory requirements and increasing the efficiency of the process of repairing equipment. The strategic and operational benefits of moving to a *focused logistics* radically lower the logistics footprint of the U.S. expeditionary forces during an MTW; and a smaller footprint will reduce timelines for deployments of combat forces while also reducing the vulnerability of the in-theater logistics system to air and missile attacks. No longer would there be a need for the massive dumping of supplies as in Operation *Desert Shield*, the Persian Gulf War buildup.

These powerful advantages could be offset if an opponent attacks the U.S. high-performance logistics system with cyberweapons and through cyberspace. War conducted from cyberspace means a conflict in

an environment where the geolocation of attacker and target is nearly independent.

Aside from attacks through cyberspace designed to disrupt the rapid deployment phase of a U.S. expeditionary force, cyberattacks could be directed at the national strategic infrastructure (NSI) of the United States and key allies. Targets include the major elements of the national economy: the public telecommunications network, the financial and banking system, the electric power grid, the oil and gas networks, and the national transportation system—specifically, the air transportation system. All elements of the NSI are undergoing rapid, revolutionary changes under the pressures of privatization, globalization, and exploitation of IT.

Enormous economic benefits appear to be accruing to the U.S. economy, and the IT revolution may itself provide a partial explanation for the current steady economic growth accompanied by low unemployment and low inflation. These economic efficiencies may provide the United States with increasing commercial and economic superiority, but with that comes the risk of new strategic vulnerabilities. For private industry and commerce, public security and safety become cost centers to be avoided. Unfortunately, some of the NSIs that will evolve rapidly during the next decade may prove vulnerable to a variety of attacks from cyberweapons. One possible response

by a regional opponent of the United States to the possible deployment of a U.S. expeditionary force is to cause a new strategic "fog of war." Without adequate back-track techniques, a strategic opponent of the United States might be able to conduct a disguised structured campaign that would cause mass disruption to civil society. This opponent may have nongovernmental allies located inside and outside the United States which, with or without the opponent's direct assistance, might conduct a cyberwar campaign that could distract and slow the decisionmaking process of the U.S. National Command Authority.

Finally, a future enemy could conduct a slow-motion strategic economic warfare campaign against private economic interests in the United States. A future high-performance criminal organization might be employed to conduct a campaign of strategic crime against the United States and its major allies. New opportunities for high-performance crime could use rapid deployment of a wide range of cyberpayments or electronic currency systems that facilitate the global transition to electronic commerce.

Conflict in the form of cyberwarfare that would blur conventional boundaries between crime and war might prove attractive to an opponent that sees no strategic benefit in a direct confrontation of the military of the United States in a regional war.

The opportunity to conduct major military operations in a relatively pristine environment, such as the Kuwaiti theater of operations, is not likely in many future SSCs or plausible MTWs. As in the case of NATO military intervention in Bosnia, future military operations may be conducted in very adverse terrain and weather conditions. Opponents may attempt to take advantage of features of urban environment and mountainous or jungle terrain to reduce the effectiveness of U.S. forces highly reliant on RMA-type systems.

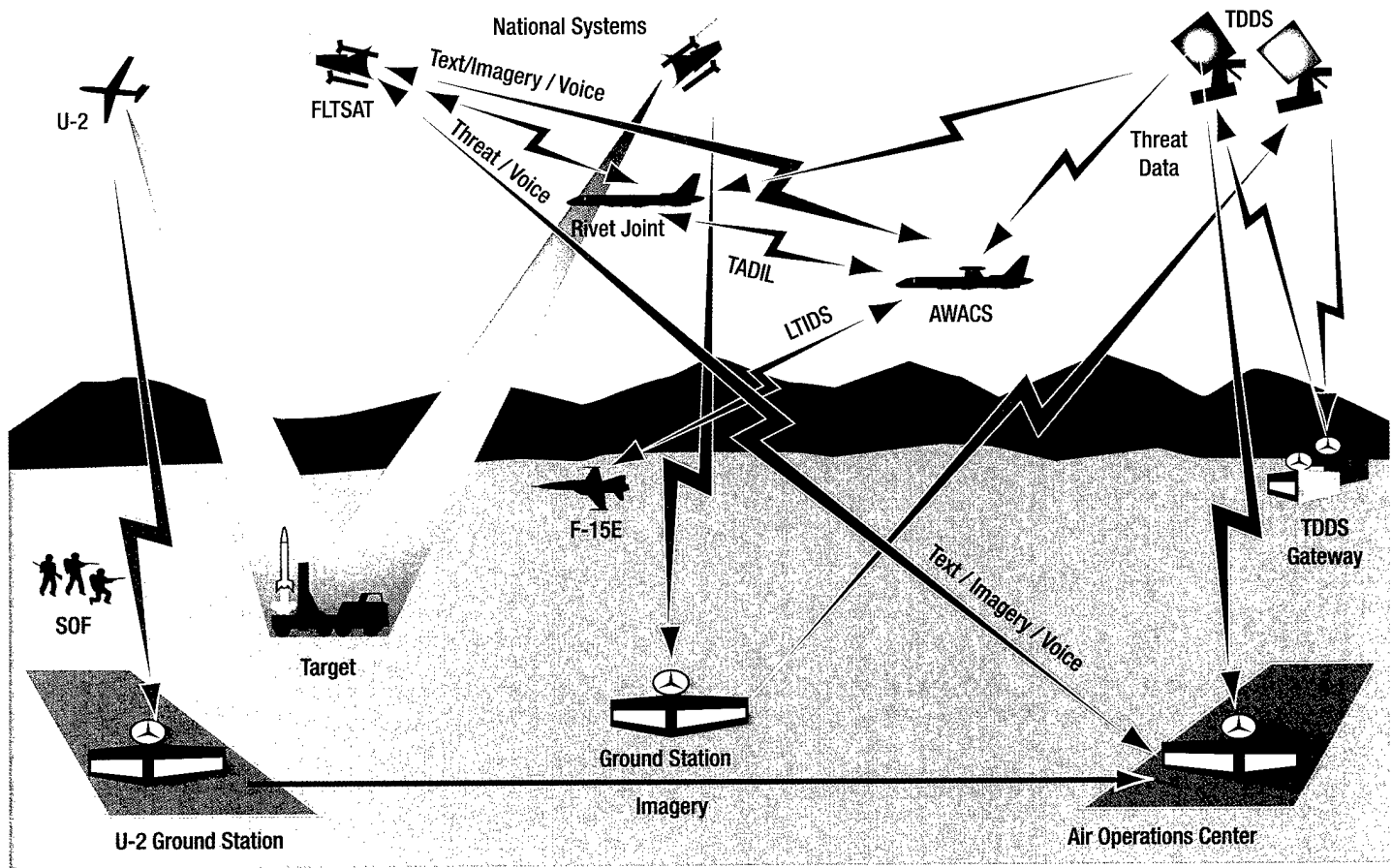
Given the U.S. public's low tolerance of conflicts that do not involve the vital or major interests of the United States and their seeming unwillingness to accept casualties, future opponents may try to cause major casualties. General Aideed's successful response to the U.S.-led UN expeditionary force in Somalia in the fall of

Biological Agents

Disease	Incubation time (days)	Fatalities (percent)
Anthrax	1 to 5	80
Plague	1 to 5	90
Tularemia	10 to 14	5 to 20
Cholera	2 to 5	25 to 50
Venezuelan equine encephalitis	2 to 5	<1
Q fever	12 to 21	<1
Botulism	3	30
Staphylococcal enterotoxemia (food poisoning)	1 to 6	<1
Multiple organ toxicity	Dose dependent	

SOURCE: Department of Defense

Strike II Architecture



1993 offers a model for potential opponents. U.S. forces are likely to be involved in a number of SSCs. The U.S.-led NATO intervention in Bosnia may profoundly color future administrations' views of the usefulness of having U.S. Armed Forces deal with civil and tribal or clan conflicts.

Opponents

Large Transition States

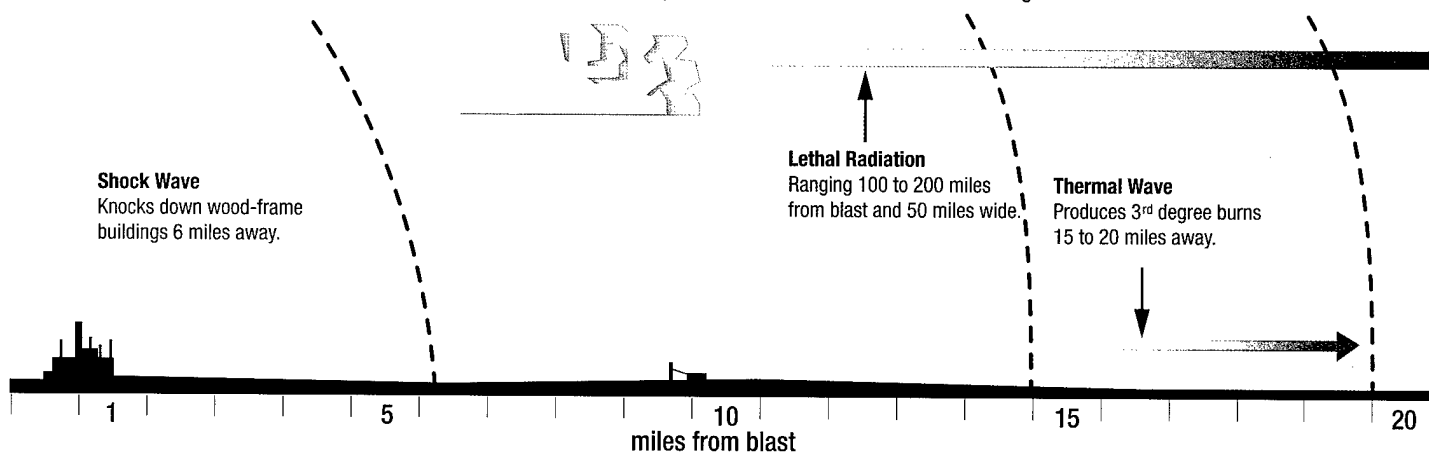
An important implicit assumption of the QDR is the absence of a military threat by a global peer before 2010. Several credible theater-peer competitors may challenge U.S. interests as early as 2008. A theater peer, by definition, will have a transoceanic nuclear delivery capability. It will have a substantial technological and military industrial base to develop, exploit, and deploy selected elements of an RMA-class

military systems. It will have a large regional military capacity. And it will have a substantial space program and access to much of the global aerospace industry through commercial sources.

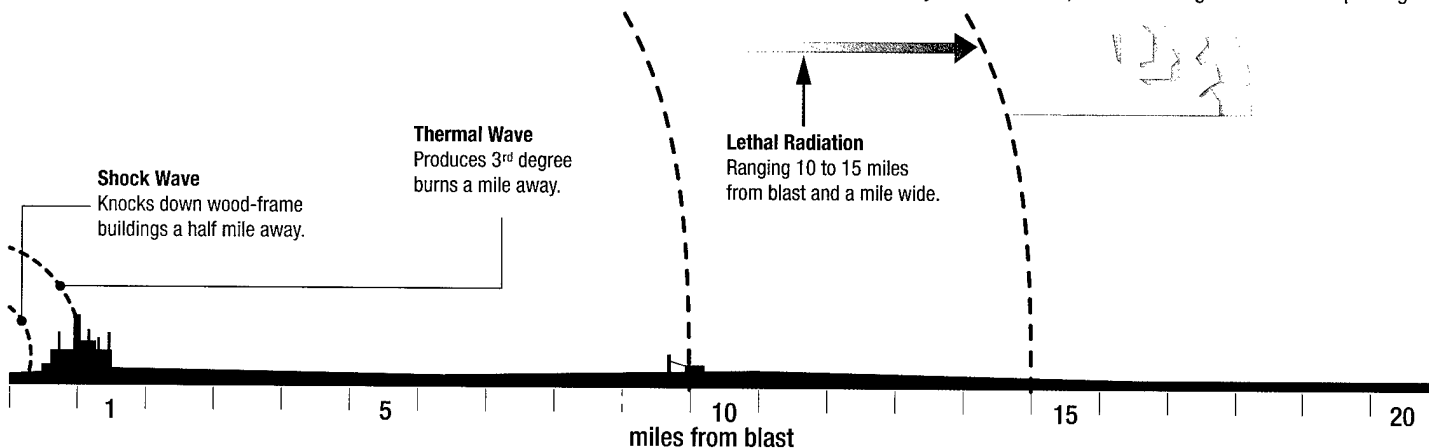
From the perspective of U.S. military planners, the arrival of future theater peers may be ambiguous. As transition states, they will probably both cooperate and compete with the United States on a wide range of strategic and geoeconomic issues. Such mixed relations will make any long-term U.S. strategy to use international monitoring or sanctions to restrict in a substantial way the diffusion of advanced dual-use or military technology ineffective. At present, the most plausible theater peers by 2008 are three large transition states: China, Russia, and India.

Bombs Designed for Underground Targets

Old: B-53 Large size means it can be dropped only by a B-52 bomber; explodes in midair with wide surface damage.



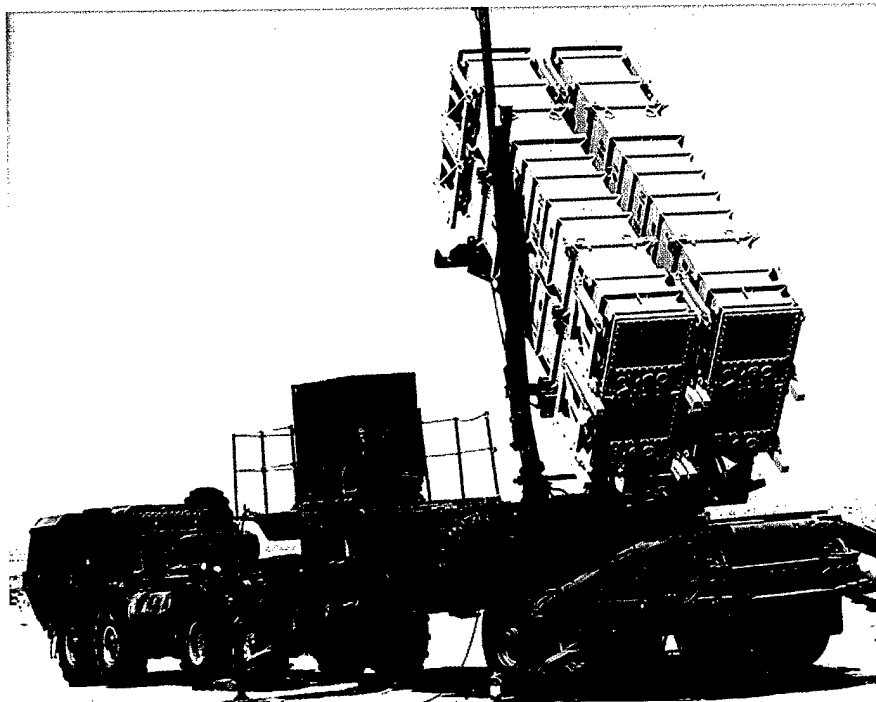
New: Modified B-61 Roughly equivalent in power to B-53, but smaller size means it could be carried by stealth aircraft; burrows into ground before exploding.



SOURCE: Sandia National Laboratory

These three major powers may not pose a direct military threat to U.S. interests, with the possible exception of a future major military crisis between China and the United States over the disposition of Taiwan. More plausible is that the long-term strategic calculus of these powers may undermine central strategic assumptions of the QDR. First, Russia and China will probably give considerable emphasis to the role of nuclear weapons in deterrence and possibly warfighting, if only to counter U.S. preponderance in high-technology nonnuclear warfighting capabilities. India and Pakistan may follow the same rationale. If these major powers follow this nuclear emphasis strategy, it could prove to have an even more corrosive effect on the viability and stability of the

NPT regime. Second, Russia and China have developed relations with several states—Iran, Iraq, Syria, and Libya—that the United States has defined as rogues, and they have become major exporters of military hardware and technology to these states. At the least, their relationships with Iran and Iraq will undermine the U.S. dual-containment strategy, by which it seeks to impose both international pressure and isolation on both regimes reminiscent of the Cold War. Most worrisome would be successful reestablishment of an alliance between either Russia or China and one or more of these rogue powers.



Patriot missile battery

China, Russia, and India may invest in leap-ahead technologies, include major investments toward directed energy, EMP, HPM, and cyberweapons systems designed specifically to undermine the U.S. concept of dominant battlefield knowledge warfare.

The biggest worry for the United States, as suggested above, may be the indirect strategic effect of a theater peer's behavior in a Eurasian region where the United States has vital interests.

Rogues

Current regional opponents (rogues) of the United States, specifically Iran and Iraq, may make major efforts to develop a geostrategic and geoeconomic alliance with either Russia and China or with both. Unlike the Persian Gulf War, where Iraq was geostrategically isolated, a future crisis involving Russia and China would be far more stressful for the U.S. military. The specter of limited wars in Korea and Vietnam looms large in the minds of U.S. military planners, and Washington might even rule out some high-performance reconnaissance strike options out of fear of escalation in a regional conflict.

With or without an alliance relationship, most potential rogue states will attempt to acquire the capability of a theater

peer by 2008. Iran today continues to acquire a substantial WMD and long-range missile capability, and Iraq may soon follow, once UN economic sanctions are removed; the scientific and engineering cadre lies in wait. As already noted, the attractiveness of acquiring a regional WMD delivery capability is very powerful as a counter to U.S. power-projection capabilities. In parallel, rogue regimes will try to acquire a variety of niche capabilities to threaten or actually to raise the entry price of any major U.S. military intervention. Much of what the potential regional predator will do in the coming decade will probably be focused on undermining a U.S.-led political-military coalition, both in the region and at the United Nations.

Failed States

In Somalia and Chechnya, local insurgents led by charismatic leaders frustrated military operations by the United States and Russia, respectively. With the global increase in urban sprawl, future conflicts are liable to occur in cities rather than in the countryside. Urban terrorism has a long history of use as the strategy of the weaker military party. Hiding within a civilian population, many of whom are sympathetic to the policies, if not the immediate aims, of the terrorists, is a consistent strategy of opponents of a U.S. or multilateral military intervention viewed as hostile to that organization's strategic interests.

Insurgents have already acquired advanced infantry weapons, including man-portable anti-aircraft and antiarmor guided weapons, which are spreading rapidly worldwide, reflective of the broader cascade of older weapons out of both NATO and the former Warsaw Pact nations. Insurgents in the near future will be able to exploit the three space-based assets—navigation, surveillance, and telecommunications—to support their own operations. Mobile telephones equipped with encryption technology will be very useful to insurgent leadership. Insurgents may behave like niche regional military powers that have acquired RMA-types of weapons and support systems. The basic strategy of the

Chemical Agents

Agent Class	Agent Name	Rate of Action
Nerve	Tabun	very rapid
	Sarin	very rapid
	Soman	very rapid
	GF	very rapid
	VX	rapid
Blister	Sulfur mustard	delayed
	Nitrogen mustard	delayed
	Phosgene oxime	immediate
	Lewisite	rapid
	Phenyldichloroarsine	rapid
	Ethyldichloroarsine	delayed
	Methyldichloroarsine	rapid
Choking	Phosgene	delayed
	Diphosgene	variable
Blood	Hydrogen cyanide	rapid
	Cyanogen chloride	rapid
	Arsine	delayed

SOURCE: Department of Defense

insurgent or local tough ordinarily is, as stated before, to raise the entry price for any U.S. or other intervention force and drive it from the local field of battle.

Transnational Criminals

Even gray zones of classic insurgent warfare may be blurred by the introduction as a major player in future conflicts of the transnational criminal organization (TCO).

The U.S. military has already faced the frustrating task of taking part in the protracted drug war against various TCOs operating out of Latin America, Asia, and the greater Middle East. The current focus of U.S. Armed Forces is to provide wide-area surveillance south of the U.S. border in support of U.S. law enforcement efforts to interdict the flow of illegal drugs. Especially in Colombia and Mexico, U.S. law enforcement has been thwarted by the ability of the various drug cartels to mutate rapidly and suborn local governments. Several nations may become dominated politically and financially by powerful criminal enterprises. Certainly, a number of Latin American countries have had to struggle against this challenge.

The phenomenon is global, and a potential worry is that some states may choose to use indigenous TCOs in a symbiotic way. Like the use in Elizabethan England of letters of marque during state-sponsored terrorism against Spain's seaborne gold traffic, TCOs may be used creatively by future opponents of the United States to prey on the economies of the industrial democracies without prompting any effective reaction. Cyberspace may prove a very attractive arena for conducting strategic crime campaigns that may unfold over several years.

The QDR Response

The drafters and designers of the QDR strategy were not unmindful of the possibility of asymmetric threats. In a number of areas, new initiatives have been taken to make U.S. forces more resilient to asymmetric responses, and in others the response can be best described as "work in progress."

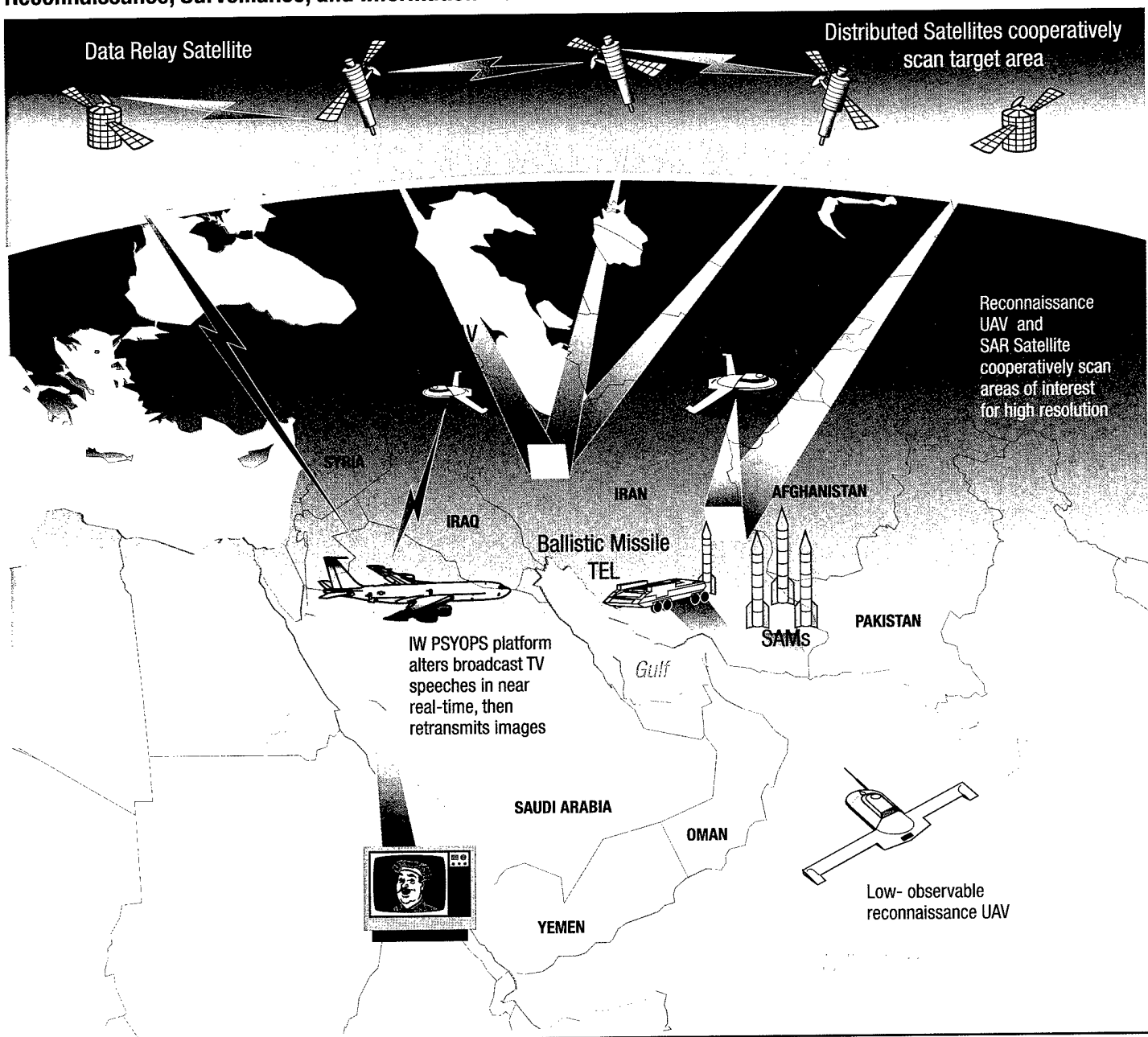
Countering WMD

Major initiatives can be identified that provide a response to a probable and very worrisome asymmetric threat—the delivery of WMD weapons by long-range ballistic or cruise missiles, or both. Some of these initiatives are listed below.

Enhanced Counterforce:

- Improved Theater-wide Intelligence Surveillance and Reconnaissance (ISR). Major new programs include the deployment of the E-8, joint surveillance and target attack radar system (JSTARS), and Global Hawk/Dark Star long-range, unmanned aerial vehicle (UAVs). Improved hyperspectral, electro-optical, and synthetic aperture radar (SAR) sensors deployed on a wide range of air- and spacecraft.
- Deep Strike (1,000+ kilometer range) Systems. New programs include deployment of 21 B-2 Spirit low-observable (LO) bombers, new variants of the Tomahawk cruise missile, development of the supersonic Fast Hawk cruise missile, and upgrade of tactical aviation with a wide range of advanced conventional munitions (ACMs).
- Enhanced Special Operations Capabilities. The U.S. Special Operations Command has taken on the counter-WMD mission as a high priority. Newly trained teams and technical assets are being developed and deployed to

Reconnaissance, Surveillance, and Information Warfare



provide for on-site seizure or destruction of WMD materials, infrastructure, and delivery vehicles. One of the important roles of SOF units in future counter-WMD operations will be to provide bomb damage assessment for a U.S. counterforce campaign.

Advanced Theater Missile Defenses:

- **Terminal Missile Defenses.** These include Patriot advance capability (PAC-3), the Standard Missile II Block 4A, and medium-extended air defense system (MEADs).

- **Wide-Area Missile Defenses.** The principal programs are the Navy theaterwide and the Army theater high altitude area defense (THAAD) systems. Both are expected to reach initial operational capability (IOC) before 2005, but the development of a reliable exoatmospheric kinetic energy kill capability has proved challenging. Further out is the Air Force Airborne Laser (ABL) program. If successfully developed by 2005, it may startle the skeptics and usher in a new era of air-combat operations.



Hezbollah guerrilla

- **Joint Cooperative Engagement Concepts.** An important program will be to provide a joint aerospace defense theater-wide command-and-control system for the array of active defense systems to be deployed by 2005. Failure to develop such a program would radically degrade the effectiveness of any theater missile defense modernization program.

Joint Theater Missile-Defense Operations:

- ***Roving Sands.*** An innovative effort led by the Army is to practice joint counterforce and active-defense operations against the threat of mobile tactical and cruise missiles. Operation *Roving Sands* may be the precursor to a permanent National Training Center (NTC) type of operation where all the services can practice the "SCUD hunt."

Joint Passive Defense Measures:

- **BW or CW passive defense.** Many programs are underway to enhance the passive protection of U.S. field forces against the threat of BW and CW weapons, including development of enhanced local- and wide-area warning and attack characterization sensors.
- **Enhanced Combat Engineering.** Although no dramatic new initiatives are planned, substantial Army and Marine combat engineering capability will be maintained. These units will be

a critical part of any early deployment force and will provide field-expedient shelters and fighting positions against the threat of long-range missile fire. Field-expedient shelters radically reduce the lethal radius of nuclear weapons, especially the lower yield variety, which are likely to be in the early inventory of a state which is a successful proliferator.

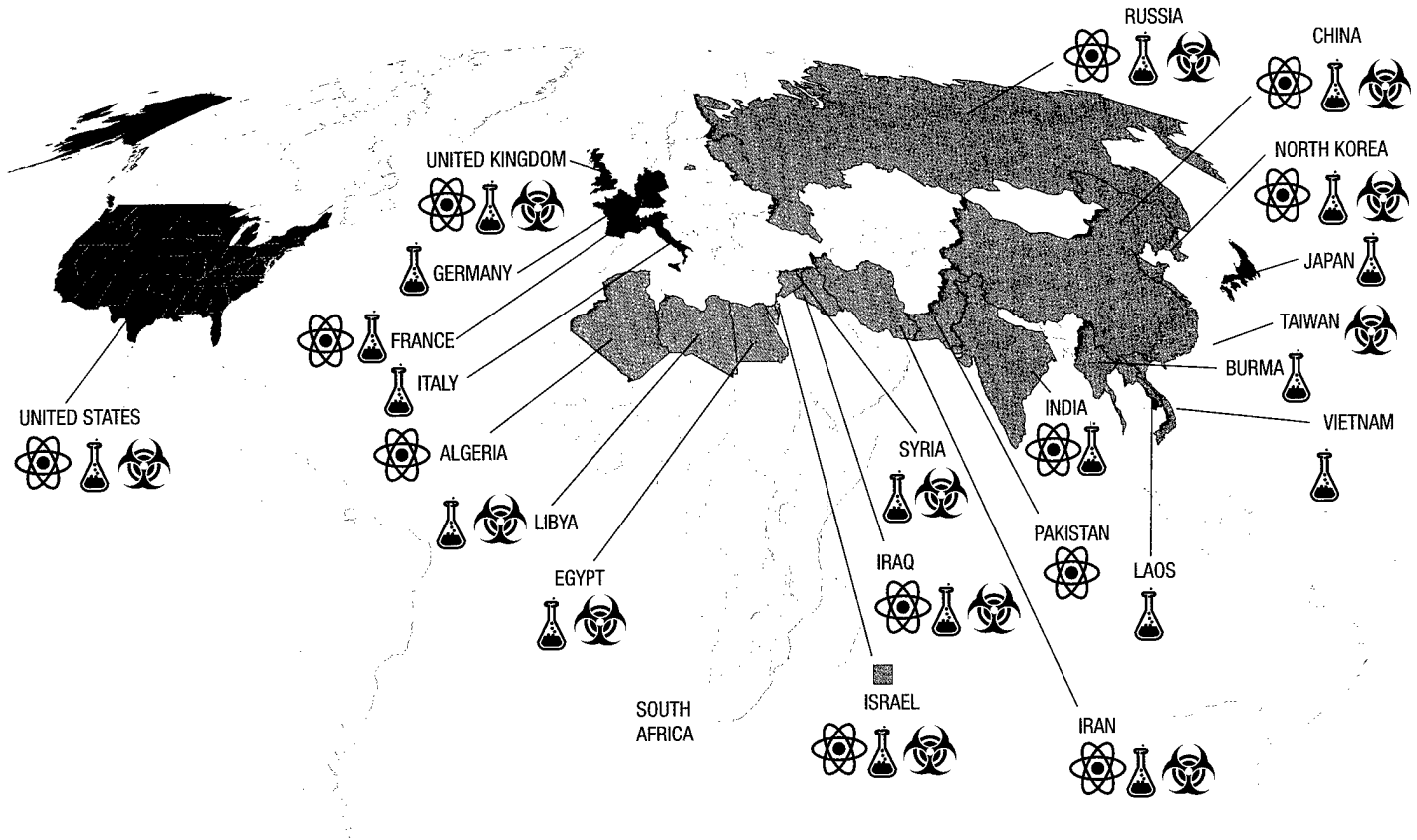
Lowering the In-Theater Footprint:




- **Focused Logistics.** There are compelling peacetime reasons to exploit the revolution in business affairs (RBA). Various "total asset visibility" programs will allow future U.S. expeditionary forces to reduce their vulnerability to attack by long-range missiles by relying more on various "just-in-time" logistics concepts. The prospect of a major innovation in logistics is enhanced by QDR plans for robust strategic and intratheater air- and sealift programs. Noteworthy are the C-17 wide-body airlifter, C-130J, and V-22 programs. By the turn of the century, U.S. sealift and maritime pre-positioning programs will have undergone major modernization. Finally, the Army continues to upgrade its helicopter and truck fleets.
- **Fighting with Dispersed Units and Indirect Fires.** The QDR emphasizes deployment of a variety of long-range fire systems, including Army and Navy tactical missile systems (TACMS) equipped with brilliant munitions, tactical aircraft equipped with ACMs, helicopter gunships, and a new generation of tube and rocket artillery equipped with enhanced munitions. Especially in the early phase of MTW, when the menace of long-range missiles armed with WMD warheads is most severe, Army and Marine ground combat units will be able to fight in a more dispersed and agile fashion while relying heavily on long-range indirect fires and a focused logistics system.

All these initiatives suggest that embedded in the QDR is a very robust response to the WMD threat. A key to the success of these programs, aside from steady funding, is whether they will be effectively orchestrated by an overarching counter-WMD campaign. Such a campaign would require all the services to make major commitments to the development of new operational concepts and to a vigorous training program. Like the antisubmarine warfare (ASW) challenge, counter-mobile missiles armed with WMD warheads would be very difficult to produce.

Finally, the issues of electro-magnetic pulse (EMP) and high-powered microwave

The Spread of Weapons of Mass Destruction

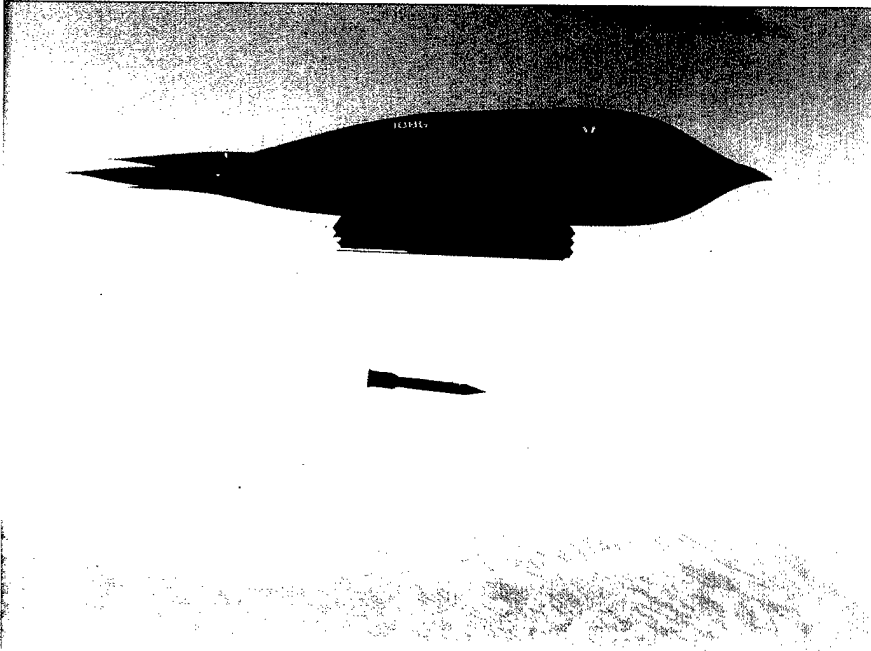


Weapon	Governing Treaty	Original Possessor States at Treaty Signing	Problem States
 Nuclear	Nonproliferation Treaty, 1970	United States, United Kingdom, France, China, and Soviet Union	Israel, India, and Pakistan. Active proliferators include Iran, Iraq, Algeria, and North Korea
 Chemical	Geneva Protocol, 1925	United States, United Kingdom, France, Soviet Union, Germany, Japan, and Italy	Egypt, Iran, Iraq, Israel, Libya, Syria, North Korea, Burma, Vietnam, China, and Russia
 Biological	Biological Weapons Convention, 1975	United States, United Kingdom, Soviet Union, and China	Iran, Iraq, Libya, Syria, Israel, Egypt, Taiwan, Vietnam, North Korea, and Laos

(HPM) weapons are troubling. The limited use of nuclear weapons above the atmosphere can generate wide-area electromagnetic effects. The United States and other countries with advanced technologies have vigorous programs to develop nonnuclear-driven EMP and HPM weapons. A major policy issue apparently not fully resolved by the QDR is whether the next generation of key weapons systems and their associated C⁴ISR should be made resilient to this class

of weapons effects. Electromagnetic hardening imposes a tax that many program managers would prefer not to pay. Without a coherent program, the risk remains that by 2008 many of the advanced weapons deployed with U.S. expeditionary forces will have a glass jaw.

This problem will not go away, even were U.S. planners convinced that the



B-2 dropping B61-11 bomb

threat of nuclear retaliation would deter the next first use of a nuclear weapon. WMD weapons may be deployed in a way that causes major material damage and disruption without also incurring mass military and civilian casualties.

Countering High-Tech

One powerful argument for investment in a robust counter-WMD and counter-missile capability is that it provides for enhanced warfighting abilities across the spectrum of conflict. Forces that can conduct a countertheater missile campaign in an WMD-shadowed environment will be very well equipped to destroy classical military threats. Put another way, if you can conduct an effective SCUD hunt, you can smash tank armies.

Although there was an interservice quarrel over which array of weapons systems could best defeat a classical mechanized invading army, the QDR chose instead to invest in a variety of "tank killing" systems. Many of these are mentioned above, in the discussion of counter-WMD and counter-missile operations.

The United States is developing a range of capabilities designed to counter asymmetric high-tech weapons. These efforts include:

- **Gaining Dominant Battlefield Knowledge.** An array of airborne and spaceborne sensors will be deployed in the next decade. Simultaneously, selected services will take the lead in deploying robust offensive EW capabilities, including the Navy's commitment to the joint Air Force/Navy EA-6B program. Although expensive, a large fleet of intelligence-collection aircraft includes the Air Force Rivet Joint and the Navy EP-3.
- **Robust Suppression of Enemy Air Defense.** An array of countermeasures has been developed to defeat the evolving threat of surface-to-air missiles. Most worrisome is the global diffusion of advanced electro-optically guided man-portable surface-to-air missiles. Airborne countermeasures will be developed and deployed during this decade to reduce this threat radically.

Low-Observable Combat Vehicles and Stand-Off Capabilities:

- **Continued Investment in low observable (LO) Vehicles.** The QDR program calls for investment in several very expensive LO programs. Although production of the B-2 will probably be capped at 21 aircraft, two major tactical fighter programs, the F-22 and JSF, emphasize LO features, which significantly increase the ability of both combat aircraft to operate in hostile airspace.
- **Diverse ACM Program.** The overall effectiveness of U.S. combat aviation, both long-range bombers and fighter bombers, will be radically enhanced by mass deployment of the next generation of guided munitions such as joint stand-off weapon (JSOW), joint direct attack munitions (JDAMs), and the wind-corrected tactical munitions dispenser. Further, the Air Force and Navy are deploying a variety of stand-off weapons, including the tri-service attack missile, extended range (TSAM-ER) and the joint service stand-off attack missile (JSSAM). All these munitions will dramatically increase the productivity of each sortie against fixed and mobile targets. Enhanced productivity will allow air campaigns to be conducted with great effect and dramatically reduce sortie rates.

Fighting for the Littoral:

- **Enhanced shallow antisubmarine warfare (ASW) and countermine programs.** After several brutal wake-up calls, the Navy appears heavily committed to development of enhanced countermine capabilities. Without a major upgrade in sea-mine countermeasures, various littoral states will be able radically to restrict the use of their neighboring water by the Navy. The arrival of the air-independent

propulsion (AIP) non-nuclear-powered submarine offers a new undersea menace. Although the Navy may not be seriously challenged in open ocean, littoral ASW remains a major challenge.

- Defeating the Antiship Missile. An enhanced SCUD hunt capability will provide additional benefits. For the Navy, a major challenge is that a niche opponent will effectively close a littoral region to naval surface forces by deployment of ground- and air-launched antiship missiles. Already Iran is moving down this track. Another major challenge for the Navy will be to develop a neutralization campaign that will neutralize mobile missile launchers. Further major upgrades to shipborne active defense are under way, including continuing modernization of both terminal and wide-area active defenses. An unmet need is the deployment of a long-endurance airborne sensor designed to detect sea-skimming LO antiship missiles that may approach their target at supersonic speed.
- Enhanced Amphibious and Logistics over the Shore (LOTS) Systems. Major ports may be vulnerable to missile, air, and special operations attacks, especially in the early phases of an MTW. The QDR calls for continued investment in a robust over-the-horizon amphibious capability, especially with deployment of the V-22 on new-generation large-deck amphibious ships. Further, the Army and Navy continue to invest in the LOTS program that

provides for over-the-beach logistics operations. Both programs will allow U.S. forces to bypass ports damaged or blocked by mines.

Night Fighting Superiority:

- Enhanced Night Operations. The QDR program supports a vigorous effort by all services to take advantage of the revolution in electro-optical technology to provide a 24-hour-a-day combat capability. U.S. superiority in night ground fighting was revealed during the 100-hour ground operation of the Persian Gulf War. Further advanced systems are in development, which should sustain U.S. tactical superiority for another decade. Beyond 2008, the situation will become problematic, because night-vision systems have become a major feature of the global arms market. One area in which the United States may remain ahead is electro-optical countermeasures.

Countering IW

The United States has also taken steps to counter cyber weapons, including:

- Organizing for Cyberwar. All four services have information operations (IO) or information warfare (IW) centers. At present, the Air Force appears the most energetic in developing offensive and defense IO techniques and doctrine. One major challenge for the services

Soldiers in CBW gear



will be to develop effective institutional programs that can conduct risk-assessment programs. There is a real need for a systematic understanding of tradeoffs between the benefits of acquiring major C⁴ systems from COTS sources and the risks from their vulnerability to attacks by cyberweapons, ranging from computer viruses to electromagnetic weapons. Another unresolved issue is how DoD and the larger Federal Government should organize a credible tactical warning and attack assessment system to alert the NCA to major threats to "cyberpeace."

- A Minimum Essential Information Infrastructure (MEII). An important but unresolved issue is whether the U.S. military should develop the capacity to seize control of a portion of the national if not global information infrastructure, to insure continuity of military operations during an MTW in which an opponent conducts a strategic information-warfare campaign. Other options include the more indirect approach of the Federal Government to provide tax and other incentives to owners and operators of the National Strategic Infrastructure to build robust systems capable of defeating the effect of cyberweapons by direct defenses or rapid reconstitution measures, or both.

Implicit in the QDR strategic planning is the assumption that the United States will remain at the leading edge of military and dual-use technologies. Overall, this is indeed likely for the next 10 years. But deployment of advanced silicon-based weapons systems coupled with focused logistics produces emerging vulnerabilities. Some programs will be needed to nurture effective long-term responses.

Further Work

Even against the niche player that acquires RMA-type weapons, QDR-designed forces should have a robust capability to prevail in major combat operations. What remains uncertain is whether U.S. combat casualties will rise substantially during future SSCs or MTWs. Even with enhanced capabilities, U.S. commanders may not escape the reality that their combat units may suffer sharp but limited casualties during the high-intensity phase of any military operation. Obviously, the central political-strategic question for the NCA is whether the prospect of such casualties is worth the cost. Clearly, a regional player or local tough will try to prompt the answer "no." This chapter does not try to establish whether military leaders should either attempt to warn its political masters of this possibility, or continue to support the fiction, based on the unique experience of the Persian Gulf War, that war is a blood-free sport.

Aside from the threat of niche players and local toughs acquiring RMA-type technologies, several major powers, including potential theater peers, are likely to invest in the next generation of leap-ahead technologies.

Nuclear Weapons

Since the dawn of the nuclear age, the United States has been engaged in an ongoing debate—internally, with its allies, and with the international community—about its nuclear strategy. This has included vigorous discussion and analysis of the types of weapons that should be built and deployed, the characteristics of delivery vehicles for them, the targets to which these weapons should be assigned, the alert status of forces, and the relationship between how the weapons might be used (employment policy) and what senior government officials should say about their use (declaratory policy). The debate has addressed the requirements for deterrence of adversaries and reassurance of allies and examined the relationship of the U.S. nuclear force posture to the U.S. nonproliferation goals. In recent times, it has focused in detail on how far and how fast nuclear force reductions should proceed. This chapter deals with the nuclear issues that bear on U.S. security in the immediate future, that is, in the next two decades. The discussions of political issues that could shape the nuclear policy are offered in the specific chapters on regional security.

Response Capabilities

For five decades the United States has maintained a large, sophisticated nuclear force, which, until the end of the Cold War, was to do the following:

- Deter a nuclear attack on the continental United States by the Soviet Union
- Deter a nuclear or conventional attack by Warsaw Pact forces on U.S. allies in Europe
- Deter an attack on Japan or South Korea by the Soviet Union, China, or North Korea
- Reassure U.S. allies that U.S. commitments to their security were sufficiently credible for them to maintain high confidence in U.S. security guarantees and therefore not to entertain seriously the acquisition of their own nuclear forces.

To achieve these missions, the United States deployed a mix of strategic nuclear forces based on a triad of delivery vehicles: intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and heavy bombers. At the height of the Cold War, roughly 12,000 nuclear warheads were deployed on about 2,000 delivery vehicles, all in a high-alert status to preclude the Soviet Union from executing a disarming first strike on U.S. nuclear forces. In addition to these strategic forces, the United States deployed nuclear weapons on the



Minuteman

ground, on dual-capable aircraft in Germany and other NATO member states, and on carrier-based aircraft. More than 7,000 nuclear weapons were at one time deployed in Europe. Security guarantees were codified through the declaratory policy of extended deterrence. The United States led

NATO's adoption of a flexible response policy, indicating a willingness to use whatever level of force was required to defeat the aggressor. To shore up these guarantees the United States refused to pledge no first use (NFU) of nuclear weapons, implicitly reserving the right to initiate nuclear weapon use should circumstances warrant it.

U.S. nuclear strategy in Europe evolved as relations between the United States and the Soviet Union improved after Mikhail Gorbachev took power in Moscow in 1985. In 1987, the two superpowers completed the Intermediate Nuclear Forces in Europe (INF) Treaty, which eliminated deployment in Europe by both sides of all nuclear weapons capable of delivery in the 500- to 5,500-kilometer range. For the West, this was significant, because it eliminated the Soviet SS-20 intermediate range ballistic missile (IRBM) force, which would have been a potent Soviet asset for political coercion or in the event of war in Europe.

Since the end of the Cold War and the collapse of the Soviet Union in 1991, the United States has undergone considerable rethinking about the roles and missions of nuclear forces. Such rethinking is likely to continue in the next two decades, as the United States adjusts its force posture to emerging international realities.

Overall, the quantitative deployment levels of U.S. and Russian strategic forces are limited by the Strategic Arms Reduction Treaty (START) I of July 1991, signed by Presidents Bush and Gorbachev. The treaty entered into force in December 1994 and is scheduled to be fully implemented by the end of 2001. Although it calls for numerical parity of forces, this may be misleading. Some students of nuclear forces and policy, noting severe budgetary constraints, decline in equipment reliability, and deterioration of morale that have plagued Russia since at least 1992, believe that the United States enjoys a superiority in operational effectiveness of the forces. If true, that may be a military distinction without a difference, given Russia could still deliver enormous destruction against the continental United States if its leaders chose to do so. Moreover, the humiliating Russian defeat in Chechnya suggests that for some time Russia will derive its "great power" status primarily from its nuclear arsenal and will therefore probably

do what it can to maintain a modernized force that could remain impressive to Western analysts. According to Andrei Kokoshin, former Russian Deputy Minister of Defense and, who at this writing is the national security adviser to President Yeltsin, "Nuclear weapons, especially strategic nuclear forces, also play no small role in defining the status of our state, and by that parameter, Russia remains a superpower."

United States

For the United States, the main policy lesson has been the political value of sustaining a nuclear arsenal second to none—numerical parity coupled, if possible, with operational superiority—to complement superiority in conventional forces and in

the unparalleled strength of its economic, technological, and industrial base. Some doubt that the United States needs to maintain nuclear forces greater than or equal to Russian capabilities, on the grounds that Russia is no longer a world power and unlikely to become one again for decades. But this reasoning is shortsighted. A vibrant nuclear force posture is the only politically feasible stance that would pass muster before intensive congressional scrutiny and reinforces the overall image of the United States as the only surviving superpower in the post-Cold War world, an image and a reality that serve U.S. strategic interests.

These favorable conditions have, however, permitted the United States to take significant unilateral steps to streamline its forces. In 1991–92, President Bush endorsed a set of nuclear initiatives, which, along with President Clinton's 1994 Nuclear Posture Review, have led to substantial reductions in the scope and character of the U.S. nuclear posture. President Bush cancelled the Peacekeeper rail mobile ICBM, a new small ICBM, and a new short-range attack missile (SRAM II); curtailed production of new warheads for sea-based missiles; ended production of B-2 bombers and the advanced cruise missile; and approved worldwide withdrawal of nuclear artillery shells, Lance missile warheads, and naval nuclear depth bombs.

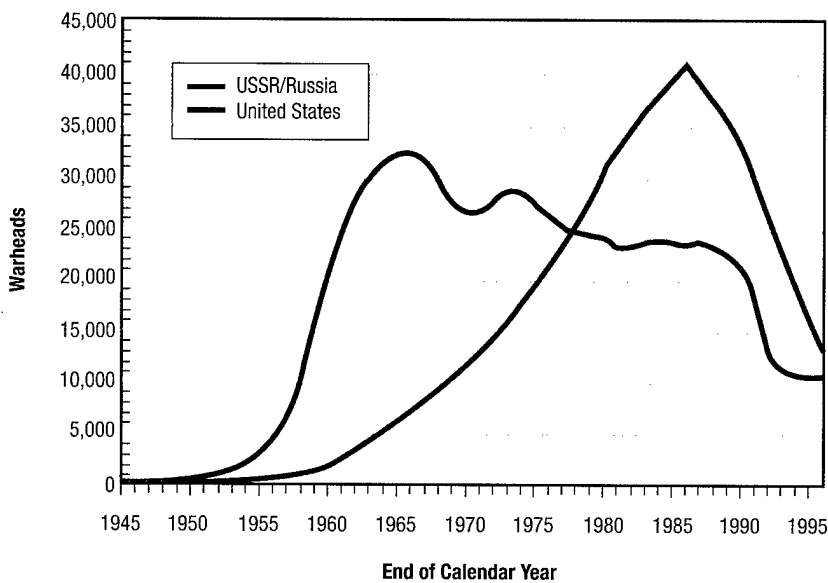
In November 1997 President Clinton approved a Presidential Decision Directive (PDD) that reaffirmed a force posture based on a triad of strategic forces but required that a nuclear weapon be detonated on U.S. soil before nuclear retaliation would be authorized. The PDD reconfirms that the United States would not use nuclear weapons first in a conflict unless the state that attacked the United States, its allies, or military forces is nuclear capable or is in alliance with a nuclear power or is not in good standing in the nuclear nonproliferation treaty. The PDD leaves open U.S. nuclear weapon use in response to a biological or chemical weapons attack, but it reaffirms that nuclear weapons are for deterrence and not to be used to prevail in a nuclear war.

The 1994 Nuclear Posture Review

The NPR completed and extended President Bush's initiatives in several important aspects:

- It created no new mission or scenario for nuclear-weapon use and articulated the premise that nuclear weapons play a smaller role in U.S. security today than at any other time in the nuclear age.
- It codified that the United States no longer targets any country with strategic nuclear forces on a day-to-day basis.
- It specified that U.S. strategic bombers were taken off alert. Further, more ballistic missile submarines now patrol on "modified alert" out of the range of their targets than on an "alert" status. The U.S. airborne command and control posts now operate at a reduced tempo.
- It called for continued reduction of defense expenditures for strategic nuclear forces and in the number of associated personnel. The levels for FY 97 were roughly one-third those of FY 88.
- It terminated U.S. ground-force nuclear capability and training for nuclear missions. By FY 97, the number of U.S. nuclear weapons deployed in Europe was down from a peak of 7,000 to "hundreds."
- It mandated that all nonstrategic nuclear weapons, including nuclear cruise missiles, depth charges, and torpedoes, be removed from surface ships, multipurpose submarines, and land-based naval aircraft bases. The capability to deploy such weapons on U.S. surface ships has now been eliminated.
- It continued the reduction of the overall U.S. nuclear stockpile—a 59 percent reduction from FY 88 to FY 97. Ninety percent of the nonstrategic nuclear stockpile and 47 percent of the strategic nuclear stockpile have been eliminated.
- It called for the continued elimination of nuclear warheads. By mid-1997, nearly 10,000 strategic and nonstrategic nuclear warheads had been eliminated. Since September 1993, the United States has unilaterally removed more than 225 metric tons of fissile material from its nuclear stockpile and offered to place it under the safeguards system of the International Atomic Energy Agency.

U.S.-Soviet/Russian Nuclear Stockpile (1945-96)



SOURCE: *Nuclear Weapons Databook*, January 1997

Beyond these unilateral initiatives, the disposition of strategic forces has been governed through much of the 1990s by the START I agreements and, potentially, by the START II Treaty signed by Presidents Bush and Yeltsin in January 1993. START I called for the reduction of the total number of deployed strategic warheads to 6,000, roughly half the peak Cold War level. Implementation of the treaty is running ahead of schedule. START II was ratified by the United States in January 1996 but has yet to be ratified by Russia. Until this treaty enters into force, U.S. strategic nuclear forces will include the following:

- 500 Minuteman III and 50 Peacekeeper ICBMs armed with multiple independently targetable reentry vehicles (MIRVs)
- 18 Ohio-class ballistic missile submarines, each carrying 24 SLBMs with MIRVed warheads
- 71 B-52 bombers, each equipped to carry 20 air-launched cruise missiles (ALCMs)
- 21 B-2 bombers, carrying up to 16 gravity bombs each.

The START II Treaty, if implemented, would reduce the number of deployed strategic warheads to 3,000-3,500, roughly half the START I levels. It also calls for elimination of all MIRVed ICBMs, an important contribution to strategic stability, because this would eliminate the most potent and potentially vulnerable systems of each side's nuclear arsenal. If implemented, U.S. nuclear forces would contain:

- 500 Minuteman III ICBMs, each deployed with a single warhead
- 336 Trident II SLBMs, each deployed with five warheads
- B2-A and B-52H strategic bombers deployed with a mix of nuclear-armed cruise missiles and gravity bombs. The United States would also retain 350 nuclear-armed sea-launched cruise missiles and several hundred Air Force tactical bombs.

According to the joint statement on future reductions in nuclear forces issued by Presidents Clinton and Yeltsin at Helsinki in March 1997, once START II enters into force, a START III negotiation would commence, to establish a limit of 2,000 to 2,500 deployed warheads for each side by the end of 2007. The START II deadline would then be extended from 2003 to the START III deadline of 2007.

The effect of implementing these arms control agreements would be a dramatic reduction in the U.S. strategic nuclear arsenal in 17 years, from 1990 through 2007.

Russia

Russia has experienced a similar decline in its strategic forces. Over the next 10 years the United States intends to maintain survivable nuclear forces that are sufficient to retain superiority in the eyes of potentially hostile foreign powers. This is a "hedge" strategy against the accession to power of hostile elements in Russia or the development of a hostile China. The strategy requires forces that provide an effective deterrent within arms-control treaty limitations, plus maintenance of a capability to reconstitute additional forces if needed. It constitutes the near-term concern now driving the immediate requirements of the U.S. nuclear force posture.

What are the implications of this strategy for the forces? For most or all of the next decade the United States will need to

maintain a triad of ICBMs, SLBMs, and heavy bombers to ensure a diversity of delivery vehicles and to continue to deny any potential adversary the ability to launch a disarming first strike. So long as U.S.-Russia political relations remain largely cooperative, these forces need not be on high alert and could be reduced significantly in number and type through both arms control negotiations and unilateral measures. Their modernization rate can be meaningfully slowed, but modernization should not be terminated to hedge against technological surprise by Russia, China, or other powers.

During the next decade, two concerns for U.S. nuclear strategists will be the status of the command and control of Russian nuclear forces and a possible surge in capability of Chinese nuclear forces. Some students of Russian nuclear weapons policy believe that control of these weapons has seriously deteriorated, that budgetary constraints have led to a decline in the reliability of equipment and systems, and that the probability of accidental or unauthorized launch has increased dramatically since the end of the Cold War. The detargeting agreement reached by Presidents Clinton and Yeltsin provides some insurance against an accidental launch. Yet some believe a substantial risk of "erroneous use" of nuclear weapons remains, such as conscious decisions by military or political leaders to use

such weapons based on incomplete or inaccurate information, faulty reasoning, misinterpretation of intentions by other countries, or hasty decisionmaking. Reports of a deterioration in Russia's missile-attack warning system lend credibility to these concerns. Therefore, measures to enhance the safety of the forces through "de-alerting" ICBMs and heavy bombers will need to be considered. De-alerting SLBMs is exceedingly difficult unless the ballistic missile submarines were put to sea without their guidance sets, a step that political circumstances do not yet warrant.

As U.S. and Russian nuclear forces are reduced, issues of seemingly less importance rise in value: the role of nondeployed weapons; strategic reserves; and questions of what targets should or should no longer be held at risk.

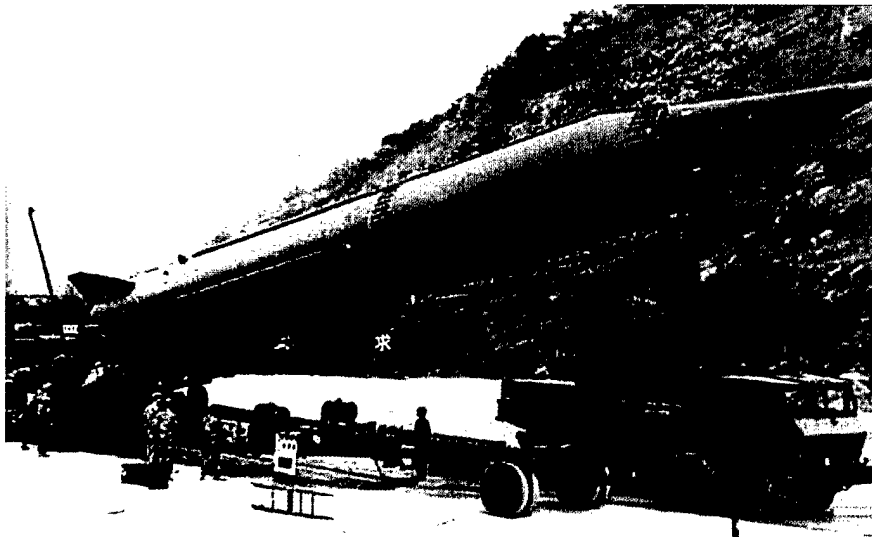
China

A surge in Chinese nuclear forces in the years ahead, though by no means a certainty, is plausible. As of 1997, China possessed a modest capability of 17 ICBMs: 7 CSS-4 intercontinental range missiles that have been tested with MIRVs, and 10 older CSS-3 single-warhead ICBMs. China also has one ballistic missile submarine with 12 long-range CSS-N-3 missiles and perhaps 70 intermediate-range ballistic missiles. It has no intercontinental-range heavy bombers. The pattern of Chinese missile development appears cautious, reflecting budgetary or technological constraints or limited political will to invest heavily in such forces. Recent accounts of China acquiring advanced (SS-18, SS-19) missile technology from Russia and the continued growth of the Chinese economy and defense budget suggest that new Chinese nuclear forces will probably be concentrated in more advanced ICBMs, because they are the most reliable, most cost effective, most easily controlled, and most potent.

China seems less likely to invest defense resources in an expensive fleet of ballistic missile submarines, which are a cornerstone of U.S. strategic strength. Even were China to overcome the considerable

Tammuz-2 reactor at Tuwaitha, Iraq





CSS-2 missile

technological obstacles to field such a force, it would face a considerable U.S. antisubmarine warfare capability that would make its own effectiveness highly uncertain. Relying on more advanced ICBMs gives the Chinese an opportunity to move slowly beyond China's minimum deterrent posture; to derive the political benefits of being a growing nuclear power; to threaten the U.S. homeland in a credible fashion; and possibly to use these forces to deter U.S. retaliation if China were to use conventional forces against Taiwan or in other contested areas in East or Southeast Asia. Because the United States does not now plan to reduce its nuclear arsenal below 2,000 deployed warheads for at least a decade, China has a very long way to go before even a dedicated surge capability would pose a serious threat to the U.S. strategic nuclear force posture.

Shaping the Strategic Environment

The strategic characteristics of the present world are sufficiently amorphous and uncertain that it is often now referred to as "the post-Cold War world." How long will it last? What will replace it and how will it be known? Answers are not yet in view, but the years immediately following the collapse of the Soviet Union revealed several important features. The

United States is now the unchallenged military leader and predominant economic power, facing no primary threats to its existence for the first time since prior to World War II. Such U.S. primacy and the absence of threat are interrelated. Unless and until Russia and China make a clear-cut transition to political democracies and it becomes self-evident that no other state poses a serious threat to vital U.S. interests—and it may be many years before these conditions are met—the United States is best advised to maintain a nuclear force with a capability and flexibility second to none.

Averting Conflict

As the United States seeks to avert conflicts in the next decade, it will be faced by two primary challenges. The first will be to provide a blend of incentives and disincentives to promote the transition of Russia and China into political democracies and market economies. The reasoning behind this priority is that as Russia and China begin to look more like the Western nations, they will have more at stake in the existing international order and decreasing incentives to pose a threat to the system. Under these conditions of unambiguously reduced threat, the United States can take bolder steps in reducing its nuclear arsenal. Second, in the next decade the United States will most probably be faced by several smaller hostile states armed with WMD. To deal with this threat, the United States must establish credible and effective counterproliferation measures involving passive and active defenses, deterrent measures, and counterforce systems.

Russia

Russia, a shell of the former Soviet Union, is undergoing profound political and economic change. By 2008, it will have experienced another decade of decline, reform, and, perhaps, renewal, in a delicate process necessarily to be managed carefully by its leaders and nurtured so far as possible by both Washington and the international community. Nuclear forces will remain important to Moscow, primarily as a domestic and international political symbol

of its former superpower status, but in the next 10 years Russia is unlikely to brandish such weapons, much less use them, in a conflict. Although Russian strategic rocket forces retain a practical capability to strike massively at the U.S. homeland, what would be gained? Such action would achieve no sensible Russian strategic objective and would certainly lead to the destruction of the Russian state. To the contrary, the Russian people have already twice democratically elected a leadership committed to joining, rather than destroying, the international community of market economies. Continuation of this pattern is the best insurance policy that Russia's nuclear forces will not pose a serious threat to the West.

Maintaining U.S. and Russian strategic nuclear forces will guarantee a degree of mutual deterrence, no matter what analysts may term the relationship. This might even be augmented with what some analysts call "mutual reassurance," that is, actions aimed at improving the understanding of each side's nuclear force posture. These actions could include the following: more complete exchanges of information; reciprocal stationing of military personnel at strategic command centers; and a broad-based effort to understand each other's

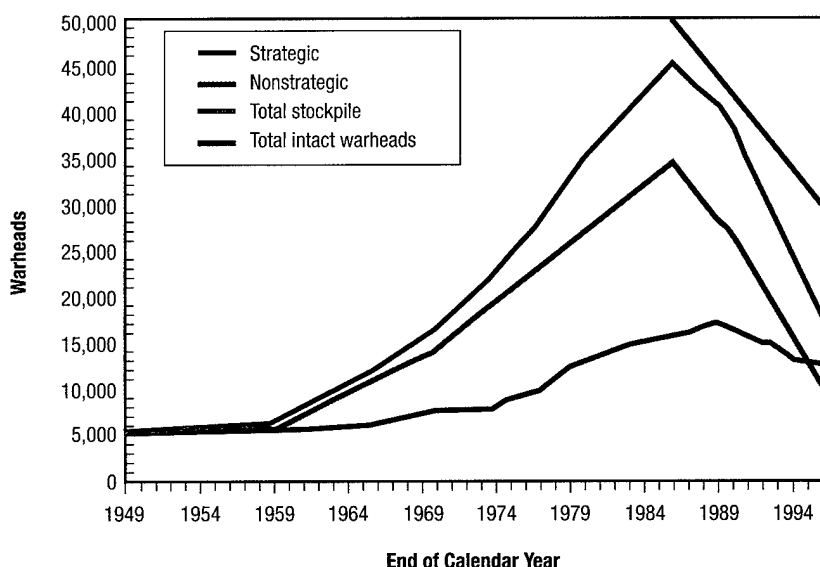
budgets, war planning, operational procedures, and longer term force planning. Continued bolstering of the U.S.-Russian political relationship could make these aspirations, currently somewhat beyond reach, eminently feasible in the next 10 years. Accomplishing this task would in turn bolster Russia's political ties to the international community and help facilitate the closest integration of Russia with the West since the Duchy of Muscovy was founded 1,000 years ago.

Russian conventional forces are in the weakest shape since prior to World War II; their performance in Chechnya demonstrated serious deficiencies in morale, training, and readiness. A massive infusion of funds for many years would be needed to turn this situation around, and Russia will not have the resources to carry out this effort for at least a decade. With an enlarged NATO about to include Poland, Hungary, and the Czech Republic, Russia, even in 2008, will not be likely to pose a serious conventional military threat to its European neighbors. A U.S. nuclear force posture predicated on the maintenance of a reduced but highly survivable and effective force, coupled with greater interaction in U.S.-Russian planning, would be the best way to ensure that conflict with Russia can be averted in the next 10 years.

China

China remains more problematic than Russia but for the next decade can be expected to focus on its primary goal of economic development. By 2008, it could move closer toward becoming a world-class economic and perhaps even military power. But these goals can be achieved only in a peaceful international climate. With the exception of Taiwan, there is no rational reason for the Beijing leadership to take on the United States in a military conflict, even in 2008. Taiwan is the exception because its political status strikes at the core of the legitimacy of the Beijing regime. With the reversion of Hong Kong to Chinese rule in 1997, under the "one country, two systems" formulation, Taiwan remains the last piece to be put into its political place to complete

Soviet/Russian Nuclear Stockpile (1949-96)



SOURCE: *Nuclear Weapons Databook*, January 1997

North Korea Nuclear Facilities



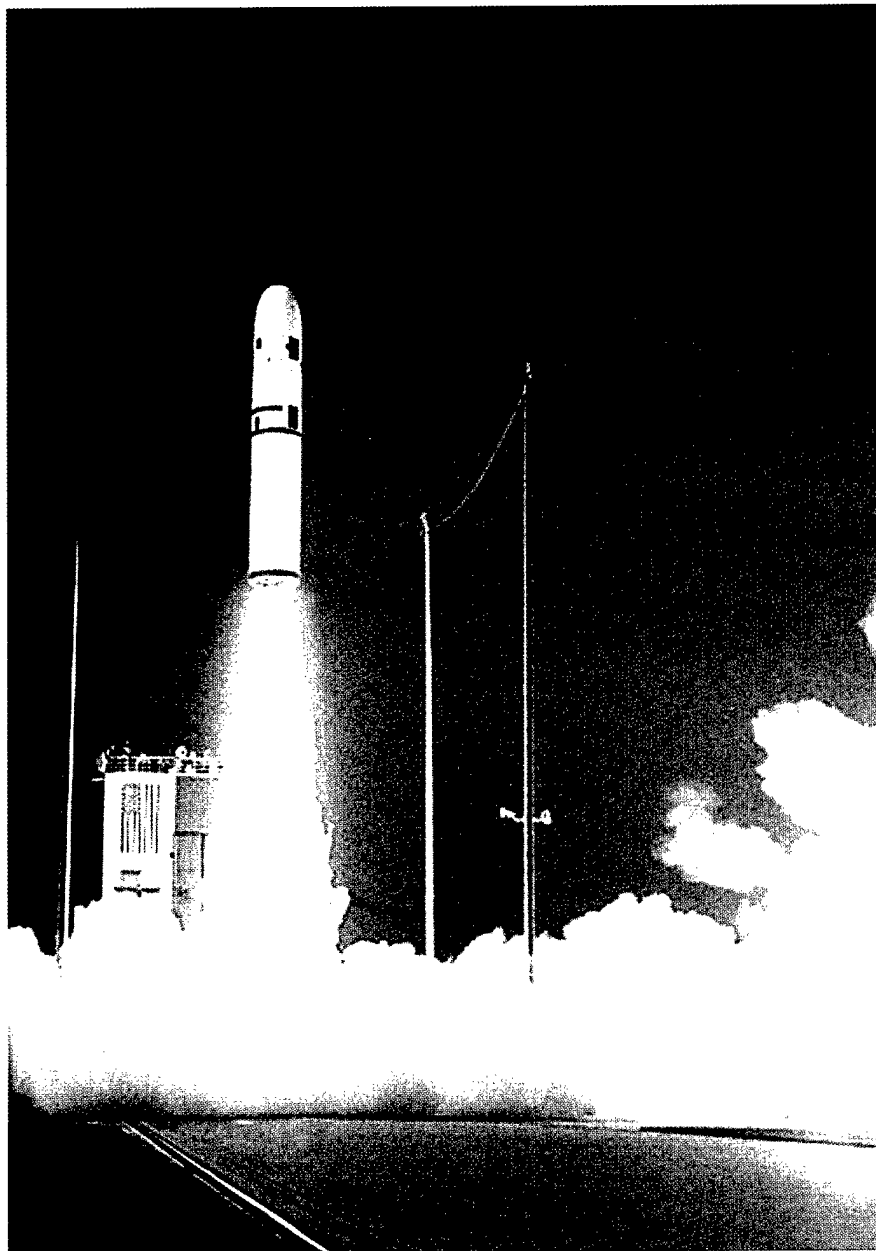
SOURCE: Federation of American Scientists

the 1949 revolution. A move by Taipei toward political independence would be opposed by the leadership in Beijing, or they themselves would almost certainly fall. There is no evidence that the United States would endorse such a provocative act openly or even privately. Although China has significant disputes with many states in East and South Asia, and an abiding distrust of and hatred for the Japanese, it will surely move cautiously in order not to stimulate a U.S. military intervention. This prognosis assumes, of course, that the United States retains a robust nuclear force as well as a forward presence of naval and air forces in the Pacific.

Within the next decade, the United States may expect to see an increase in the number of long-range Chinese delivery systems that could strike at U.S. forces in Japan and perhaps directly at the U.S. homeland. There will be no single answer to this threat. By maintaining the deployment of diversified, high-accuracy delivery systems with nuclear and conventional forces that could strike at highly valued Chinese military and command-and-control targets, the United States has the best chance of deterring Chinese use of their forces and successfully managing any Sino-U.S. crisis that might arise. Ironically, the prospect of deployment of a sophisticated network of theater missile defense (TMD) systems in East Asia or of a credible national missile defense (NMD) system for the continental United States would be used by senior PLA officers to justify operational emplacement of the longer range systems these defenses are intended to negate.

China has already made it clear to the United States that deployment of advanced TMD systems in Taiwan would be considered a provocation. It asserts that such systems deployed in Japan would reinforce the Chinese view that the U.S.-Japan security treaty had shifted from an anti-North Korean and anti-Soviet alliance to an anti-Chinese one. And Chinese officials argue that a network of land- and sea-based TMD systems deployed in East Asia coupled with an NMD system would pose a serious threat to the retaliatory capability of the Chinese nuclear deterrent.

This may be a strategic train wreck in the making. In the next decade the United States will almost certainly deploy TMD systems in East Asia to protect U.S. forces and its allies from missile attack (potentially from North Korea or China) as well as to project U.S. power in the region. The United States needs to join these deployments to confidence-building measures and transparency with some prospect of diminishing Chinese concern. Such measures could include prior announcement of deployments and, perhaps, arms control negotiations, to help communicate U.S. intentions and shape the Chinese force structure. Early efforts of this type, it should be noted, have not fared well, because China has insisted that the United States adopt a doctrine of



Trident II (SLBM) missile

"no first use" of nuclear weapons before it engages in more detailed nuclear arms control discussions.

North Korea

The threat posed by North Korea to South Korea and Japan remains real. Leaders in Washington will be challenged to sustain a delicate mix of a tough military posture toward the North while seeking slowly to introduce Pyongyang into the family of nations. It will be a demanding task unless and until North Korea collapses

and a peaceful transition to Korean unification can occur. Although many in the West believe North Korea will no longer exist by 2008, this is not a certainty, given the continued isolation of the society from most of the world and the sustained level of militancy the regime has instilled in the populace. Deterring North Korean aggression could still be a serious problem for Washington well into the next century. Few know what deters the North Korean leadership, however. A credible conventional military posture in the South, a politically strong bond between Washington and Seoul, plus continued inferences in declaratory policy that Washington might seriously entertain the use of nuclear weapons if the North attacked the South are the best that can be done to avert conflict on the Korean peninsula.

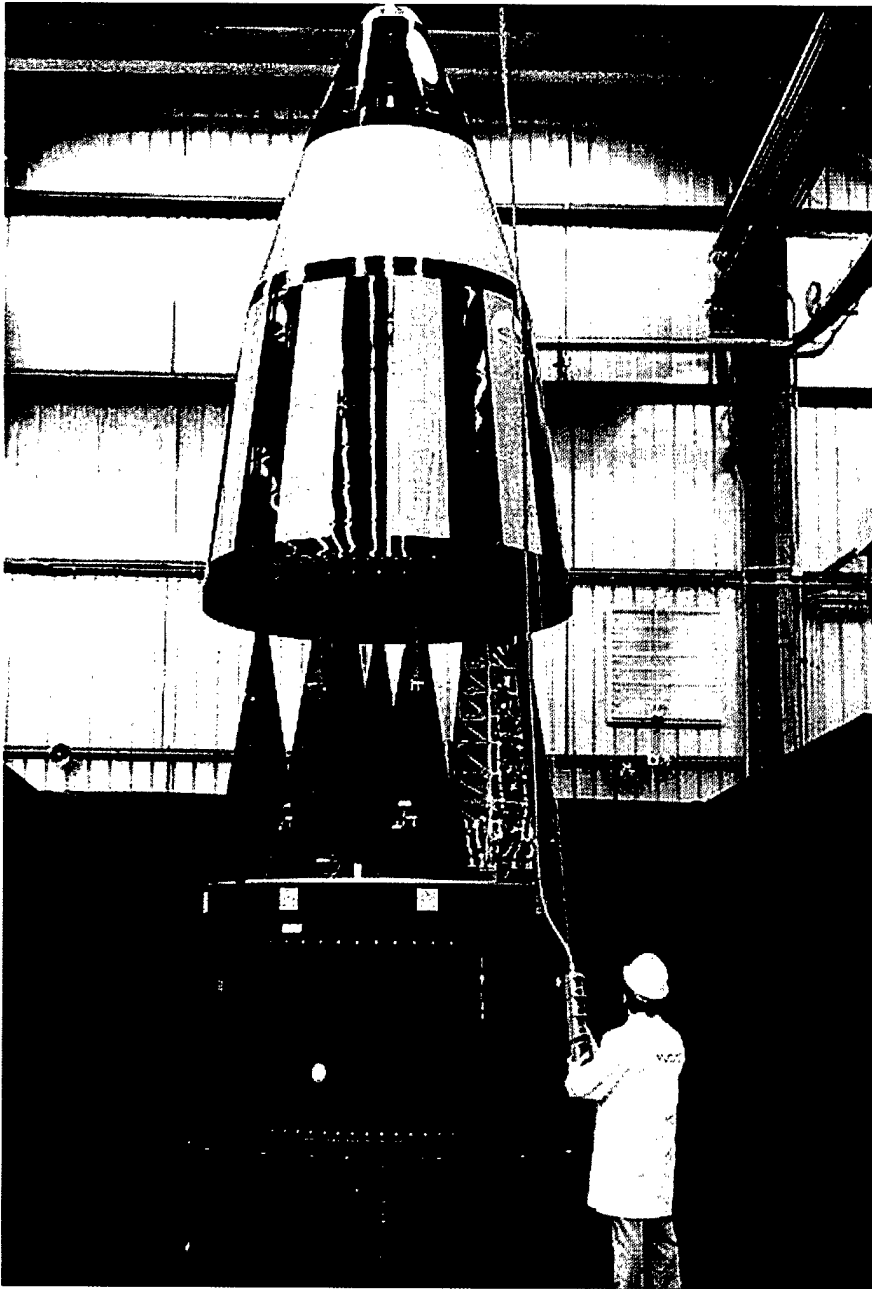
Rogues

The post-Cold War world is made up of states that fit into four categories:

- "Core states," the increasingly large group of political democracies and market economies, almost all allies or friends of the United States, with a stake in maintaining the current international system
- "Transition states," which are attempting to shift into the first category (this includes Russia, other states of the former Soviet Union, China, and the Eastern European states) and which Washington encourages to become members of the core
- "Rogue" states, opposed to the core's values (North Korea, Iran, Iraq, Libya, Syria)
- "Failed states," which cannot carry out the basic functions of a sovereign nation (e.g., Haiti, Rwanda, Bosnia).

The particular problem with North Korea is an example of a more general problem: the proliferation of WMD—nuclear, chemical, and biological weapons; ballistic missiles; and potentially cruise missiles—by rogue states.

North Korea has an active nuclear weapons program, which was ostensibly frozen by the October 1994 U.S.-North Korean nuclear agreement. It has a stockpile of chemical and biological weapons, has deployed the 1,000-kilometer *NoDong* missile, and is developing the much longer



Nuclear warhead

range *TaepoDong* ICBM. Iran clearly has a dedicated nuclear weapons program for which it is seeking Russian, Chinese, European, and expatriate assistance. It has deployed chemical and biological weapons and obtained the 150-kilometer CSS-8 missile from China. Iraq appears still to be conducting nuclear weapons research and has covert chemical and biological weapons stockpiles. Syria has no known nuclear program but has deployed substantial numbers of chemical weapons, is

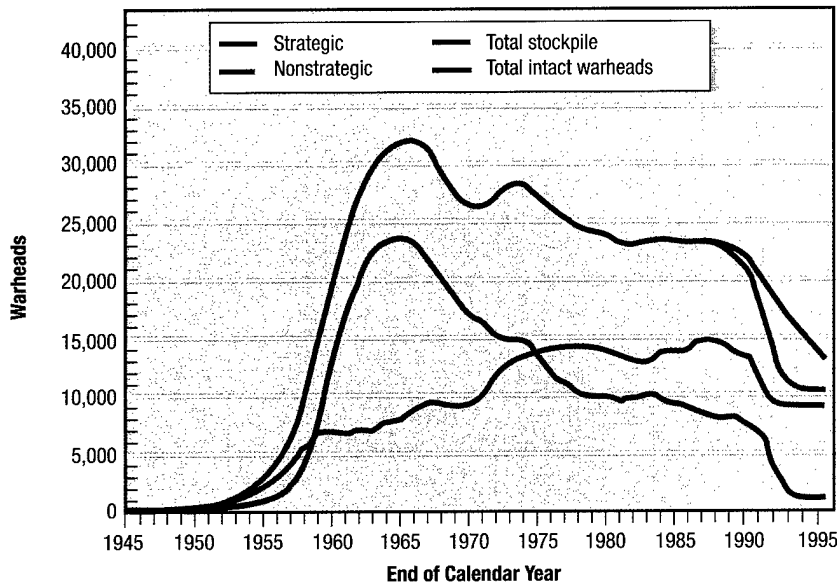
developing a biological weapons capability, and has obtained the 120-km SS-21 missile from the former Soviet Union. Libya has conducted some research on nuclear weapons and has sought to buy them from China, has deployed chemical weapons, and is conducting biological weapons research. North Korea, Iran, Iraq, Syria, and Libya all possess adequate delivery systems (SCUD-B short-range missiles), obtained from the Soviet Union.

Almost certainly WMD proliferation by rogue states will be a dominant threat to U.S. interests in the next decade. The U.S. response is multifaceted:

- Arms control regimes to reduce the international legitimacy of possessing such weapons (e.g., the Nuclear Nonproliferation Treaty, now permanently extended); the Chemical Weapons Convention; the Biological Weapons Convention
- Intrusive on-site inspection measures built into these arm control regimes
- Export control regimes to inhibit the supply of WMD to rogue states (e.g., the Missile Technology Control Regime, the London Suppliers Group)
- Passive (e.g., masks) and active (missiles) defenses to protect U.S. forward-deployed forces and allies from use of WMD by rogue states
- Enhancement of high-accuracy conventional weapons as counterforce measures to destroy WMD systems preemptively or in retaliation. This capability is a useful deterrent only if it can destroy targets highly valued by rogue states. For example, the United States may need to target the sources of Iranian oil revenues or the Iranian Revolutionary Guard Corps to pose a threat meaningful to the leaders in Tehran
- Ambiguous declaratory policies about U.S. use of nuclear weapons in response to WMD attacks. The United States unambiguously reserves the right to use nuclear weapons of its own if an adversary attacks with nuclear weapons. But would it use such weapons first, after an attack with CW or BW? Indeed, this doubt may have deterred Iraq from using CW in the Gulf War.

One possible step that the United States could consider would be to promote a "no first use of WMD" regime. Although it could not provide airtight guarantees, it might reduce the likelihood that WMD would be used in the first place.

U.S. Nuclear Stockpile (1945-96)



SOURCE: *Nuclear Weapons Databook*, January 1997

Other conflict situations will surely materialize around the world by 2008; whether the U.S. nuclear force posture will influence their initiation or outcome is not clear. U.S. nuclear weapon power appears remote in the calculations of most Middle East and Persian Gulf leaders. Israel's nuclear weapons program is prompted by motives of national survival and unlikely to be affected unless the country's leaders were to become convinced that a general peace is at hand. No evidence suggests that the world will be any closer to this condition in 2017 than it is today. The calculations of leaders in the various Arab capitals, in Tehran, and among the major non-state groups— Hamas, Hezbollah, the Muslim Brotherhood—are rooted in some cases in matters of domestic prestige and in a desire to inflict punishment on their neighbors, to destroy Israel, and to remove the U.S. presence from the region. Perhaps some learned from the Gulf War that the best way to deter U.S. intervention is to acquire WMD, including nuclear weapons. Although specific changes in the U.S. nuclear force posture probably would not significantly influence these calculations, the types of measures cited above (increasingly

known as the U.S. counterproliferation strategy) could have a meaningful effect on decisionmakers in rogue states.

Middle Eastern decisionmakers opposed to the United States are unlikely to launch attacks on U.S. targets in such a fashion that the source of attack could be easily determined. Their aim would be to cause enough damage to force a U.S. retreat—as did the truck bombing of the Marine barracks in Lebanon in 1983. This threat, which will only grow by 2008, may increase the desire of U.S. national leaders to maintain the tradition of not using nuclear weapons.

The South Asian subcontinent rivalry between India and Pakistan, almost certain to be going strong in 2008, will also be separated from U.S. nuclear forces and doctrine. Both countries have dedicated nuclear weapons programs to meet regional threats and satisfy domestic demand. Their arsenals are liable to grow substantially in the next two decades. Leaders in both capitals know that a conflict in South Asia does not engage core national interests of the United States. Several wars have already been fought between them since independence in the late 1940s, and more may occur. The United States may seek to engage in diplomatic conflict prevention, mediation, and conflict resolution. But the Indo-Pakistani rivalry, based on religious and geopolitical differences, will have to be worked out, irrespective of U.S. nuclear posture. One area of intersection, however, concerns the evolution of international diplomacy concerning the Comprehensive Test Ban Treaty. Although signed by the five declared nuclear powers and many other states, the treaty cannot enter into force unless India is a party to it, but India resists. Will India remain outside this symbolically important treaty while it seeks in many other respects to become a leading player in the international system? The answer will be known within the next few years and it in turn may influence India's nuclear program and even the prospect of conflict on the subcontinent.

Reductions in U.S. Strategic Nuclear Forces (FY90–FY07)

	FY90	FY01	FY07
ICBMs	1,000	550	500
Declared Warheads on ICBMs	2,450	2,000	500
SLBMs	568	432	336
Declared Warheads on SLBMs	4,864	2,160	Not to exceed 1,750
Ballistic Missile Submarines	31	18	14
Declared Warheads on Ballistic Missiles	7,314	4,160	Not to exceed 2,250
Heavy Bombers	324	92	84

SOURCE: U.S. Strategic Command

Shaping the Threat

There are three overriding issues in the years ahead related to U.S. strategic calculations that could shape the threat posed by Russian and Chinese forces. The first concerns theater missile defense (TMD), the second concerns North Korea, and the third relates to the control of nuclear materials.

Theater Missile Defense

The United States today has under way a robust research, development, and testing program to deploy a mix of theater missile defenses in 2005–10. These programs garnered bipartisan support in Washington in the aftermath of the Gulf War and the demonstrated vulnerability of U.S. forces and allies to Iraqi Scud short-range ballistic missiles. A series of systems is expected to be deployed in Northeast Asia and elsewhere to provide a layered defense of forward-based U.S. forces and those of Japanese and Korean allies, including the following:

- Patriot Advance Capability (PAC-3)
- Navy Area Defense (Navy Lower Tier)
- Navy Theater Wide (Navy Upper Tier)
- Theater High-Altitude Area Defense (THAAD) system.

There are sound reasons for such deployments. Further, the United States is developing a national missile defense (NMD) capability that could be deployed also between about 2005–10 to protect the U.S. homeland against attacks by small numbers (“tens”) of missiles from rogue (i.e., not Russia or China) states.

Consider the probable response of China and Russia to TMD deployments. The Chinese leadership has already expressed concerns. They claim that providing TMD systems to Taiwan would be a brazen act of interference by the United States in China’s internal affairs and would push Taiwan further toward political independence. Provision of such systems to Japan would be seen as bolstering a U.S.-Japan anti-Chinese alliance. Deployment of sea-based TMD systems plus an NMD system would seriously degrade the retaliatory capability of the Chinese strategic force. Leaders in Beijing assert that these deployments would stimulate Chinese nuclear force modernization, leading to a proliferation of launchers and warheads, the MIRVing of Chinese systems, the acquisition of penetration aides, and other measures.

The Russian view is that deployment of layered TMD systems in Northeast Asia along with possible NMD deployment would seriously degrade the ability of their SLBMs based in the Sea of Okhotsk from reaching their targets. In response, Russian leaders speak of having to spend scarce resources to modernize offensive forces and of terminating the nuclear arms reduction process should such deployments proceed. Some Russians now argue that their country is a regional power competing with China, rather than a superpower competing with the United States. Even under such revised guidance, Russian defense planners would not sit idly by and witness a substantial modernization of the Chinese strategic nuclear force without responding in kind.

The emergence of these difficult trade-offs suggests that the future of strategic arms control may require freedom to mix agreements involving both offensive and defensive forces. It is certainly in U.S. interests to deploy TMD systems to defend U.S. troops abroad and close allies from real ballistic missile threats. But it is not in U.S. interests to stimulate Chinese or Russian nuclear force planning. A mutually agreed-on U.S.-Russian formula of offensive and defensive forces, although difficult to develop, could eliminate, or at least forestall,

this problem. Such a strategic bridge may well have to be crossed during the next decade if not by 2017.

North Korea

Should North Korea collapse in the next decade, as many believe will happen, new security concerns will emerge in Northeast Asia. A unified Korea with a nuclear weapons capability would pose a serious threat to Japan. China has already made great strides in improving economic relations with South Korea—for its own economic gain, to begin to drive a wedge between the United States and the South, and perhaps to lay groundwork for close Sino-Korean relations aimed against Japan after Korea is unified. It would be politically difficult for the United States to retain military forces in Japan if they were withdrawn from Korea. For the United States to maintain a stable balance of power in Northeast Asia, it might be useful to consider an idea proposed by Japanese analysts: a nuclear-free

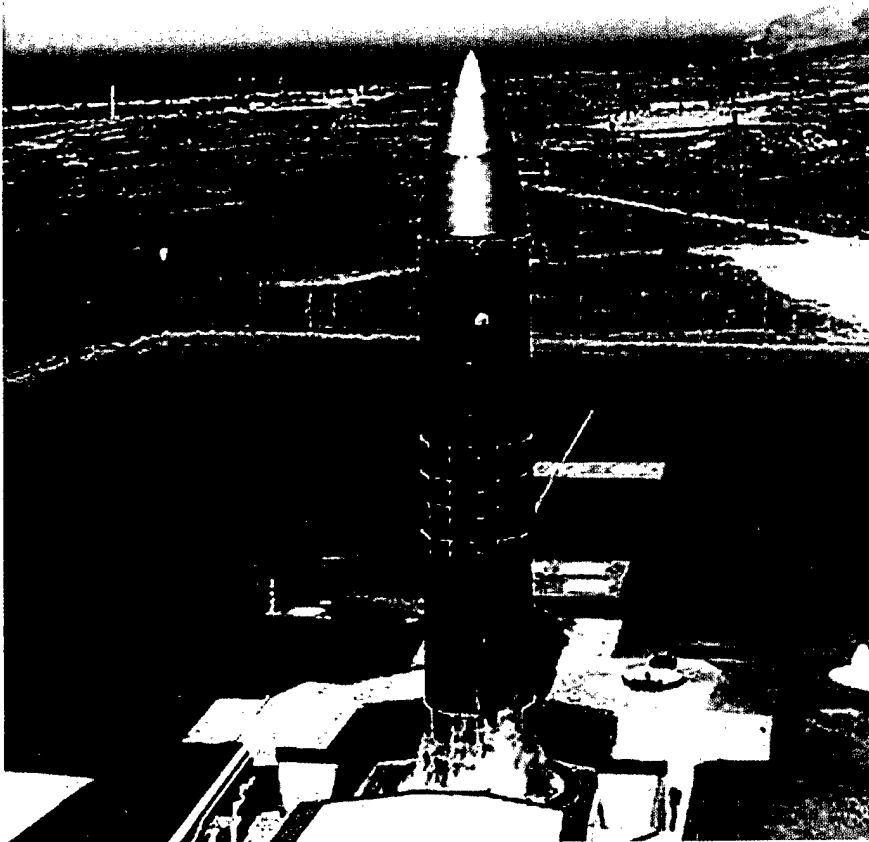
zone in the region. This would preclude a unified Korea having nuclear weapons and a volatile Japanese response to such a development. The United States must think ahead as to how its nuclear weapons policy could instill stability into the region once Korea has become one nation.

Control of Nuclear Materials

Another issue concerns promoting the transparency of nuclear materials in the Russian federation. Once the Soviet Union had collapsed, the serious problem in Russia of control of fissile material became clear. A combination of lax security measures; poorly paid military, law enforcement, and technical personnel; inadequate equipment; and the creative inroads of organized criminal elements and other buyers from the Middle East and Persian Gulf taken together constitutes a serious "loose nuke" problem in Russia. This problem has led to several initiatives, including the cooperative threat reduction (CTR) program (the Nunn-Lugar and now Nunn-Lugar-Dominici Program), which has been funded for five years at \$300-\$400 million per year to assist in the denuclearization of Ukraine, Kazakhstan, and Belarus and in the control of nuclear materials in Russia. A key element of an effort by the Clinton administration that has not been successful was a diplomatic initiative to reach a bilateral U.S.-Russia agreement on exchange of classified information that would lead to a "chain of custody" formulation in which both sides would know the whereabouts of the fissile material of the other. Owing to resistance from leaders of the Russian atomic energy community to opening up their vast network of facilities to external observers ensured very limited progress.

According to the 1997 Clinton-Yeltsin agreement in Helsinki on future reductions of nuclear forces, once START II was ratified a START III agreement would include measures relating to the transparency of strategic nuclear warhead inventories and the destruction of strategic nuclear warheads to promote the irreversibility of deep reductions. This would

Peacekeeper ICBM





Chernobyl

be the first time that a U.S.-Russian nuclear arms control agreement would constrain *warheads*, not merely the means for their delivery. After hard bargaining, Russia agreed to an element that calls for both sides to consider issues related to transparency of nuclear materials.

That nuclear warheads would be eliminated in subsequent arms control agreements is a potentially very important step. But such elimination would lead to the proliferation of more nuclear materials outside the hands of the strategic rocket forces, thereby exacerbating the "loose nukes" problem. The Helsinki agreement calls for these matters all to be worked out and completed by 2007, but allowing for diplomatic slippage—a safe bet—these issues may still be on the negotiating table in 2017. The establishment of a sound basis to account for Russian nuclear materials will minimize the probability that such lethal material will fall into the hands of adversaries of the United States.

Core Nations

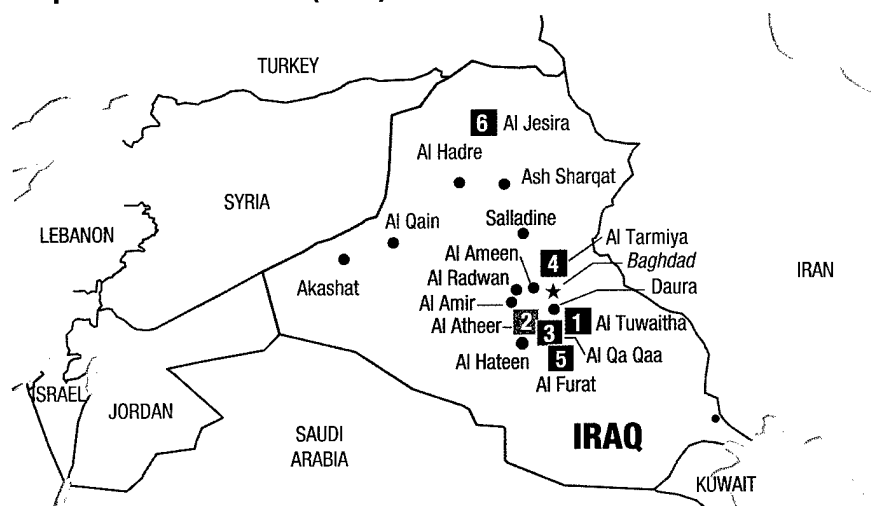
A not very subtle objective of U.S. national security policy throughout the Cold War was to enmesh both Germany and Japan in a web of international security and economic relationships to ensure both

were dependent for national security on the United States while, at the same time, allowing them every opportunity to prosper economically. This strategy worked beyond anyone's wildest imagination, and Germany and Japan, both now robust democracies, have been conflict free for half a century while their citizens enjoyed unparalleled achievements in quality of life. A key element of the security part of this equation has been the nuclear guarantees offered to both countries by the United States. These guarantees were formulated as part of a nonproliferation strategy seeking to convince leaders in both countries of the credibility of U.S. assurances and dissuading them from following extreme nationalist sentiments favoring independent nuclear forces.

In the next 10 years the United States will face the task of sustaining this policy, which has implications not only for alliance cohesion but also for relations with China and Russia. Virtually nothing else would stimulate Chinese defense expenditures more vigorously than an independent Japanese military force armed with nuclear weapons. The unilateral strengthening of Chinese military power will further strain the United States to demonstrate to Japan that it is still a credible guarantor of Japan's security. A somewhat similar interconnectedness affects Europe. Nothing would exacerbate Russian fears more than a newly mobilized, independent-minded, nuclear-armed Germany. But a Russia that begins to recover from its post-Cold War doldrums and reassert itself would stimulate renewed demands from Germany that the United States shore up its security commitments. For the next decade, the United States would be prudent to maintain in Europe a residual nuclear arsenal of a few hundred weapons, to reinforce alliance cohesion, mute independent German defense aspirations, and demonstrate to Russia a continued U.S. commitment to European defense.

In sum, by 2008 the United States will be in the daunting position of playing the

Iraq's Nuclear Facilities (1995)

**1 Al Tuwaitha Nuclear Research Center**

- Tammuz I (Osirak), Tammuz II (ISIS), and IRT-5000 research reactors (the first destroyed by Israel in 1981)
- Site of research and development (R&D) programs in uranium enrichment*
- Location of "hot cells" used for separation of grams of plutonium*
- Weapons-related R&D activities in nuclear physics, uranium metallurgy and triggering system capacitors**

2 Al Atheer

- Prime development and testing site for nuclear weaponization program including facilities and equipment for large-scale uranium metallurgy and production of weapons components
- Computer simulations of nuclear weapon detonations
- Experiments for the development of an implosion-type explosive structure**

3 Al Qa Qaa High Explosives and Propellant Facility

- Military and nuclear weapons R&D facility
- Development of exploding bridge wire detonators (EBW) used in the firing system of nuclear weapons
- Storage of large quantities of military high explosive used in nuclear weapons

4 Al Tarmiya.

- Industrial-scale complex for Electromagnetic Isotope Separation (EMIS) designed for the installation of 70 1,200-millimeter separators plus 20 600-millimeter separators (eight units were operational prior to *Desert Storm* bombings)
- If all separators had been installed, the plant could have yielded 15 kg of highly enriched uranium (HEU) annually, possibly enough for one nuclear weapon

5 Al Furat Project

- Large-scale manufacturing and testing facility
- Designed for the production of up to 2,000 maraging steel centrifuges for uranium enrichment

6 Al Jesira

- Large-scale facility for the production of uranium dioxide (UO₂) and uranium tetrachloride (UCl₄), feed materials for EMIS

Names on map represent nuclear-related sites either declared by Iraq or discovered by IAEA inspectors during implementation of Security Council Resolution 687 adopted at the end of the 1991 Gulf War. The facilities and equipment at these sites that escaped damage during the war were subsequently dismantled or destroyed by the IAEA or came under the IAEA monitoring; sensitive nuclear materials have been removed.

* Activities found by the International Atomic Energy Agency (IAEA) to be in violation of Iraq's safeguards agreement with the IAEA.

** Activities found by the United States to be in violation of Iraq's obligations under Article II of the Non-Proliferation Treaty (NPT) prohibiting the "manufacture" of nuclear weapons.

Source: International Atomic Energy Agency and United Nations

crucial role to keep in balance both the Sino-Japanese and Russo-German relationships. Economic prosperity and thriving democracies in all four countries would make the task far easier, but at present that is not the case nor may it be 20 years hence. Promoting nuclear transparency and coordination with both Russia and China may well prove a necessary, but not sufficient, condition to maintain these critical regional balances.

The Gulf War, although it may prove to have been a unique event, demonstrated the enormous power of a U.S.-led international coalition. By 2008, future adversaries may well be armed with weapons of mass destruction (WMD), which will greatly increase the difficulty of forming and sustaining such coalitions. The United States requires at its disposal a wide range of highly sophisticated nuclear and conventional arms to demonstrate *a priori* that it can lead the way in such dangerous situations. Planning for this eventuality would point the way for the United States to maintain a decisive edge in military power against any plausible regional adversary.

The Future

One obvious manifestation of the post-Cold War world has been the proliferation of WMD—nuclear, chemical, and biological weapons; ballistic missiles; and, soon, cruise missiles. Their use by rogue states and non-state groups will pose a first-order challenge to the United States two decades from now. The Defense Counterproliferation Initiative was established in 1993 to develop a coherent approach to the problem. Diagnosis of the issue led to two basic conclusions. First, the problem is clustered in four geographical regions: Northeast Asia, especially North Korea as a developer and China as a proliferator of these weapons; the Middle East and North Africa, focusing on Iran, Iraq, and Libya; the former Soviet Union; and South Asia, notably the Indo-Pakistani rivalry. The regional perspective is complicated by cross-regional links such as the sale of relevant systems and technologies by China to Pakistan and Iran, by North Korea and Russia to Iran, by Russia to China, and by Pakistan to Libya.

Second, the problem is not limited to nation states in these regions but now has a pronounced transnational character involving terrorist groups, insurgents, civil war factions (e.g., Chechens versus Russians), and organized criminal elements. Analysts have noted that the number of actors has expanded, as have the types of materials involved, their means of delivery, and the ease with which the technical know-how, materials, and equipment can be acquired.

The United States has sought to manage the growing threat, as noted above, through arms reduction agreements, the CTR program, and the establishment of international norms. It also seeks to deter the threat by maintaining robust conventional and nuclear forces. And it seeks to defend against the threat. The Defense Counterproliferation Initiative is designed to meet this last objective through measures for prevention and protection.

The proliferation of WMD by rogue states and terrorist groups and the emergence of China as a power with global reach will be the two dominant challenges facing the United States by 2018.

Larger Adversaries

One prospect for the world of 2018 is of the United States facing a substantial military adversary. Two old adversaries could become new ones, though the probability of that is not high. Germany would have to take off on a totally different political and economic course from the one it has followed for 50 years, and that is a very low-probability, high-consequence event. Germany today remains enmeshed in international security and economic relationships and has faced up to its behavior during World War II. The threat from the East has markedly declined, and several generations have been brought up on democratic political values and a market economic system that has made Germany one of the strongest and most free countries in the world.

In Japan the story is a little less certain. Japan has moved very slowly to confront its horrific behavior in the 1930s and 1940s and remains widely distrusted throughout East Asia. Even assuming the threat from North Korea disappears by 2018, as seems probable, a unified Korea may seem even

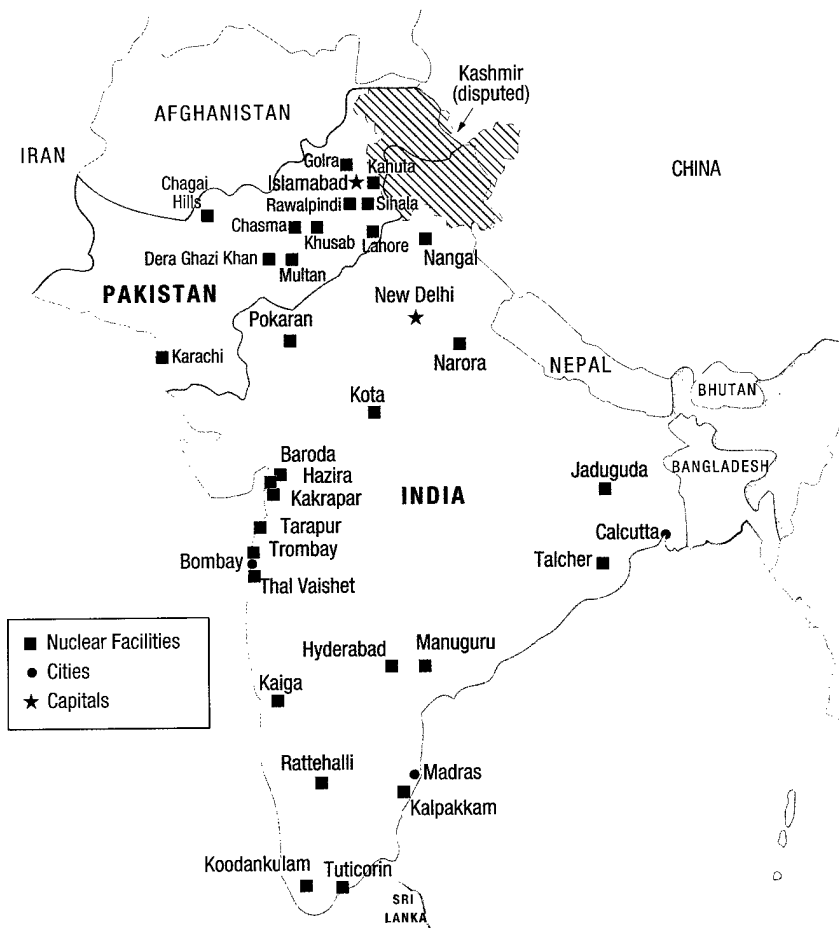
more problematic from Tokyo's perspective. China, far stronger in 20 years than today, will surely be seen as the dominant national security issue for Japanese policymakers. And new generations of younger Japanese may feel much less inhibited about exercising Japanese military power than has been the case for five decades. The responsibility will fall on the United States to manage these complex interrelationships so that Japan feels secure and not in need of reestablishing itself with power projection forces. It is imperative that U.S. nuclear policy be sufficiently nimble and credible to dissuade Japanese decisionmakers fully of the need for acquisition of nuclear weapons. Overall, both Germany and Japan have so much to lose by embarking on independent nuclear weapons paths that the probability that either will choose this option, even in 20 years, is remote.

Without Germany or Japan, the only candidates in the "larger" category are China (having converted its growing economic prosperity into military might) and Russia (once recovered from its post-Cold War economic collapse). In this evolving situation the United States will be faced with tough choices in continuing nuclear reductions and altered declaratory policies.

Already today many notable voices are calling for major changes in U.S. nuclear policy. Suggestions include the following:

- Abandoning nuclear deterrence policy and sizing U.S. forces on the basis of criteria other than the ability to inflict enormous damage against an adversary in a retaliatory attack, such as mutual assured safety
- Abandoning launch-under-attack options and pushing for a global zero alert
- Officially embracing a declaratory policy of no first use of nuclear weapons or at least nuclear weapons as weapons of last resort
- Moving much further and faster than is outlined in the Helsinki agreements toward a very small number of deployed strategic nuclear weapons (i.e., a few hundred) or to zero nuclear weapons
- Establishing a policy of strategic escrow, in which the United States has only a few hundred weapons not deployed
- Redefining zero nuclear weapons as a few hundred not deployed.

Nuclear Facilities on the Subcontinent



SOURCE: International Atomic Energy Agency

Prominent retired military officers of the United States and other countries, distinguished scientific panels, and some prominent defense analysts have endorsed one or more of these measures. Some argue that the best way to avoid a nuclear showdown with a future Russia or China is to implement these measures now, when the United States enjoys enormous conventional force superiority, as demonstrated in the Gulf War. They also argue that these steps are needed to gain control over a dangerous situation in Russia where military leaders have neither command nor control of their nuclear forces.

Political realities, however, dictate just the opposite approach. A world in which Russia, China, and India are not a threat to the United States would make it easier to sell some of these measures to the domestic political elites who debate

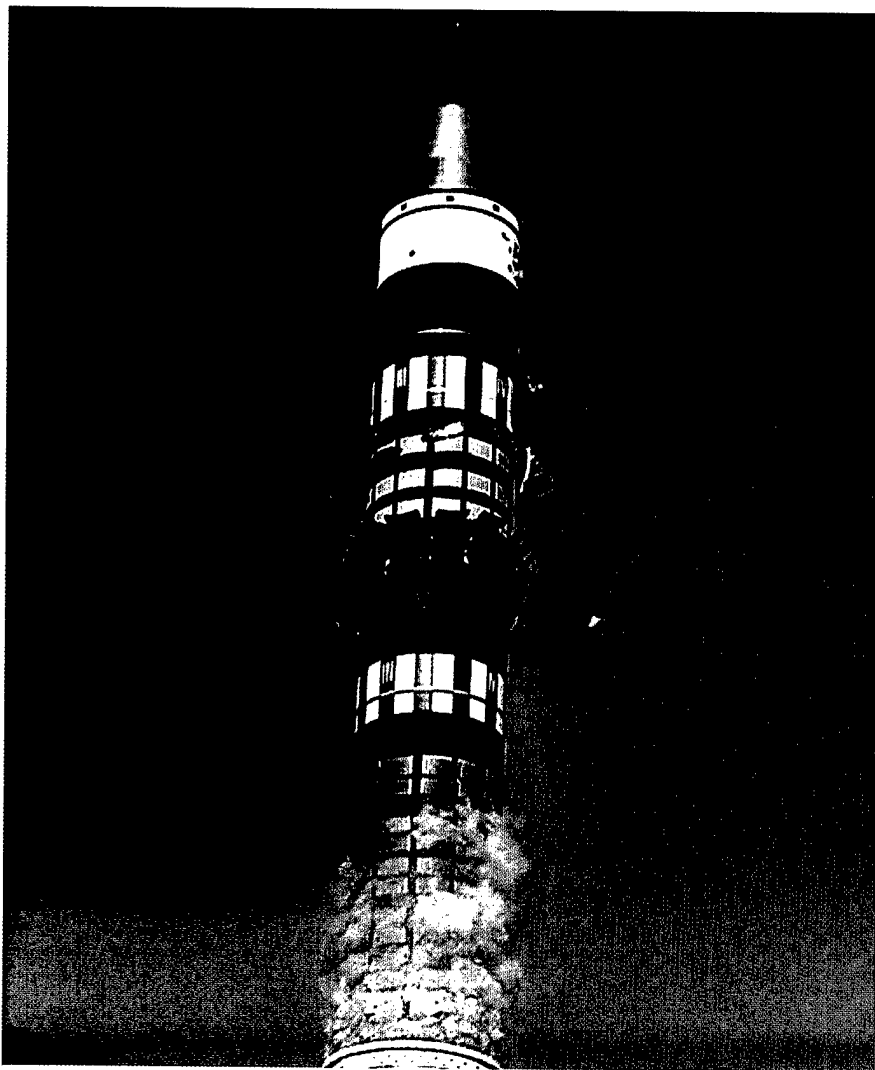
them. A world in which a potentially hostile Russia or China looms over the horizon, which some would argue will be the world for the next two decades, would be a far less hospitable climate in which to garner support for such initiatives. More than a decade must pass without a larger threat before a number of these measures could be given serious consideration.

To deal with a substantial Chinese nuclear force, Washington will have to become as focussed and as knowledgeable about Chinese weapons, doctrine, organizational structure, decisionmaking processes, and technological base tomorrow as it is about these aspects of Russia today. Today, the top leaders in the Department of State all are specialists on Russia. The United States discusses nuclear weapons issues with Russia in many forums:

- Presidential summits
- The Gore-Chernomyrdin Commission
- Frequent meetings between defense ministers
- Frequent meetings between foreign ministers
- High-level political contacts at the Under Secretary of State level
- Meetings between the Deputy Secretary of State and top Russian leaders
- The Joint Compliance and Inspection Commission established to implement START I
- The Standing Consultative Commission established to address problems in the ABM Treaty
- Frequent military-to-military contacts.

Through the end of 1997, Presidents Clinton and Yeltsin had met some 15 times and had held detailed discussions on nuclear issues at many of these meetings.

There is nothing like this in the dialogue with China. The United States meets sporadically with Chinese officials to complain about China's proliferation of WMD, ordinarily at the deputy assistant secretary of state level. Occasionally, meetings are repeated at the Under Secretary of State level. Other contacts at higher levels deal with broader security issues, are much less frequent, and far more formal. A few efforts have been made to initiate a dialogue on nuclear arms control, confidence-building measures, and transparency, but, as said



Peacekeeper ICBM

above, China's insistence on a U.S. no-first-use pledge has blocked progress. In this regard it would be interesting to see Chinese reaction to a U.S. no first use of WMD.

The U.S. approach to an emerging powerful China, somewhat similar to the policy toward the Soviet Union, must be one of military strength, transparency, communication, and engagement at many levels. It is encouraging that China is now developing a serious arms control community in many institutions, including the following:

- The foreign ministry
- The People's Liberation Army
- The defense ministry
- The Committee on Science and Technology for National Security (COSTIND)

- The Center for Advanced Engineering Physics
- The Institute of Applied Physics and Combinatorial Mathematics.

Many Chinese have studied in the United States and are therefore familiar with the U.S. approaches to arms control. For the United States, with respect to China, *engagement is containment*. It is the only way to reduce tensions and minimize misunderstandings.

If the Chinese nuclear force grows from several hundred to more than 1,000 deployed weapons, the United States will find it difficult to continue to discuss arms reduction with Russia. There will be tremendous political pressure at home to maintain substantial numerical and operational superiority over Chinese forces, which would lead to more rapid modernization of nuclear forces and deployment of NMD systems. It seems implausible, though not impossible, that China's leaders would want to trigger such a response in the United States. Beijing, however, is more likely to continue deploying a small number of warheads while keeping a much larger stockpile in covert reserve status so that other nations would be highly uncertain of the size of its nuclear force. China surely does not wish to engage in a technological nuclear arms race with the United States, with everything to lose and virtually nothing to gain. But it may well continue to show independence from U.S. wishes by being a supplier to rogue states—partly for economic gain, partly to show great power reach around the world, and partly to defy U.S. preferences. The United States will continue to need to refine its counterproliferation policies but will be hard pressed to influence China's behavior.

A U.S.-China showdown over Taiwan could materialize by 2018, and it is imperative that the United States have the offensive and defensive forces that would actually be used in such a crisis. High-accuracy standoff precision conventional weapons that could destroy targets of vital interest to Chinese leaders are the most credible and potent weapons. Defenses to protect U.S. forces, Japanese allies, and selected military targets in the continental United States would also be highly valuable.

In sum, there will be no magic answer to coping with China as a great power. The Chinese believe in power and the balance of power. The United States must always retain a mix of nuclear forces and a doctrine for their use that the Chinese find credible under certain circumstances and that will constrain China from aggressive actions inimical to U.S. interests.

Nastier Adversaries

In a "nastier world" the proliferation of WMD systems by rogue states would be the foremost U.S. national security concern. As discussed above, such a world would put tremendous strain on U.S. decisionmakers not to break the tradition of nonuse of nuclear weapons. The use of CBW systems in anger against assets highly valued by the United States would involve the military immediately in efforts to punish the perpetrators. This would most probably require the engagement of sophisticated conventional weapons, ground forces, and special forces. U.S. decisionmakers, *de facto* if not *de jure*, would consider nuclear weapons as weapons of last resort, as they have for the past 50 years. In the past, U.S. presidents were confronted with several prospects of using nuclear weapons but always sought an alternative means of prevailing:

- Berlin in 1948
- Korea in 1951
- Vietnam in 1954 and 1967
- The Taiwan Strait in 1959
- Cuba in 1962.

It would probably take a direct attack using WMD on a major U.S. military force or population center for U.S. leaders to abandon this norm. This is not to suggest that they would not respond, and respond vigorously, but that nuclear weapons remain unique among the arsenal available to the president. An extraordinary provocation would be necessary before their use would be authorized.

One of the questions raised by the prospect of nasty rogue states armed with WMD is whether the United States should reconsider the deployment of intermediate-range or shorter range nuclear systems

as a threat to such states. This approach does not appear very promising. It would place highly vulnerable nuclear systems in volatile regions of the world where they could be attacked by unconventional means (such as truck bombs) with devastating results. To the contrary, the development of rogue states or terrorist groups armed with WMD would best be dealt with by precision-guided standoff conventional weapons that have a high credibility of being used and of acquiring their targets. By 2018 the United States will presumably have destroyed all its chemical and biological stocks; therefore the right mix would be a robust nuclear force useful for retaliatory purposes, plus precision-guided conventional weapons plus, perhaps, a doctrine of NFU of WMD that has political value.

Messier Adversaries

A "messier" world would be one dominated by failed states where internal strife would be the hallmark of contemporary security affairs. The most extreme case would be a civil war in Russia or China with nuclear weapons used in the strife. Such use would be seen on television around the world, and the horrors of nuclear war would be immediately visible to citizens everywhere. Rather than prompt U.S. military involvement, such a horrible eventuality would probably stimulate enormous U.S. diplomatic and political efforts to end the struggle. In these circumstances, the United States would need to ensure that its own assets, including nuclear forces, were adequately protected against desperate attempts by civil war antagonists to lash out at the United States, its forces, or its allies.

Perceptions matter. After the Vietnam conflict revealed a pronounced U.S. sensitivity to taking casualties, some believed the United States did not have the staying power to fight almost anywhere. Chinese analysts believed the United States would be defeated by Iraq in the Gulf War because of its inability to sustain casualties and maintain political will. The Gulf War proved, however, the enormous value of precision and standoff weapons, even if other lessons of the conflict remain highly debatable.

A messier world could indeed be dangerous. The proliferation of substantial amounts of nuclear, chemical, and biological materiel and missile technology in the hands of rogue states and nonstate actors accountable to no one is unsettling at best. Russia would be a major source of this materiel, and Russia or China, in political turmoil or civil war, could conceivably turn to WMD to resolve its conflict. In this messier world, WMD could be used on U.S. targets, mimicking the bombings in Oklahoma City and at the World Trade Center, with more devastating effect.

Such a world would be horrific. In it, the United States would need to maintain tight control over its nuclear forces, use satellite technologies and all available sensors to determine the identity of the perpetrators (a very demanding task), and deliver lethal force to destroy the users of WMD. Precision and control would remain the fundamental desirable attributes of U.S. nuclear and nonnuclear forces.

The irony of a messier and even a nastier world is readily apparent. The United States fought the Cold War for 50 years against a highly dangerous adversary that had the ability to annihilate it. It triumphed without a nuclear weapon being used in anger. Now, in the aftermath of this great victory, unexpected to most in its swiftness and decisiveness, the United States is on the verge of confronting a new series of threats. None of these is individually so daunting as the nuclear-armed Soviet Union at the peak of the Cold War, but collectively they could create an international environment so poisonous and challenging that the likelihood of nuclear weapons being used in the post-Cold War world could rise, alas, rather than fall.

No one can anticipate with confidence the global impact of the use of nuclear weapons in anger. Would it stimulate nuclear proliferation and make subsequent use even more probable? Would it generate global condemnation, followed by the most robust nuclear disarmament movements ever seen? It is in the U.S. national interest, and arguably in the interest of the entire international community, that no one have to answer these questions.

Nonstate Threats

In the core countries, and more and more over the globe, economies and infrastructure are increasingly integrated and people move more or less freely across borders. Mischief initiated in one place thus can now ripple across oceans and continents (e.g., an attack on information systems in the United States could be felt in Europe and Asia). This increased vulnerability magnifies the power of nonstate actors, making cooperation among the core countries against potential threats more desirable than ever.

International criminal activities, the focus of this chapter, include terrorism, which the United States has characterized as the use of illegal violence. Emphasizing its criminality has helped the United States strengthen the international consensus against terrorism, by underscoring the unacceptability of violence against innocent civilians, irrespective of the cause in whose name it is employed.

In addition to crimes motivated by causes, the other major international criminal activity is that motivated by profit. Criminal groups like the Russian *mafya* or the Italian *Cosa Nostra* are highly flexible, shifting the location and character of crimes whenever better opportunities for illegal gain present themselves. These

groups rarely target governments directly, but their activities can undermine weak states. If the criminal groups decide to seek profits from smuggling weapons and military technology, particularly weapons of mass destruction (WMD), then their criminal activities can represent a serious challenge to international order.

U.S. Interests

The U.S. Government has an obvious interest in the physical protection of its citizens and their property. U.S. citizens appear to regard terrorist attacks as particularly disturbing crimes. Were the United States seen as not effective in protecting its people, especially its forces, that perception might create doubt about its ability to protect allies or punish enemies in far away regions.

Transition States

As part of its interest in promoting the successful transformation of transition states, the United States has an interest in seeing those states develop stable governments committed to the rule of law, at home and internationally. The United

Mass Migration

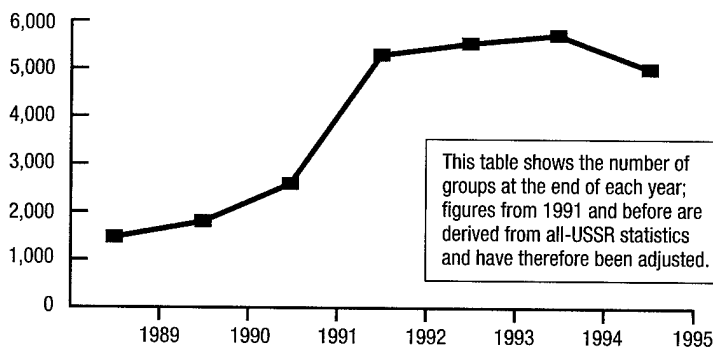
Massive outpourings of peoples from their countries of origin increased in the 1990s. People who flee from conflict and cross international borders are generally recognized as refugees if they have a well-founded fear of persecution were they to return. In 1960, there were 1.4 million refugees; by 1980, the number was 8.2 million; and in 1997, there were about 15 million refugees. Refugee movements have increased not only in number but also in frequency and complexity. In civil conflicts, such as in Bosnia-Herzegovina and Rwanda, political leaders exploit ethnic, tribal, religious, and linguistic differences to incite neighbors to battle neighbors. The sweeping devastation forces overpowering numbers of refugees to seek safety at the same time, such as the Iraqi Kurds in 1991 and the 1 million Rwandans who poured into Zaire in a four-day period in July 1994.

Those who are displaced within their own country for the same reason that refugees flee across borders are called internally displaced persons. In 1997, they numbered approximately 30 million. Often, the internally displaced are trapped in the midst of armed conflict or in a country where governance has broken down, leaving no one with whom humanitarian organizations can negotiate access. In some cases, the government charged with protecting its citizens may refuse access to persons in territory held by rebel factions.

While refugees are those who flee involuntarily, migrants relocate voluntarily, usually out of the desire for a better life elsewhere or owing to deterioration in the living conditions in the home country. The illegal immigration of Caribbean people in the 1990s has been particularly troublesome; waves of migrants from Haiti and Cuba overwhelmed the response capacities of both the Coast Guard and civilian authorities, requiring intervention by the U.S. military, and the housing of migrants at the Guantanamo Bay naval base and in Panama.

Mass waves of refugees and migrants are a nonstate problem that will challenge the U.S. military in the future. When humanitarian organizations are overwhelmed by the scale of a disaster—including natural disasters—the military may be called on to assist in relief. It may also be called on to protect borders or to establish peace and carry out constabulary functions.

Organized Criminal Groups Within Russia

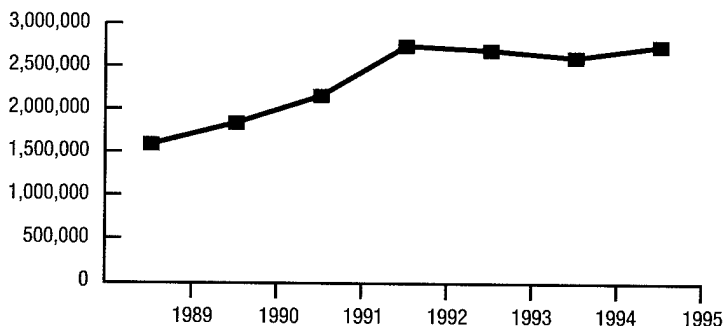


States has an interest also in helping transition states overcome what may be serious crime problems, owing to weakened governance, politicized criminal justice systems, and opportunities for easy money from breaking the rules during a time of rapid economic and institutional change. In some countries, such as Colombia, criminal activities finance guerrilla movements that threaten social stability, even if the prospects for those movements taking power are slim.

Deterring Terrorism

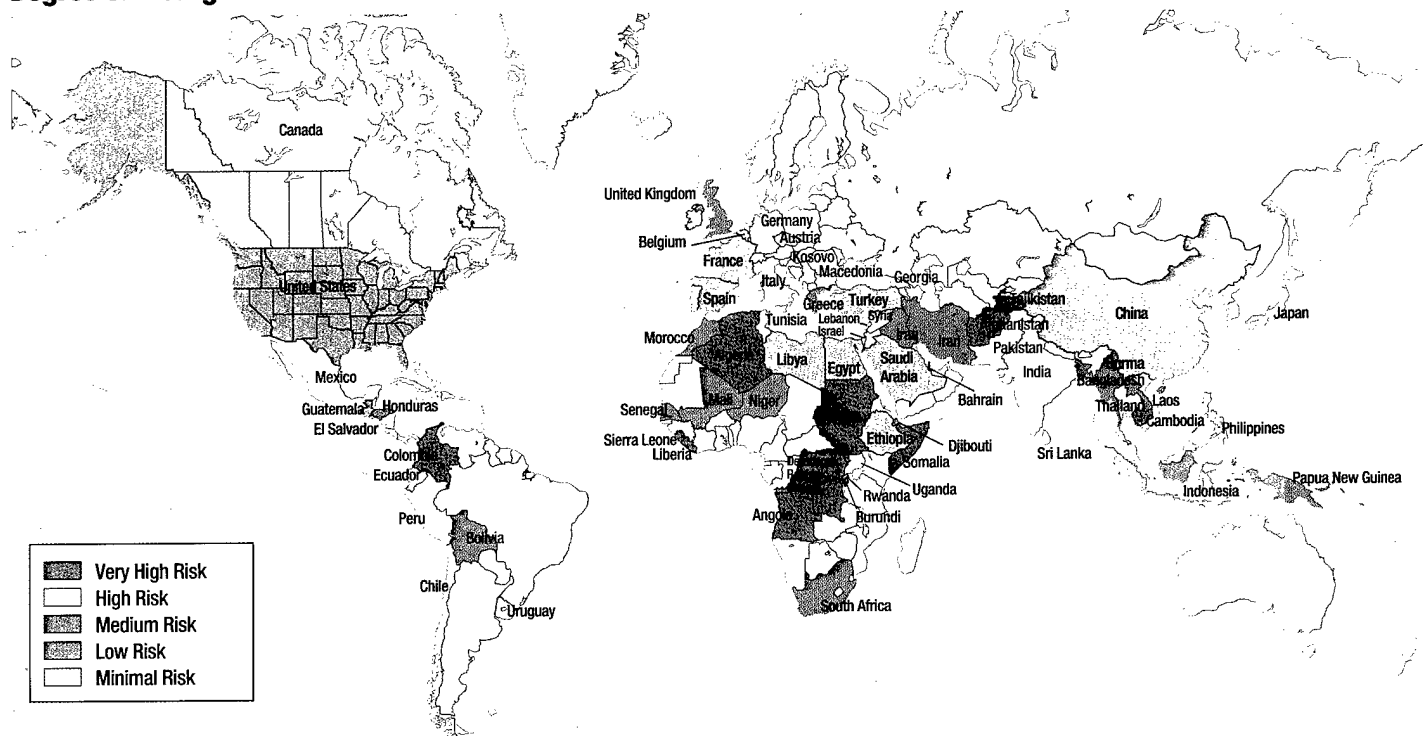
Terrorism can be a tempting tool for rogue states, particularly because they are not able to confront the United States more directly. Rogues can use anti-U.S. terrorism to intimidate U.S. allies into distancing themselves from the United States or denying access to facilities. Rogues need not be governments; they can be radical movements. Some such movements, lacking the political support to take power, find terrorism an attractive means with which to blackmail governments and gain publicity for their cause. In other cases, nonstate groups may be used to hide sponsorship of rogue states behind layers of cutouts through which money and technical support can be channeled.

Recorded Russian Crimes



SOURCE: Jane's Intelligence Review, *Mafiya: Organized Crime In Russia* (Special Report No. 10), June 1996

Degree of Insurgent/Terrorist Risk Worldwide



SOURCE: *Jane's World Insurgency and Terrorism Binder*, 1997

NOTE: The fact that Saudi Arabia in general has only a medium risk of insurgency/terrorism belies the rather more considerable danger to U.S. service personnel operating in the Kingdom. Also note that the map shows the risk of episodes in a country, not the risk of episodes perpetrated by nationals of that country.

Current Trends

Threats to U.S. Forces

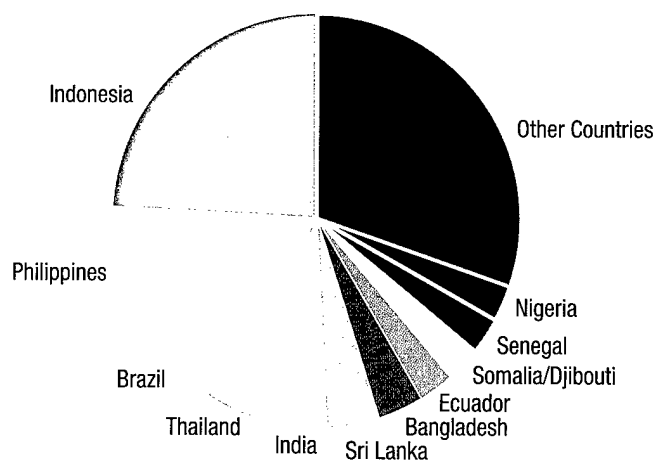
On the whole, international terrorism—that is, terrorism involving citizens of several countries as victims, perpetrators, or sponsors—has been declining since the Cold War ended. Incidents of international terrorism fell to a 25-year low in 1996. In the 1990s, incidents have occurred most often in Europe, particularly as a result of the conflicts in Northern Ireland and the former Yugoslavia. Incidents have also been frequent in Latin America and the Middle East. Asia has had few of them, but these few included some particularly bloody attacks by Tamil ethnic movements in India and Sri Lanka. Indeed, the casualties from international terrorism issued overwhelmingly from a few spectacular incidents, like the Tamil attacks or the bombing of the World Trade Center in New York City, which was responsible for 1,006 of the 1,007 casualties from international terror-

ism in North America in 1991–97. Although the number of incidents is on the decline, casualties from them appear on the rise as terrorists use increasingly lethal explosives.

In the 1990s, most international terrorist incidents have targeted businesses rather than governments. For instance, in 1996, of the 296 incidents, 227 targeted business and 41 targeted governments, including 35 with civilian government targets and 6 with military targets. Anti-U.S. attacks are similarly usually against businesses: 50 attacks in 1996, compared with 6 against U.S. government targets, of which 4 were military.

The relatively few attacks on U.S. forces offer no reason for complacency, however. On the contrary, the small number of such attacks would seem to be a measure of U.S. success in force protection.

Pirate Attacks by Country



SOURCE: International Maritime Bureau, 1997

Piracy

At least 45 ship crew members were killed by pirate attacks in the first nine months of 1997, according to the International Maritime Bureau. The typical 1990s pirate attack is armed robbery of a ship and its crew on the high seas. The most common location is in Southeast Asia, near the Straits of Malacca and in the South China Sea. Persistent if unconfirmed reports suggest that some governments turn a blind eye to piracy and that some low-level military officials cooperate with the pirates for cash.

After the June 1996 bombing of the Khobar Towers in Dhahran, Saudi Arabia, which killed 19 U.S. servicemen, force protection became a higher priority for the United States, particularly in the Middle East and Bosnia. The hope is that the protection has discouraged terrorists, but some may shift their targets from U.S. forces to U.S. businesses, which are already the more common terrorist target.

Force protection has been accomplished by various means, but one of the most significant has been reducing unprotected physical proximity to locals, including limiting off-duty recreation and individual missions in the local community. For instance, in Saudi Arabia, most U.S. forces are isolated in the desert, with little opportunity to interact with the Saudi military, much less the Saudi civilian population. The challenge has been to achieve reduced contact without compromising other mission goals, such as training locals and

maintaining U.S. force morale. The problems can be acute for a peacekeeping operation, as in Bosnia, in which the mission involves close interaction with locals. Where appropriate, another means to achieve force protection has been to mix so thoroughly with the local population that terrorists would have difficulty targeting the U.S. military. Techniques include wearing inconspicuous civilian clothing outside military installations and dispersing the housing for U.S. military among civilians in hotels and apartment buildings.

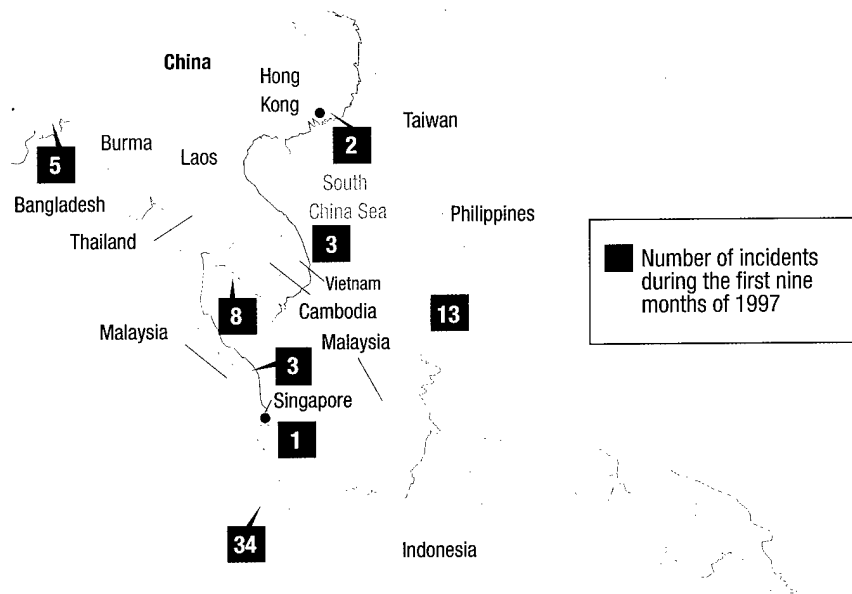
Criminal Destabilization

Great changes in the global economy—stemming from disintegration of hostile power blocs, technological advances in transportation and communications, and diminished government controls over the flow of goods, services, and money—have fundamentally changed the context in which organized crime operates. Increased legal commerce provides a handy cover and justification for the movement of illegal merchandise and cash proceeds. That less than 3 percent of the 9 million large shipping containers entering the United States annually is checked by U.S. Customs only underscores the problem. The collapse of the Soviet empire and the reintroduction of capitalism in China have removed barriers not only to business but also to criminal activities. New opportunities have allowed criminal organizations to globalize their operations, move into new markets, and expand the range of illegal activities. Transnational criminal enterprises appear to share several key characteristics:

- Establishment of affiliates or cells abroad
- Corrupt relations with foreign leaders
- Transnational strategic alliances
- Legitimate investments in foreign countries.

Within a country's borders, organized crime presents two broad types of threats to an existing political authority. One is that flagrant lawlessness and criminal threats to the legitimacy or integrity of governments will provoke the growth of extremist or authoritarian movements that promise to reestablish order and fairness.

Pirate Attacks in Southeast Asia



Reported attacks worldwide, 1991-96

	1991	1992	1993	1994	1995	1996
Southeast Asia	67	59	12	27	51	92
Far East	1	1	64	27	41	14
Indian Subcontinent	—	—	2	3	11	17
Americas	—	—	3	7	16	27
Africa	—	—	9	3	16	15
Rest of the World	—	25	—	2	11	4
Total Reported Worldwide	68	85	90	69	146	169

SOURCE: International Maritime Bureau, 1997

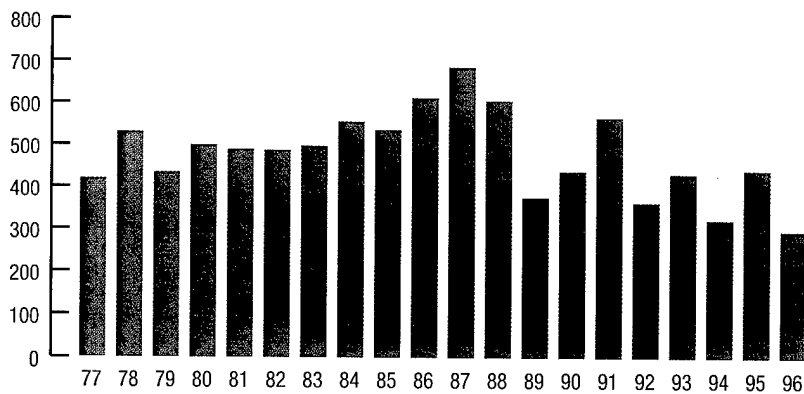
The other—almost a mirror image of the first—is that the activities of criminals will merge with and reinforce existing civil conflicts or separatist tendencies. These problems afflict many weak states, for instance, Albania and elsewhere in the Balkans, plus Nigeria and elsewhere in sub-Saharan Africa. For the United States, an important case of the first threat type is in Russia, and an equally important case of the second type is in Colombia.

The grave weakening of state power in the former Soviet Union weakened the law enforcement and criminal justice systems. Porous frontiers and newly convertible currencies have increased the attractiveness to criminals of local markets for drugs. In the former Soviet countries, as a

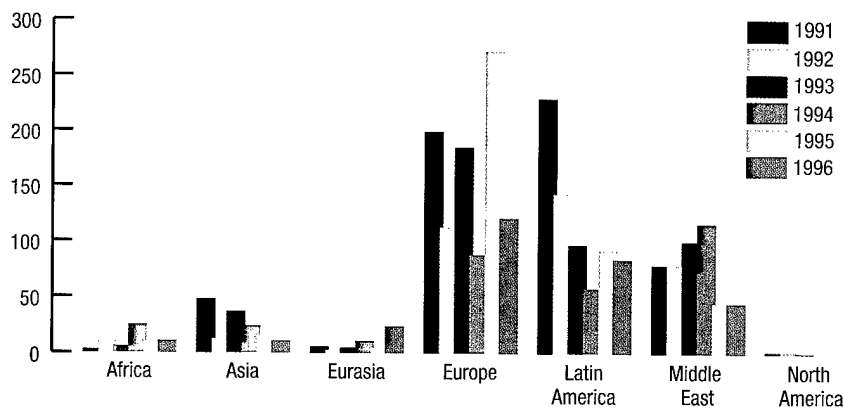
result, organized crime flourishes in various guises—drug trafficking, counterfeiting, stolen cars and art objects, commerce in illegal aliens, and arms smuggling. Police forces tend to be underpaid, underfunded, ill equipped, and demoralized. This situation encourages both the offer and acceptance of bribes, as well as the use of violence by organized gangs against honest law enforcement officials. An atmosphere of inadequate rule of law has weakened support for democratization and free markets, discouraged Western investment, retarded economic growth, and made a return to authoritarianism and state control of the economy seem attractive to some. In Russia for instance, intensified criminal activities fanned the discontent that produced the success in the December 1993 parliamentary elections of the ultranationalist Vladimir Zhirinovskiy, when his Liberal Democratic party won 23 percent of the vote. Zhirinovskiy's platform included on-the-spot execution of criminal gang leaders and seizure of criminal assets to finance a reduction of government budget deficits.

In Colombia, the government's ability to control the country has been brought into doubt by the large armed forces of leaders of the drug trade. Paramilitary forces, often subsidized by drug traffickers, exercise more control over large areas than the government can. The most important of the approximately dozen such forces is that of Carlos Castaño, reported to have 2,000 men in uniform at a \$400 monthly salary. These forces engage in violent conflict with guerrilla groups, the largest of which is the 8,000-soldier Revolutionary Armed Forces of Colombia, which takes the lion's share of the \$700 million the guerrillas raise annually from the drug trade. This group spearheaded a boycott of the October 1997 local elections, using death threats to force 2,000 candidates to withdraw their names. Despite the intense terrorist threat and the government's poor control over large areas of the countryside, 45 percent of the eligible voters turned out, mainly because of the extensive role of the

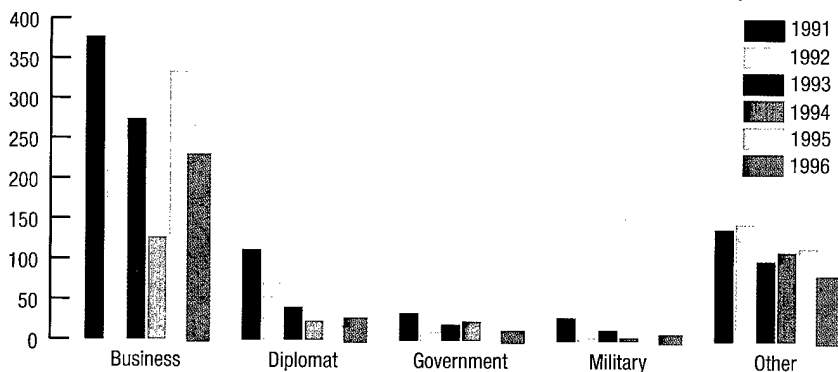
International Terrorist Incidents (1977–96)



International Terrorist Incidents Over Time by Region (1991–96)



International Incidents Over Time by Type of Facility (1991–96)



SOURCE: US State Department, *Patterns of Global Terrorism*, 1997

Colombian military: 84,000 soldiers joined 102,000 police officers to protect the voting.

The scale of violence by the drug traffickers is beyond police capabilities to control, necessitating a vigorous role for the Colombian military. The situation may worsen as cooperation between the Colombian and Russian organized criminals increases. Russian criminal groups were said in 1997 to have offered to sell Colombian drug traffickers a submarine, helicopters, and surface-to-surface missiles. The traffickers may have acquired at least two Russian combat helicopters.

Terrorism

Compared with the radical leftist and nationalist anti-Western terrorism that dominated the 1970s and 1980s, terrorism in the 1990s has come from more diffuse sources. The distinction between international and domestic terrorism has eroded, as shown by the Aum Shinrikyo cult, which attacked Tokyo subways and had branches in several industrial countries, including the United States and Russia, from where it purchased and then imported into Japan an MI-17 helicopter. Much of the international terrorism of the 1990s has come from amorphous groups of individuals, not tightly knit organizations. In particular, radical Islamic fundamentalists were able to carry out several spectacular attacks, including the 1992 World Trade Center and the 1996 Khobar Towers bombings, without any evident central organization. These terrorists, whose claim to act on the basis of Islamic principles is rejected by the overwhelming majority of Muslims, drew in part on the experiences of the war against the Soviet occupation of Afghanistan. Financing for their activities comes from well-to-do individuals, such as the former Saudi citizen Osama Bin Laden, now resident in Afghanistan.

Of the seven governments on the U.S. terrorism list, there is little evidence that four of them—Cuba, North Korea, Syria, and Libya—are still sponsoring terrorism, though they continue to harbor terrorists and to maintain the infrastructure for terrorist training. Of the other three terrorist

Nuclear Smuggling

A compelling international security concern in the 1990s has been the illegal traffic in radioactive isotopes and other nuclear materials, which originates principally in the nuclear complexes of former Soviet states. Although illicit transactions in nuclear materials occurred in the 1960s, 1970s, and 1980s, most of the 450 reported attempts recorded by the Department of Energy prior to 1994 were scams involving bogus materials perpetrated by opportunists. The unprecedented leak of nuclear materials from the former Soviet Union in 1994 signaled a shift in significance of the problem of nuclear smuggling. The openness of former Soviet states to international travel and trade facilitates the creation of supply chains and mechanisms to transport such material. For instance, the trafficking chains that delivered 363 grams of plutonium-239 to Munich in August 1994 comprised three former employees of the Obninsk Institute of Physics and Power Engineering, a Moscow scientist, a Colombian medical doctor turned broker in military goods, and two Spanish construction businessmen. In all, there were in 1994 five weapons-usable samples (three plutonium-239 and two uranium-235) recovered in Europe (three in Germany and one each in Italy and the Czech Republic).

Since 1995, leaks from the former Soviet Union appear to have lessened. Through the end of 1997, not a single case of stolen nuclear materials actually reaching a bona fide customer had been documented. Most incidents have ended in arrests, the result of sting operations by law enforcement authorities and a lack of professionalism by part-time thieves. The role of Russian organized crime in nuclear smuggling is unclear. Some believe that it is only a matter of time before the Russian *mafya* begin to deal in weapons-usable materials, while others believe it has better opportunities in its current high-profit, low-risk crime than in nuclear smuggling, which would surely result in high-level domestic and international countermeasures.

A more troubling concern than this "supply-driven" smuggling, motivated by criminals out for profit, is "demand-driven" smuggling, representing a specific request from a would-be proliferant state or subnational group. Demand-driven nuclear smuggling would be characterized by an acquisition scheme involving a complex network of government and business front organizations, not unlike the network put together by Iraq in assembling its nuclear capabilities in the 1980s. Identification of such a network would be extremely difficult.

Another matter of concern is use of radiological material by a terrorist group. For instance, in November 1995, Chechen rebels placed cesium-135, a radiological material used for many industrial and medical purposes, in a heavily used Moscow port and then directed members of the Russian press to the site.

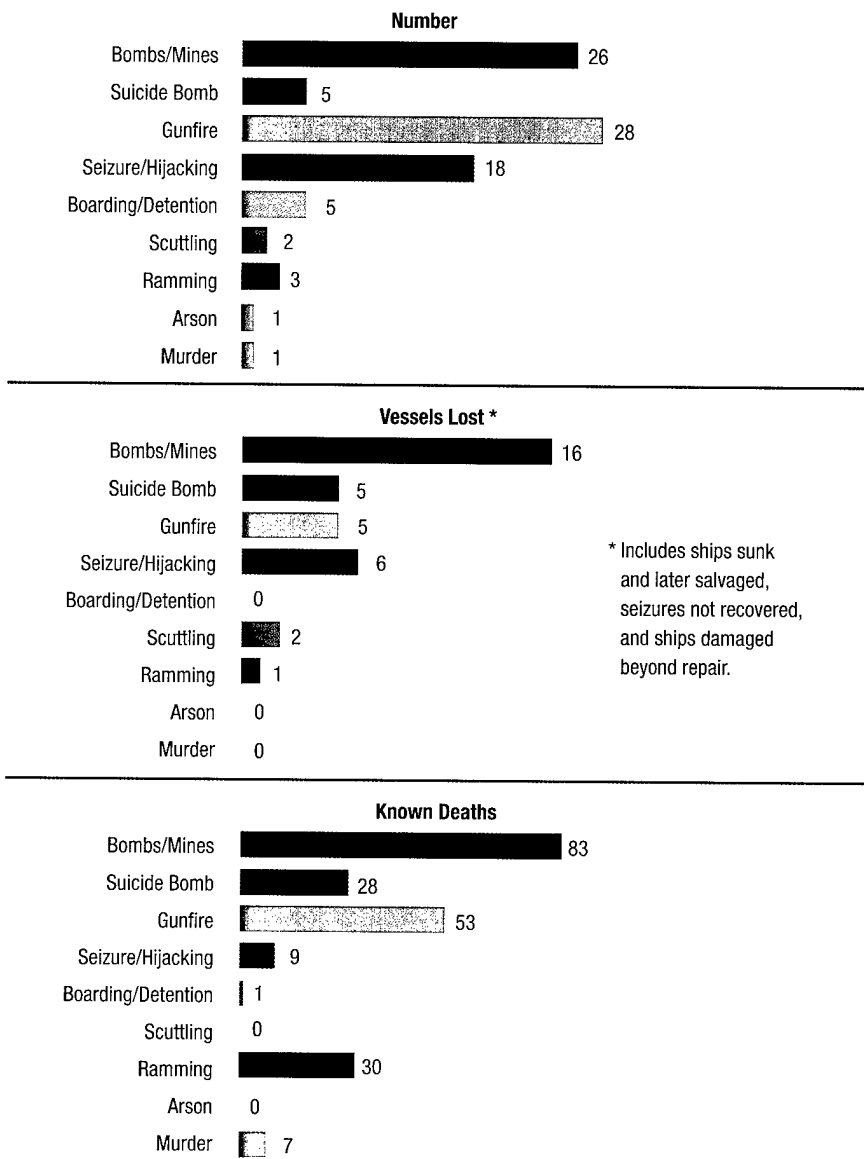
Smuggling of materials for chemical and biological weapons is easier to conceal than nuclear smuggling. Many materials of these kinds have legitimate civilian uses. For instance, some chemical weapons are similar to pesticides vital for agriculture, while the equipment needed to produce biological weapons has much in common with that needed to produce vaccines. Smuggling of chemical and biological weapons material is therefore primarily a matter of concealing the intent of what appears to be legitimate exports. It may be easier to arrange through front firms and state-owned companies than through transnational criminals.

supporting states—Iran, Iraq, and Sudan—Iran is the main state sponsor of international terrorism. Some of Iran's recent activities include the following:

- In July 1997, the Palestinian Islamic Jihad, which Iran founded and controls, claimed responsibility for the Jerusalem market bomb that killed 15 shoppers, one of three bombings for which it took responsibility in 1995–97.
- In April 1997, a German court ruled that "Iran's political leadership made the decision" to kill four Iranian dissidents who had been gunned down in Berlin's Mykonos Restaurant in 1992—a ruling that led the European Union states to withdraw their ambassadors from Tehran until November 1997.
- In June 1996, the Bahrain government arrested a group trained in and financed by Iran that had tried with little success to foment unrest in Bahrain (the unrest that shook it in 1995–97 stemmed instead from domestic sources).
- In March 1996, Iranian agents smuggled a mortar in Antwerp probably to carry out terrorist attacks for which similar mortars were used against Iraq.
- In February–March 1996, Hamas, with which Iran works closely, carried out four suicide bombings in eight days, killing 59. These bombings shook Israel, creating a climate in which the more moderate Israeli Government narrowly lost the May elections to hardliners.
- In February 1996, NATO forces broke up a training camp in Bosnia where Iranian instructors appeared to have been preparing locals for terrorist attacks; explosives were found wired to children's toys.
- In 1996, Palestinian Authority Chairman Yasser Arafat claimed that Iran tried to have him assassinated.
- In June 1995, President Hosni Mubarak was nearly killed during a visit to Ethiopia; Egyptian journalists reported that the Egyptian Government saw Iran as involved in the attack.

Maritime Terrorist Incidents (1986-96)

As of July 1, 1996



SOURCE: International Maritime Bureau, *International Perspectives on Maritime Security*, 1997

■ British national Salman Rushdie remains under a death decree from Iran's current spiritual ruler for his book, *Satanic Verses*.

Shaping the Strategic Environment

In most circumstances, the military will be only a supporting actor in the fight against terrorism and other forms of international organized crime. The principal responsibility for combating these threats rests with the criminal justice system—the police, the courts, the prisons—and those who write the laws. But the military will be used in counterterrorism, as in rescuing hostages in hostile territory and reprisals against terrorist-sponsoring states. And the military will be involved in constabulary operations, as a supplement to the police. Some circumstances in which the military's unique skills will be used are:

- Countering organized criminal gangs equipped with heavy armaments and advanced technologies (e.g., WMD)
- Operating in areas such as the high seas that are outside the control of any state
- Protecting borders
- Providing intelligence, logistical, and communications support
- Responding to a threat of such a size that the police are overwhelmed.

With other core country militaries, the United States aims to build on multilateral cooperation initiatives for both counterterrorism and counternarcotics. As these phenomena threaten all who share the values and interests of the core countries, this aim offers the basis for developing common strategies and sharing the responsibility for implementing them.

With transition country militaries, the U.S. focus is on reinforcing the capabilities to assist the criminal justice system in countering terrorism and organized crime, while drawing the transition states' military forces into multilateral cooperation mechanisms like those with core countries.

In the face of rogues, the principal security aim of countercrime policy is to deter these states from sponsoring terrorism, including hidden support.



Photo: AP/Wide World Photo

Hezbollah guerrillas

Avert Conflict

U.S. counterterrorism forces are part of the larger special operations forces, which have approximately 29,000 active-duty personnel and an annual budget of \$3 billion. The portion of these forces and budget devoted to counterterrorism is classified information, but counterterrorism units train for a wide range of activities, including intelligence gathering, rescue operations, and combat missions. DoD policy prohibits divulging details about these forces or their use. The DoD willingly allows other entities to take credit for successful efforts for which its own counterterrorism forces have been responsible, both abroad and at home. Any advantages that might accrue from publicizing successful exploits are more than outweighed by the benefits of denying U.S. enemies information about how counterterrorism forces operate.

Military responses to terrorism are not limited to the use of special forces. One noteworthy example of a different response was the April 1986 air strike against Libya, a reaction largely to the bombing of a discotheque in Berlin popular with U.S. service personnel. The effectiveness of this reprisal remains unclear. To be sure, in the late 1980s Libya sharply scaled back its support for terrorism, but the change may have been due to a changed international environment (dramatically lower oil revenues, less support from the USSR). Further, Libya organized a particularly deadly attack after the 1986 strike, the December 1988 bombing of Pan Am flight 103 over Lockerbie, Scotland.

In theory, U.S. Armed Forces could be used to carry out combat missions against members of organized crime and their assets, but such actions would risk arousing nationalist sentiment in favor of the criminals, undermining anticrime goals, and possibly putting at risk the already weakened governance in a transition state. In many cases, a government under siege by organized crime may be unwilling to give approval for U.S. military operations directed against criminals. Were the United States to carry out strikes on the territory or in the airspace of foreign countries without their approval, these would almost certainly be seen as attacks on state sovereignty.

The U.S. Military on the Border

In 1989, the U.S. military began to operate a series of listening posts in unpopulated areas along the U.S.-Mexican border; currently there are about 200 posts. Since 1990, a Joint Task Force based in El Paso, Texas has carried out more than 3,000 operations in support of the Border Patrol.

Controversy erupted about the role of the U.S. military in assisting with control of the border in May 1997, when Marines on patrol shot and killed Ezequiel Hernandez, a south Texas youth, when they thought he was firing at them; others claim he was practicing shooting while watching the family sheep and may not have seen the camouflaged Marines. Concern about the death led Defense Secretary Cohen to suspend all ground-monitoring and observation activities in September 1997.

U.S. Military and Counterterrorism in the United States

The role of the military in counterterrorism and other domestic constabulary activities is likely to be a function of the magnitude of the threat—the size and frequency of episodes—and the degree to which terrorism is sponsored by hostile states. At present, the Federal Bureau of Investigation (FBI) has principal Federal responsibility for responding to domestic terrorist incidents and the Federal Emergency Management Agency (FEMA) for the Federal response plan for the consequences of terrorism.

As a general principle, the 1878 Posse Comitatus Act (18 U.S.C. Sec. 831, 1385) prohibits use of “any part of the Army . . . to execute the laws,” a provision extended to the sea services by regulation. However, a series of statutory exceptions enacted since 1981 permit use of the Armed Forces in specific situations, including counternarcotics operations and in dealing with terrorist threats that are exceptionally grave or beyond FBI capabilities to resolve. In practice, for a terrorist incident, written authority from the President is required and has never been sought. That said, the Armed Forces became involved in the 1993 episodes involving antigovernment activists at Ruby Ridge, Idaho (with reconnaissance flights), and Waco, Texas (e.g., with armored vehicles lent to the FBI), on the basis of alleged narcotics activities. The Posse Comitatus restrictions have strong support from civil libertarians, those who want to limit the powers of the Federal Government, and those who want the military to concentrate on traditional war-fighting. But the trend has been toward relaxing restrictions in cases of strong perceived threat, especially regarding guarding the borders (e.g., from narcotics smugglers and illegal aliens). In its December 1997 report, the National Defense Panel argued that domestic security will be one of three national security imperatives in 2020 (along with national survival and global economic and political stability). The panel argued, “Beyond its responsibility to secure our borders against attack, the Department of Defense must be able to assist civil authorities against a variety of threats to lives and property in the United States, regardless of their source.” To this end, it recommended: “Use Department of Defense assets to advise and assist law enforcement in combating terrorist activities” and “Incorporate all levels of government into managing the consequences of a WMD-type attack.”

In 1996–97, the military acquired an accelerated role in Federal preparations for possible WMD terrorism. As provided for in the 1996 Defense Against Weapons of Mass Destruction Act sponsored by Senators Nunn, Lugar, and Dominici, DoD began in April 1997 to train first responders in the nation's 120 largest cities, with 27 cities covered in FY 1997. A variety of WMD terrorism exercises were held (e.g., in Washington, D.C., prior to the January 1997 inaugural, and in Denver prior to the June 1997 G-8 summit). The U.S. Army Chemical and Biological Defense Command (CBDCOM) maintains a rapidly deployable monitoring and assessment system, and its Technical Escort Units can perform render-safe procedures on munitions as well as decontaminate equipment and personnel. The Marine Corps' Chemical Biological Incident Response Force is rapidly deployable to decontaminate victims, stabilize patients, and treat chemical and biological casualties.

Even well-established criminal groups, like terrorist organizations, ordinarily do not possess permanent, irreplaceable infrastructure that provides targets for conventional military operations. For instance, a raid on terrorist camps may destroy only buildings and kill low-level caretakers, with little effect on the terrorist group's ability to carry out attacks. For these reasons, the principal overt use of the Armed Forces to counter organized crime abroad will be assistance to local military and security services.

U.S. allies are not likely to doubt the seriousness with which the United States views the issues of terrorism and counternarcotics, so long as these continue to receive high-level attention, as they have in the mid-1990s.

Promote Defense Reform

A major problem limiting the use of military forces in constabulary operations has been mixed reputations for fairness and effectiveness. Concerns about the human rights record of the Colombian military delayed provision of materiel for counternarcotics operations to both the military and the police, although the latter's record has been less doubtful. In 1996 and 1997, President Clinton authorized provision of nonlethal equipment for the Colombian counternarcotics effort contingent on agreement by the army and police on observing human rights. The police quickly agreed and received \$100 million in equipment; the military agreed only in August 1997 and then was authorized to receive \$50 million in nonlethal equipment.

Corruption in the Mexican military, though less rampant than in the Mexican police, has limited its effectiveness in counterdrug operations. Efforts to establish

**U.S. Coast Guard searching for
illegal drugs**



more professional accountability in the military are an essential component of counternarcotics policy, given that the vast sums of money changing hands in the drug trade create an inherent risk of terrorism. In February 1997, General Jesús Gutiérrez Rebollo, the director of Mexico's top antidrug agency (the 2,500-man National Institute to Combat Drugs), was arrested on charges of corruption. In March 1997, General Alfredo Navarro Lara was arrested for offering a \$1 million-a-month bribe to the general heading antinarcotics efforts in Tijuana.

The United States also encourages fuller civilian control over the military in countries where order has been threatened by drugs and drug-financed guerrillas, as in Peru. (For more on these issues, see chapter Seven.)

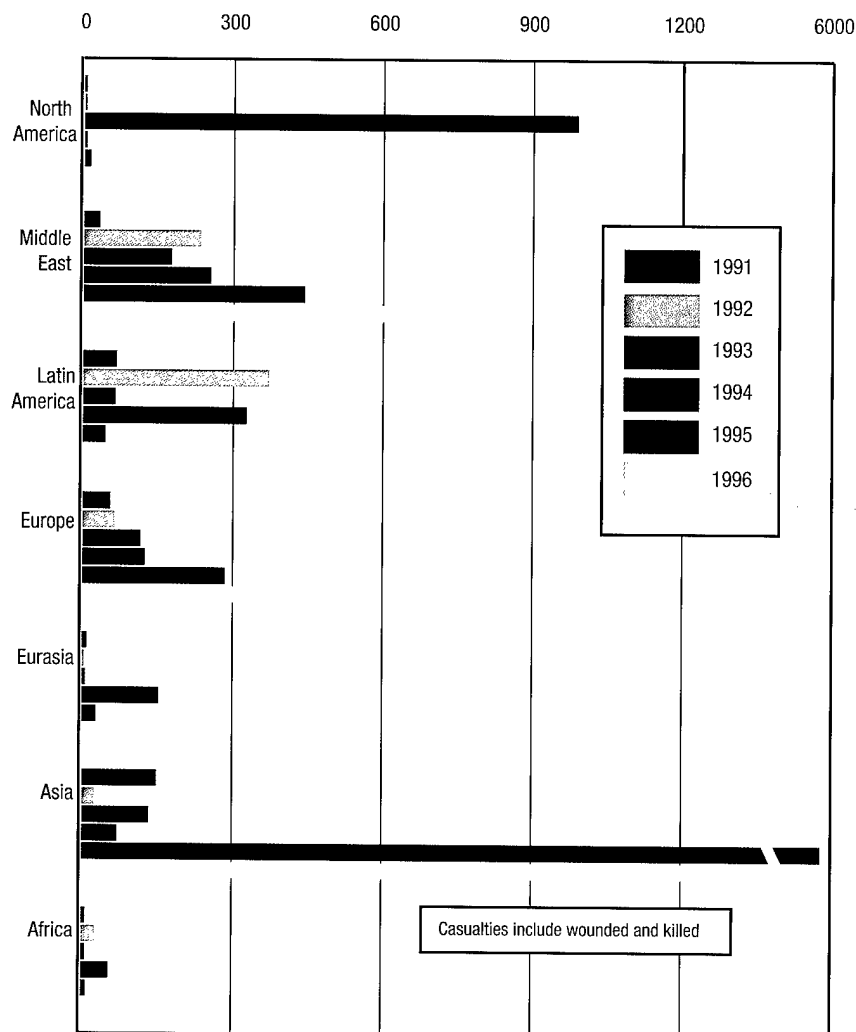
Another potential role for the U.S. military is to reinforce the police, especially as part of U.S. intervention in small-scale contingencies (SSCs). (For a discussion of the role of the U.S. military in policing the new world disorder, see chapter 10.)

Complement Friends

Multinational initiatives can be vital for combating transnational threats. For instance, consider the successes in the mid-1990s at interdicting drug smuggling. Since 1995, the United States, Colombia, and Peru have sustained a complex, closely coordinated attack against the drug-laden aircraft traversing the so-called air bridge from the coca-growing regions of Peru to the processing laboratories in Colombia. This included efforts to share detection, monitoring, and other information to identify and track these planes, so that Colombia and Peru can force—and, if necessary, shoot—them down. The program's success has been one of the reasons for the post-1994 collapse of the coca price in Peru and a dramatic reduction in cultivation there.

In the Caribbean, DoD has sponsored a joint interagency task force (JIATF), JIATF/East, which includes liaison officers from the United Kingdom and the Netherlands, whose forces are responsible for their territories in the region. The liaison officers assist in passing information between the United States and their countries, and they help in acquiring clearances concerning drug-enforcement flights that cross their borders. Since 1992, as the trafficking threat in the region shifted from air to seaborne smuggling, the United States has negotiated

Casualties of International Terrorist Incidents (1991-96)



SOURCE: Department of State, *Patterns of Global Terrorism*, 1997

Maritime Counternarcotics Agreements with 11 nations bordering the Caribbean and is negotiating similar agreements with the United Kingdom, Netherlands, and France for their territories in the region.

In 1997, the United States and Panama reached agreement in principle on the formation of a multinational counternarcotics center, to be located in Panama. (For a discussion of this matter, see chapter Seven.)

Potentially Hostile States

In spite of the tragedy of the Khobar Towers bombing, the U.S. military's force protection policy has generally been successful; for instance, no casualties have been

inflicted by terrorists in Bosnia, despite the high-threat environment. The paradox of successful protection measures is that they may encourage terrorists to consider larger or unconventional attacks that then inflict more casualties. Indeed, one of the reasons that the Khobar Towers bombing was so deadly was that the bomb was much larger than was believed within the capabilities of local terrorists. This problem, a kind of asymmetric attack issue, will be difficult to avoid. One response is to encourage imaginative thinking about the kinds of attacks terrorists could mount.

Conclusion

Few U.S. military units are organized or trained for law enforcement, which is the main instrument used against terrorists, drug traffickers, and other international criminals. Although the U.S. military will generally play only an auxiliary role in responding to nonstate threats, it alone can provide capabilities such as reprisal against terrorist-sponsoring states. The military will also assist in areas such as responding to the use of heavy arms and WMD and providing intelligence, logistics, and communications assets.

If the scale of the nonstate threat grows, especially if local police are being overwhelmed, the U.S. military will become more active. That is most likely in conjunction with U.S. military operations, e.g., protecting U.S. forces deployed overseas and in conjunction with SSCs. However, the U.S. military could also become involved in transition states or even inside the United States.

To a large extent, the training, doctrine, and equipment for accomplishing its periodic law-enforcement tasks will be an outgrowth of what the U.S. military prepares for SSCs. If escalating problems necessitate a larger military role in domestic defense in support of U.S. civilian authorities, careful attention to new training, doctrine, and equipment such as nonlethal weaponry will be needed. The U.S. military would have to balance military necessity and due vigilance for the lives of U.S. citizens who, when encountered in the field, must be presumed innocent.

CHAPTER FOURTEEN

Alternative Futures

Today's states are largely at peace with one another and likely to remain so through 2018. Nevertheless, militaries are designed for the exceptional, not the ordinary. The same rule holds for the future. The path forward may look benign, but the U.S. military must continually prepare for a world in which conditions have turned sour. The U.S. public will forgive its military if the world turns out to be sunnier than military planners had forecast, but it will be far more critical if its forces are unprepared for the worst.

In a sense, the U.S. military must simultaneously learn from and forget its last war, particularly since it was such a great victory. In retrospect, Iraq was not large, technologically adept, or operationally clever; the Gulf War was clean cut. But hubris lurks in positing Iraq (or a comparable midsize, midtech rogue) as the foe against which DoD (or most of DoD) should be structured. True, states larger than Iraq are now among or on good terms with core states; they alone have mastered the weapons of mass destruction (WMD) or interdiction which would imperil U.S. operations overseas. Global chaos appears to have increased or at least become more noticeable since the Cold War ended, small-scale contingencies (SSCs) continue,

and U.S. participation in their resolution remains discretionary. With luck, the situation may hold through 2018, but not necessarily.

To survey the requirements for adapting in the present to an uncertain and possibly gloomier long-term future between 2008 and 2018, this section sketches a three-dimensional space. One vector features larger foes; a second, foes who have mastered nasty technologies; a third, a profusion of messy situations. Larger, nastier, and messier are understood here in relation to today's threat environment; even were the next 20 years free of unpleasant surprises, the environment in 2018 will be different from today's, a difference which must be reflected in defense planning.

In a sense, each dimension corresponds to some dysfunction within the world's state structure. A large transition state, for example, that failed to develop democratic institutions may emerge as a powerful foe. A rogue state may learn enough about the nasty technologies of warfighting to pose a serious challenge. The ranks of today's failed states may grow so large that a large share of the U.S. military (and those of its allies) would have to be devoted to coping with the resulting mess.

Any one future (or foe) may combine two or all three dimensions. A hostile Russia, for instance, would be bigger and enjoy better technology than Iraq did. Sea lines of communication (SLOC) can be contested by both a major power or clever rogue. Achieving the ends of conventional aggression by unconventional means (e.g., disguising military articles in the commerce of urban life) would prove that an enemy had mastered some nasty techniques and could cause a large mess (indeed, nastier becomes messier). The ambiguity that defines messiness can exacerbate military challenges because they generate operational constraints.

Each dimension, rather than being of intrinsic interest, is illustrated because it carries requirements for restructuring the armed forces in various ways. One can imagine interesting futures (e.g., a powerful neutral Brazil with a big, busy navy) that call for, at best, only modest changes in U.S. force structures. Finally, variant domestic futures (e.g., a \$100 billion DoD budget or an unexpected willingness to take casualties), despite their potential impact on U.S. forces, were specifically excluded from consideration.

Larger

In 2018, the United States may face a much larger adversary than any current rogue state. A large transition state could turn away from the core, become hostile, and build military forces. A large coalition could be constructed by the convergence of several hostile states, no one of which has that much mass.

A larger foe would challenge U.S. force planning in several ways. It might simply fight better, thanks to greater robustness, more striking power, or deeper C⁴ISR. One that could project power around its periphery may be able to challenge U.S. interests in many places simultaneously; in so doing, it would enjoy the advantages of operating from interior lines. A major power with robust nuclear capability and space assets could jeopardize the U.S. sanctuary and threaten its strategic assets. If nothing else, its vote in the Security Council could stymie U.S. use of the United Nations for international security.

A critical factor in tomorrow's correlation of forces would be how U.S. friends react. In the Cold War, the United States and its allies faced the Soviet Union as a team, something that surely affected the Soviet calculations. Will a future foe induce the same reaction? Not automatically. As earlier chapters explain, most core states

Comparing a Surprise-Free 2018 to 1998

The world of 2018 will be identical to that of 1998 only if today's trends come to a dead halt. That being improbable, the differences 20 years may make are worth sketching.

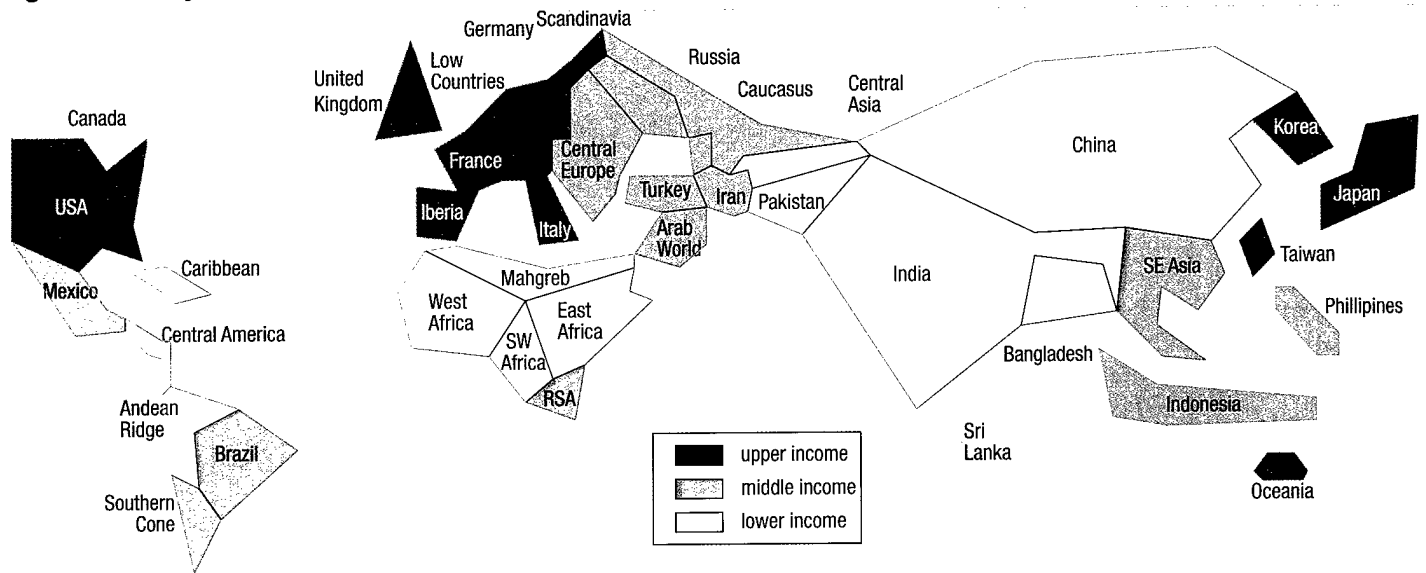
- **Demographics.** As recently as 1978, four times more people lived in greater Europe (i.e., between the Atlantic and the Urals) than in the Middle East (i.e., Iran plus Arab nations). By 1996, the toddler population in the two regions was equal. By 2018, nearly all those toddlers will be 25 (well over 95 percent of them having survived and stayed in their native region).

- **Military Technology.** Even if the leading edge of military technology does not advance, simply replacing legacy equipment with modern equipment will increase the *average* level of military technology. A few more states will have WMD and ballistic missile capability.

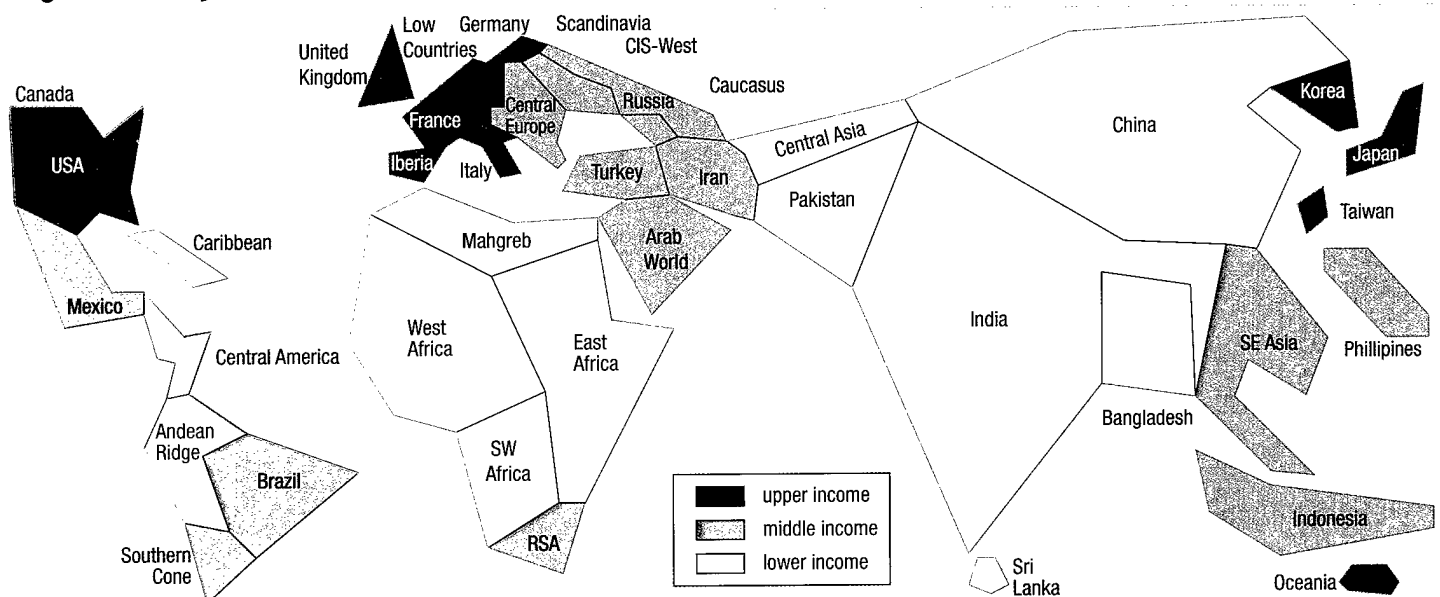
- **International Relations.** Some countries in Eastern Europe, Latin America, and Asia will probably become core states. Given another 20 years of experience, today's norms of international conduct, having been around that much longer, may be more accepted among core states and those aspiring to join them. Most of Asia will be richer than today despite recent economic troubles, but the larger countries (e.g., Indonesia, China) will still be less affluent than Europe is today.

- **Globalization.** The world's economy will doubtless grow more interconnected. Trade will account for a growing share of world GNP, more capital will be invested overseas, and multinationals of all sizes will do more business outside their home region. Unless energy prices rise spectacularly, the world's transportation network will grow denser—seaport, airport, and road capacity in Asia and Latin America in particular. Fiber-optic lines will connect nearly all cities of more than 100,000 inhabitants. Global satellite systems will serve affluent customers in both cities and hinterlands. Televisions will be as ubiquitous as radios today. Cellular telephones and the Internet will be almost as pervasive.

Regions Sized by Number of 25-Year Olds in 1978



Regions Sized by Number of 25-Year Olds in 2018



Regions are defined by nations except as otherwise indicated:

- The United States includes Puerto Rico.
- The Caribbean includes all other island nations and territories.
- Central America encompasses Guatemala, Belize, Honduras, Nicaragua, El Salvador, Costa Rica, and Panama.
- Andean Ridge encompasses Surinam, Guyana, French Guiana, Venezuela, Colombia, Ecuador, Peru, Bolivia, and Paraguay.
- The South American Cone encompasses Chile, Argentina, and Uruguay.
- The United Kingdom includes Ireland.
- Central Europe encompasses Switzerland, Austria, Poland, the Czech Republic, Slovakia, Hungary, Rumania, Bulgaria, Greece, Cyprus, Albania, and the republics of former Yugoslavia.
- Western CIS Nations encompass the Baltic states, Belarus, Ukraine, and Moldova.
- The Caucasus encompass Armenia, Azerbaijan, and Georgia.
- The Arab States are bounded by Turkey, Iran, the Indian Ocean, Red Sea, and the Mediterranean.
- India includes Nepal and Bhutan.
- Central Asia encompasses Kazakhstan, Kyrgyzstan, Turkmenistan, Tadjikistan, Uzbekistan, and Afghanistan.
- Southeast Asia encompasses Myanmar, Thailand, Malaysia, Brunei, Laos, Kampuchea, and Vietnam.
- China includes Mongolia and Macao.
- Korea encompasses both North and South Korea.
- Oceania includes Australia, New Zealand, Papua New Guinea, and Pacific island nations and territories.
- The Mahgreb countries are the five African countries with a Mediterranean coastline.
- The Republic of South Africa (RSA) includes Swaziland and Lesotho.
- East Africa encompasses Sudan, Eritrea, Djibouti, Somalia, Ethiopia, Uganda, Kenya, Rwanda, Burundi, Tanzania, Mozambique, and Indian Ocean Islands.
- Southwest Africa encompasses Gabon, both Congos, Angola, Namibia, Zambia, Zimbabwe, and Malawi.
- West Africa encompasses all other African nations.

China, Russia, and India as Potential Regional Peers

Three transition states, China, Russia, and India, possess the theoretical resources and sufficient independence of interest to become larger adversaries of the core states. Such an evolution is neither inevitable nor unlikely. Indeed, the three are counted among the transition states precisely because they are now integrating themselves into the world economy, embracing market forces, and leaning toward greater democracy. U.S. policy will certainly influence the path to power of these nations over the next two decades. Yet worse surprises have happened.

- *China* is the most likely major power foe of the three, for several reasons: a growing GNP to finance a big military, an authoritarian government undergirded by a large army, a robust nationalism, and a history that leaves the state less than sympathetic to the interests of core states. But would China be willing and able to amass sufficient military power by 2018? Maybe not. First, because China is becoming rich as a trading state (rather than through the kind of forced draft industrialization that the Soviet Union underwent), its economic health requires global trade and hence an absence of major conflict. China's coastal provinces are growing richer and could serve as a potential counterweight to the center: even were China to bridge coast-inland schisms, the government's ability to mobilize resources for central ends might be limited. Second, a competent military takes years of investment; projecting power takes painstaking attention to the details of doctrine, logistics, and C⁴ISR. China has a long way to go: its rocket forces have mixed performance records, its air force and navy are unimpressive, and no army can get half its budget from running businesses without putting its warrior orientation in question. How soon China might challenge the United States as a near equal will be determined by its economic growth rates, its willingness to subjugate economic to state interests, and a demonstrated competence in military operations, especially those requiring power projection.

- *Russia* couples great strengths and grave weaknesses. Among its strengths are vast resources, a large nuclear arsenal, and a reservoir of technology. But much of Russia's industry is shuttered. Its military sits at the edge of crisis. Birthrates have fallen below death rates. Technology-savvy people are emigrating. The central government has problems with organized crime and fissiparous tendencies in the perimeter (e.g., Siberia, the Caucasus). Russians still aspire toward great power status, but in a bleak economy individuals are consumed by survival. To reemerge as a power by 2018 Russia would need to pull out from its depression before its technological strengths dissipate, reassert central authority (either crushing or coming to terms with its Mafiya), and undertake serious military reform. Russia is unlikely to be a foe if it lacks security issues that define its own interests in clear and meaningful opposition to those of core states. Another indicator (if not necessarily cause) of strength would be a strong power position in former near abroad states (e.g., Ukraine, Kazakhstan).

- *India* has a growing economy (roughly 6 percent a year), a large technically trained population, the world's largest population of preschool children (i.e., adults in 2018), a functioning space program, nuclear weapons, and a military of proven competence—as well as vast poverty and backwardness, a politically and culturally divided population, and a relatively weak central government. India has established a hegemonic position in South Asia and sits near two shipping chokepoints (the straits of Hormuz and Malacca). Yet, India is a democratic state with no serious quarrels with core states. To emerge as a major power by 2018, India would need faster economic growth (e.g., 10 percent a year), a unified will to power, and a greatly accelerated space and nuclear program. Even then India is likely to be on good terms with the core.

take a softer line toward Iran (not to mention Cuba) than the United States. A threat to some core states may not be seen as such by others; a foe may use a strategy of divide and conquer. Allies may very well shrink from a cohesive partnership with the United States just as U.S. policy would have them take more responsibility for global security.

A major power may participate in international trade and institutions, looking relatively benign to some, yet still help those whose behavior is hostile. China's trade with Middle Eastern rogues, for instance, has often been seen as a response to U.S. military sales to Taiwan. Under different circumstances, Russia could have

helped Serbia, while the United States provided aid to Croatia and Bosnia.

Implications

Scale is the essence of this threat, even though the larger foes are likely to have mastered the nasty technologies.

The character of an operational challenge from a major power depends, of course, on who the major power is. Were China and India hostile, the United States might seek broad naval and amphibious capabilities (including riverine operations) and the ability to operate in jungles and cities, possibly against very large armies. Were Russia to turn itself around, return to great power status, but pick fights with the core, the United States may have to return

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resources to be major powers, each has firmly decided to work with the United States to pursue common security. Both have, on many occasions, lobbied the United States to exercise more, rather than less, global leadership.

China has demonstrated national security objectives at odds with U.S. interests (e.g., over Taiwan or islands in the South China Sea) and it abuts nations at or near core status (e.g., South Korea, Japan, ASEAN states). Russia, at this point, is primarily interested in its near-abroad. India has defined few interests outside its immediate subcontinent. A *global* challenge to the United States is much less likely; that would take decades of military investment, practice in power projection, and a belief system that results in global interests—all of which no large transition state possesses.

One contradiction inherent in the challenge of a potentially larger foe is that requisite economic and technological growth requires a nation to be open to interaction with the core. Yet the government of an open society may have more difficulty mobilizing resources against core states. A coherently hostile national will may be hard to induce if many internal forces identify their own well-being with the survival and prosperity of the

core. The sooner a challenger arises, the more it will evoke memories of (and possibly responses to) the old Soviet Union. Yet, these contradictions do not apply to the rise of a major power that simultaneously works with the core on one level but takes military issue with it elsewhere.

Nastier

Estimates of future conflict often assume that it would involve only conventional weapons, that lines of communications to the front (or elsewhere) would be unimpeded, and that the United States would hold supreme technological advantages. All three assumptions are more likely than not. But a foe might plausibly have the will, wherewithal, and wit to figure out how to violate each of them. Chapter 11 outlines some paths a nation can take to confound the United States, particularly its ability to project forces overseas. To do so by 2008 would require good luck on the part of today's rogue states. But with globalization, technology is likely to spread faster. The 20 years between today and 2018 offer potential foes time to master the nasty technologies of warfare.

Technology Races and Globalization

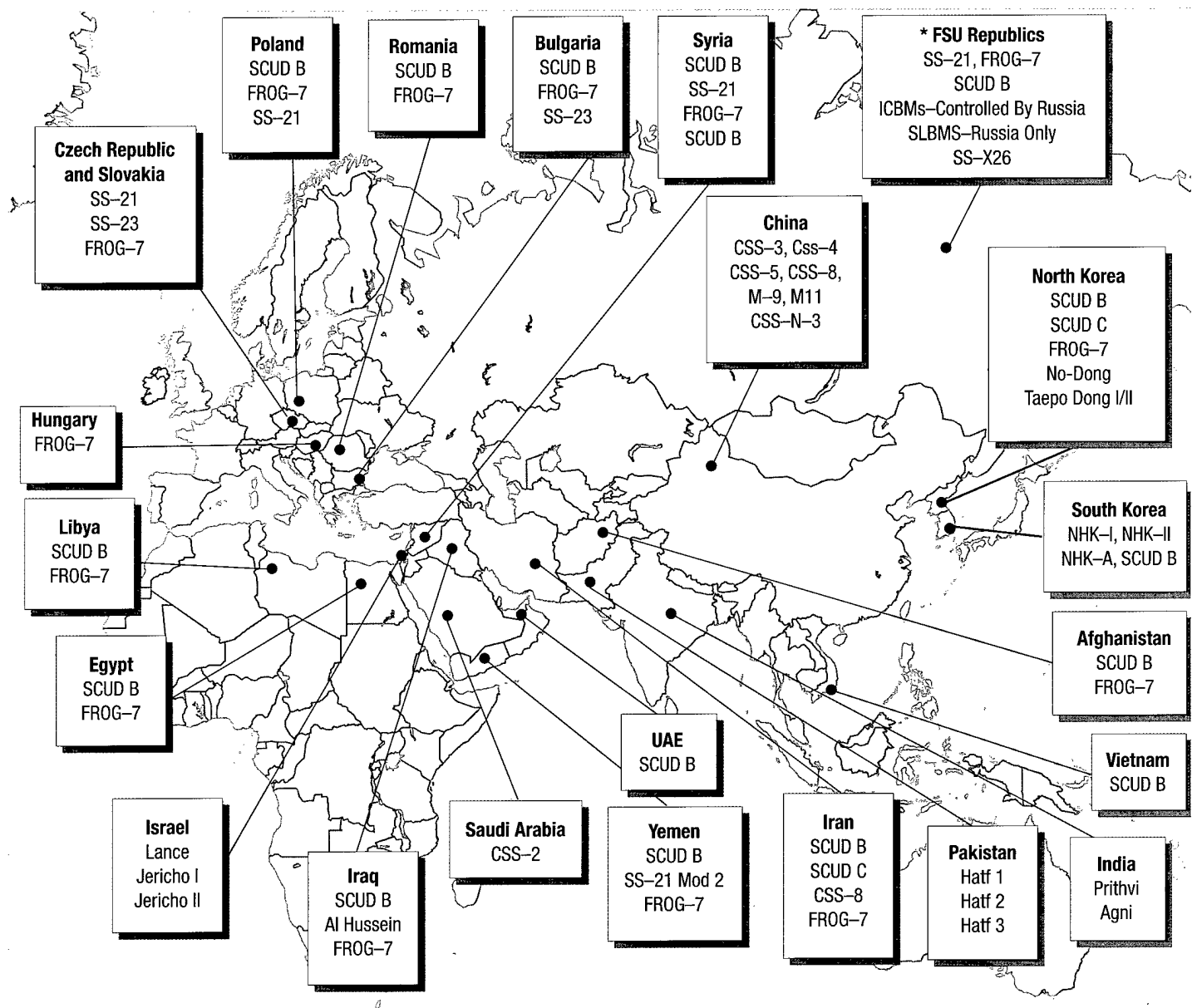
When the worlds of defense and commerce were separate, technological competition between the United States and its adversaries could be abstracted as a two-handed match. The leader developed and deployed new technologies at the bleeding edge; the follower stole or copied (at the cost of being a few years behind), adapted it to national exigencies, and concentrated research on a few specialties (thus posing a niche challenge).

Dual-use technology offers the prospect of buying what one cannot steal, but until roughly the mid-1970s, commercial technology lagged military technology. The United States maintained its technological lead by declassifying technologies slowly and restricting the sale of advanced dual-use technologies to hostile states. Even if the system leaked, it helped contribute to the Communist bloc's relative backwardness.

Today some military equipment may be far superior to anything available commercially, but many defense systems lag commercial systems (because of delays associated with defense acquisition practices and the need to adapt products to military specifications). The sophistication and hardness of other military equipment are often purchased at a premium. Globalization means technologies are introduced everywhere at the same time (even if nations differ in their absorption rates). The end of the Cold War removed the constraint on selling dual-use equipment to almost anyone. These factors combined have led, in many areas, to where a dollar in the hands of adversaries can buy as much or more capability than the same dollar in the hands of DoD.

Where is the long-term U.S. technology advantage? First, the United States is richer; second, its military technologies give it unique capabilities; and third, the United States possesses systems integration skills that permit it to make more of a whole from its parts than others do. But do they suffice? China may have a larger GNP by 2018. Unique military technologies are becoming a thinner edge. The contribution of systems integration per se is hard to prove or even quantify.

Missile Arsenals of the World

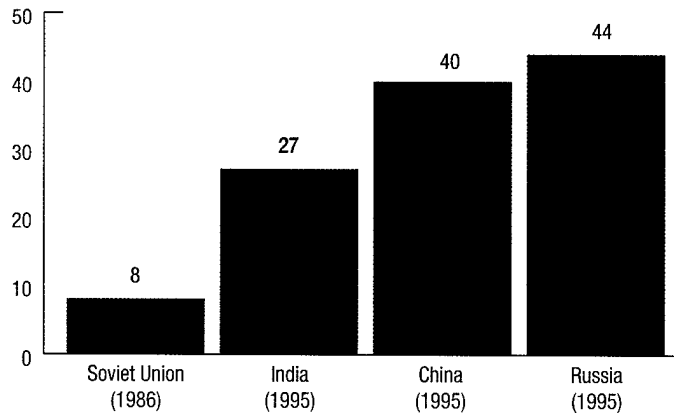
SOURCE: International Institute for Strategic Studies, *The Military Balance 1997-98*

* Former Soviet Union

Weapons of mass destruction are a looming threat. The United States, for instance, has already fought an adversary, Iraq, which possessed medium-range missiles and chemical warheads that might have been mated and fired, even though they were not. Tomorrow's adversary may be less reluctant; its missiles might have longer ranges (possibly intercontinental), greater accuracy, and nuclear warheads.

A denial strategy can operate in many ways. No nation is likely to dominate any warfighting medium in competition with the United States. Yet mines, missiles, surface raiders, and long-range guns can increase the hazards of sea transit, thereby throttling commerce. Foes can attack runways, air-traffic control sites, support services, and even aircraft. Information warfare against military information systems is inevitable, but the closed nature of most military systems may favor defenders. By

Trade (Exports Plus Imports) as Percentage of GNP



contrast, most parts of the global information infrastructure are open and likely to be more vulnerable. They could be held for ransom, or attacked so that the citizenry thinks twice before supporting intervention into the attacker's neighborhoods.

Although exploitation of the information revolution for defense has gone furthest in the United States, even partial exploitation elsewhere could have a disproportionate effect on the capabilities of an adversary. Three pillars of tomorrow's military—precision-guided munitions (PGM), unmanned aerial vehicles (UAVs), and access to space—could be acquired from many countries. Commercial technologies with military potential—computers (e.g., portables, which can store detailed maps on CD-ROMs), cellular telephones, networks, digital signal processors, and software (e.g., for simulation, manipulating databases, and encryption)—are even easier to acquire. Future foes may not have the reach or legs of U.S. forces, but they do not need them to put up a stiff fight in their own neighborhoods.

Implications

A foe's mastery of nasty military technologies—WMD, attacks on lines of communication, or a cheap revolution in military affairs (RMA)—could extract unacceptable casualties from military forces

operating overseas. A foe's technological competence could strike hardest against power projection, which is both a U.S. core competence and the most vulnerable aspect of U.S. global military capabilities. In the hands of state or nonstate actors, WMD may be used against homeland populations.

The impact of WMD depends on how they are wielded. A threat against a lukewarm ally of the United States could persuade it to leave a U.S.-led coalition (thereby reducing the coalition's combat power) or deny the ally's facilities to U.S. forces (complicating logistics). The specter of WMD use would hang heaviest on force concentrations and close-in warfighting methods where soldiers must be massed if their effects are to be focused. The existence of countermeasures against chemical and biological warfare (e.g., aerosol detectors) by no means eliminates the problem. Chemical-weapons suits are hard to fight in. Defenses against WMD delivery systems such as ballistic or cruise missiles are advancing, but today's best systems leak, and progress belies optimistic expectations of their performance. Even reliable missile defenses would afford little protection against terrorist WMD or weapons delivered by artillery (e.g., North Korea's overlooking Seoul). Any deterrence provided by retaliation-in-kind (e.g., hitting back with nuclear weapons) is problematic because it would legitimize a class of weapons otherwise receding from the inventories of today's powers.

Potential threats against cities of core states, especially in North America, have to be taken seriously. If the technologies of hitting an ICBM in flight continue to be refined into something reliable, a shield against a sparse attack might be upgraded to cover successively denser ones. True, sensors proliferated in space could increase detection and localization of missiles, but stealth and decoy techniques can hide true missile tracks. Beyond some point, the calculus of antimissile defense runs into the same technical problems (e.g., the mathematics of leak-proof defense or cheap countermeasures) that convinced the United States and the Soviet Union in 1972 to conclude the Anti-Ballistic Missile (ABM) Treaty.

The use of mines, shore-based bombardment, submarines, or surface raiders to threaten straits (e.g., Gibraltar, Bosphorus, Hormuz, Malacca, and Tsushima), canals (e.g., Suez, Panama), and littorals could frustrate global commerce, blackmail nations or corporations, and generally complicate deployment. Air threats pose similar challenges, and many are directed against lives rather than against commerce.

Cyber warfare, as noted in chapter eleven, could destroy (although more likely corrupt) information required for high-technology operations, curtail access to information systems and services when most needed, and either compromise the security of war plans and technologies or reveal locations of friendly forces. Threats against lines of communication could complicate the use of split basing and reach-back (i.e., supporting forces abroad with

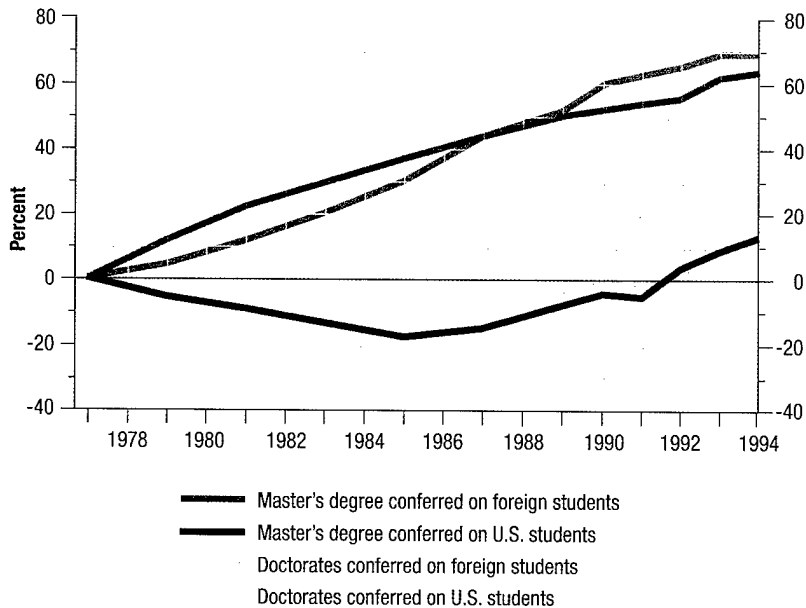
information systems in the United States) or force the addition of further layers of protection for the existing infrastructure. A thin but redundant support architecture might survive information warfare better than a thick but expensive one, prone to single-point failure because no one can afford to make it redundant.

By learning to apply information technology to conventional warfare, a nasty foe could easily undo the three pillars of the coalition victory in the Gulf: superior logistics, command-and-control warfare, and dominant maneuver. An adroit combination of cruise missiles and laser-equipped UAVs could pose substantial risks to the high concentrations of value that define U.S. platforms, notably ships, but also logistics transfer and storage points. An adversary's ability to disperse its own C⁴ISR

Somali "technicals"



Advanced Degrees Conferred by American Universities (percent increase or decrease since 1977)



SOURCE: Department of Education, *Digest of Education Statistics*

systems would complicate U.S. efforts at command-and-control warfare. If a trackable signature constitutes a target for precision guided missiles, then maneuvering (thus, disturbing the environment) can, by enhancing signature, introduce new vulnerabilities. Today's operational philosophy counts on the United States' sensor superiority through such platforms as Aegis ships, or aircraft hosting AWACS, JSTARS, Cobra Ball, and Rivet Joint suites, none of them particularly stealthy and all operating within 100 to 200 kilometers of battle. Against a foe so equipped, the United States would need to rethink the optimistic pictures of *Joint Vision 2010*. By contrast, networks of sensors, processors, and weapons can be arrayed to take hits and still recompose themselves in near real time to support operations.

Prospects

A nasty threat arises only if the requisite technologies are mastered by those willing to take the risk of using them.

Many rogue states have WMD warheads and theater missiles. Few missiles exceed 1,000 kilometers in range, but North

Korea, if it survives long enough, may have weaponry that does. Yet, developing WMD or strategic delivery systems is fraught with risks. The very activity gets one noticed and may lead to countermeasures by the United States and others before efforts have been completed. Those who would employ biological and chemical WMD must also calculate that while the odds of success may vary, even a serious attempt that fails to generate all the desired effects may result in retaliation, and nuclear means cannot be ruled out.

Because the means to challenge sea and air lines of communications are within reach of many, terrorism against either has to be considered a real threat (even if blue-water operational capability remains expensive and rare). Information warfare is cheap and many systems are vulnerable, but whether even a coordinated attack against prepared defenses can surpass the level of annoyance is not clear.

Finally, the innovative exploitation of commercial information technology is quite likely. Electronics is a commodity and is thus globally available. Although the United States prides itself on its superior skills in systems integration (a lead it should enjoy through at least 2018), the technological sophistication of the Third World is not to be underestimated. Given the Internet, the number of students studying engineering in the core states, the level of foreign direct investment, and the reverse engineering of complex systems, a potential exists to learn adequate systems integration skills.

Messier

When waging war, the United States prefers going in hard, knowing whom to fight, winning decisively, getting an enemy to admit defeat, and leaving a state to its (ultimately) grateful populace. Reality is rarely that clean. Wars, such as the one fought in Vietnam, may lack obvious starting points, clear lines between enemy and noncombatant, obvious ending points, and enemies that quit when beaten. Transitions between a large-scale peace operation, scattered resistance to peacemakers, dissolution

into chaos, and the onset of outright war may not be possible to determine (even after the fact).

As the Gulf War has shown, the United States is hard to beat in open terrain. Dense terrain gives some protection, but the ability to intermingle one's warriors amongst the background population can generate especial advantages. Making military weapons (e.g., a pickup truck with a Bushmaster-class machine gun in back) look commercial (e.g., a pickup truck) is a tempting option for a foe preferring to abjure uniforms and shield itself behind the local population (whether as supporters or hostages may be irrelevant). As events in Mogadishu or Grozny proved, even poor people can generate challenging counters to technologically sophisticated weapons confined in urban areas. The cheaper electronics gets (and anything that can be pressed into a chip will eventually be tantamount to free), the faster it is likely to spread within the Third World. By 2018, many cities may be densely wired into virtual grids permitting the detection of and mobilization against even fast-moving military units.

The U.S. military can also be stressed if loaded with enough responsibilities for military operations other than war: peace operations occasioned by failing states, natural disaster relief, or large-scale non-combatant evacuation operations (NEOs). Rapid urbanization coupled with a decline of integrating belief systems may yield an ungovernable world where criminal organizations or gangs control neighborhoods and hold commerce for ransom. Failed states already pull in core forces in intermittent, frustrating attempts to relieve potential tragedy, restore order, or protect the interests of core states.

The occupation of even a defeated nation can pose problems if its population is:

- Ideologically or religiously at odds with the United States
- Hiding those who should be brought to justice
- So torn by factions (or permeated by former internal security forces) that it cannot rule itself.

Israel, for example, beat Syrian forces in Lebanon in 1982 and has suffered 16 years of constant casualties since, while occupying a security zone south of the Litani River.

Indications and Warnings of a Revolution in Military Affairs by Other States

Military intelligence tends to assess the progress of other countries toward an RMA by examining their doctrine plus current and in-the-pipeline equipment, most of it acquired and developed along established military lines. Were such assessments reliable, other countries' RMAs could be seen coming years away, and the U.S. lead could be managed by a vigorous response where most threatened.

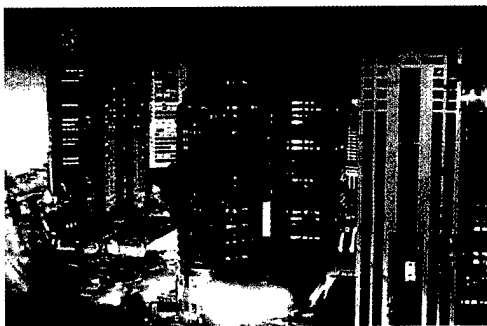
The civilian nature of most RMA technologies suggests that an RMA itself may arise from civilian ranks. Third World strategists may be able to figure out how to build an effective military by rummaging through the global Radio Shack. They might not even have to be *defense* strategists. Much of the RMA entails how to know about and control land and immediate airspace. Domination of battlespace has similarities to other tasks of national space management, such as environmental control, transportation management, urban and regional planning, law enforcement, and even public health. RMA concepts may also arise among defense firms in core states eager for overseas customers. Rogue states are unlikely to be favored cus-

tomers, but today's approved customer can become tomorrow's enemy (e.g., Iran in the late 1970s).

If new concepts for C⁴ISR and related aspects of warfighting do not show up in normal defense acquisition channels, they may be missed. Watching Beijing is not enough if the RMA comes out of Shenzhen.



Should an RMA be looked for here...



or here?

Implications

Messy situations are manpower intensive. If they go wrong, the institutional cohesion of the military may be put at risk.

Patrol, whether for peace operations, or the occupation of a hostile land, could absorb tens or hundreds of thousands of foot soldiers. Forces may have to find a mix between visible presence and the rapid, stealthy insertion and recovery of forces to conduct strikes on opposing leaders and concentrations—with international media looking on. Although technology (e.g., unmanned hovering lookouts, sniper-round detectors, microwave and infrared (IR) see-through devices) can help find *things*, true information dominance requires an understanding of an area in its full human dimension. This is never easy, especially in the face of a suspicious or hostile population.

Evacuation and disaster operations require working with nongovernmental organizations (NGOs) and private voluntary organizations (PVOs), contracting for and delivering commercial services, and exercising power to acquire enough food, medicine, and transport vehicles. Eventually militaries will come to play a skeletal organizing role, and private support services will provide the bulk of the effort (except, perhaps, quarantine enforcement).

Prospects

The extent to which the U.S. military is preoccupied with a messy world depends on whether the world becomes more of a mess, and whether it does so in ways that compel U.S. interest.

The persistence of messiness is guaranteed. Dirty wars will not go away. State failure in Africa continues. Populations in many parts of the world are pressing against food supplies. Global warming, overpopulation, deforestation, and the potential rise of antibiotic-resistant infectious agents raise the likelihood of certain natural disasters. Youth unemployment in tomorrow's growing megacities is extremely high even as such conurbations become

more vital to the world economy; irruptions against them may well call for evacuating their populations.

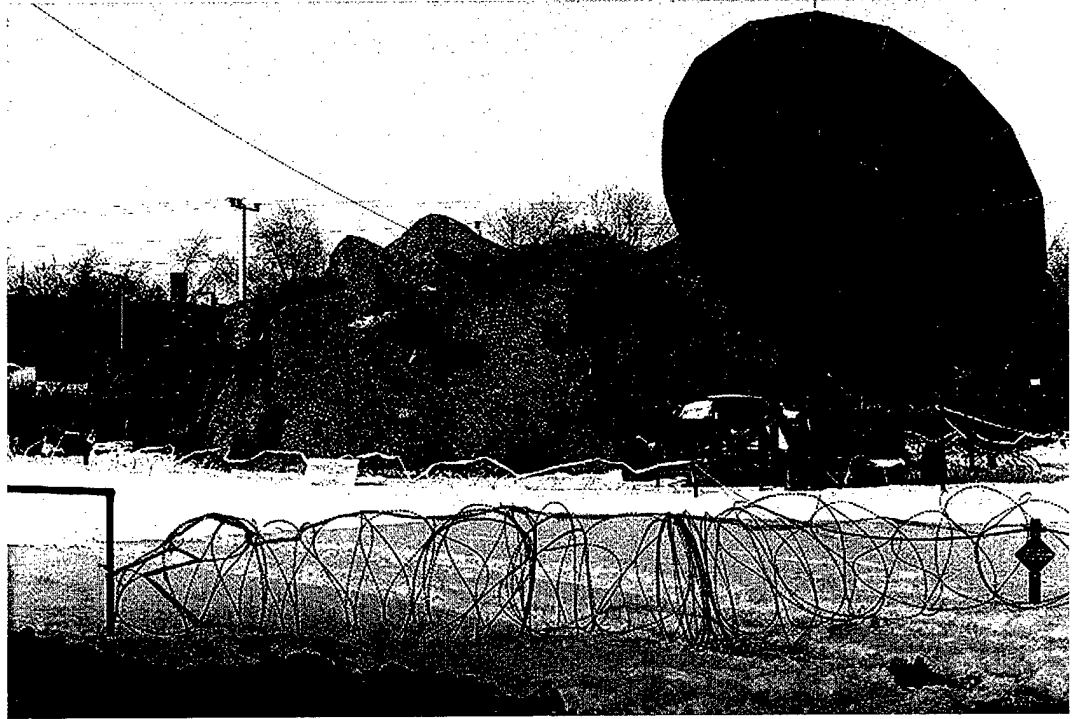
The United States will not send forces forward into every crisis or disaster. The more distant the trouble, the greater the temptation to do nothing. Yet, continued difficulties with drugs, organized crime, and unchecked immigration coupled with failing or corrupt state authority to the south may force the U.S. military to preoccupy itself with problems in its own backyard. A good deal depends on other nations' expectations of the world's unipolar power, U.S. public opinion, and the interdependence and growth of the global infrastructure. In an age of air transport, the outbreak of a highly contagious disease could force core states into action, which, in some circumstances, could involve military forces (e.g., to protect health workers in failed states). Given a globalized economy, the security of any one Third World city tied into core states affects the terms on which others live.

Responding to Worsening News

The United States could respond to a worsening world in two ways. As the next chapter details, the plausibility of larger foes, nastier technologies, or messy situations reinforces the need for defense institutions and systems to be broadly adaptive. But DoD must also monitor the world's threat environment and respond if it worsens.

Responding to the problem of a larger foe is largely one of coping with unexpected but nevertheless historically familiar size. Today's forces need not be raised to meet a larger foe that, itself, must take comparable time to build forces. Yet some elements of defense, like advanced technology, take longer to complete than others. Some tasks that once consumed the assets of the Nation's R&D establishment—strategic warning, intercontinental strike, national missile defense, space control and denial, high-energy systems, and electronic warfare—may need to be intensified when a large adversary is on the ascent rather than when it has already arrived. Investments in lift would similarly be required to

Satellite communications



face a foe capable of challenging the United States in many places.

Pacing the force to follow a rogue's progress at mastering nasty technology is difficult. Few obvious indicators foretell a foe's ability to interdict lines of communication or field a cheap RMA. Harder still is correctly forecasting a *will* to be nastier. For this reason, many of the coping strategies must be in place or en route to begin with.

Many methods of coping with the possession of WMD are getting attention: warning systems, counterproliferation, and deterrence strategies. Operating with widely dispersed or over-the-horizon forces, although a more radical response that challenges command-and-control doctrine and inter-service roles, may need to be pressed.

Sea lines of communication can be protected by using airborne surveillance and other C⁴ISR assets against shore attack or raiders. Mine-clearing and submarine-detection remain complex problems. Protecting the open ocean may require monitoring global ship movements continually, for example, by using air- or spaceborne synthetic aperture radar (SAR) to pick out wakes.

Conventional threats to airways can be managed by general air superiority, runway protection (e.g., rapid repair kits and

revetments), and redundancy in radar and navigation systems. Coping with the proliferation of portable heat-seeking missiles (with vertical ranges up to 3 kilometers) into terrorist hands is difficult. Exclusion zones around some military airports may be workable, but many civilian airports cannot be protected this way. Hardening civilian aircraft would be hideously expensive, but infrared countermeasures may be affordable for aircraft with certain missions (e.g., the Civil Reserve Air Fleet).

DoD already protects its information systems and by contractual methods could induce similar protection for its suppliers' systems. To help bolster civilian but still critical infrastructures, DoD could fund help centers, computer-hacker trackers, security technology and related tests, standards, metrics, and verification suites; DoD experts could directly assist systems administrators. Yet DoD cannot protect private systems.

The United States could respond to an adversary's cheap RMA by accelerating its own, notably its ability to conduct stand-off warfare. The growing vulnerability of

platforms will inevitably force consideration of dispersing data collection, information processing, manning, and weaponry into networks that can be assembled quickly, withstand attack, and degrade gracefully under its effects.

Escalation is another method of dealing with the threats of WMD and attacks on LOCs. In effect, the United States could declare a differentiation between the operational (conventional weapons used on the battlefield overseas) and the strategic (WMD and threats to the United States or its friends). Strategic threats warrant a strategic response. Declaring a firebreak, however, does not guarantee its acceptance; even allies might not countenance a U.S. strategic response unless there were many casualties at home.

Some trends toward a messier world can be monitored, but without sorting out its own values a nation will not know when and where it may intervene. Messy situations can be managed by using forces with sufficient mass to quell them. In other cases, control may be impossible and successful intervention a matter of influence: stand-off weapons for isolated, obvious targets; rapid-strike operations for targets of opportunity; and copious information support to local forces to help them handle problems. The challenges involved are to:

- Draw the required information from the environment
- Feed it to local friends in the best ways to support whatever doctrine local forces find appropriate to the level, scale, and character of the conflict
- Reconcile what friends do with U.S. values.

Large-scale NEOs require development of a doctrine of *cordon sanitaire*, a firebreak between the irruption and evacuees. The latter may include antimissile and anti-aircraft assets and counterfire operations.

Conclusion

Although today's world is benign and likely to stay so, the U.S. military must be prepared for less inviting futures. Compared to the canonical major theater war (MTW) foe, tomorrow may see larger foes, those who have mastered nastier technologies, or situations far messier than theater conflict.

The most difficult of plausible bleak futures may not be those that are obvious and ugly but those whose character is ambiguous. Ugliness derives from tradeoffs that even rogues may be unwilling to make. Taking on core states may impede the access to trade and technology necessary to financing and building a modern military. Brandishing WMD or threatening LOCs may risk devastating escalation by the United States. The messiest situations may not affect U.S. interests.

The futures to watch would skirt these tradeoffs. One might be a major power with a smiling face and steel-pointed boots kicking furiously under the table as domestic debate ensues over its *true* character. Another might be a midsize state that had mastered the jujitsu of commercial information technology and learned to build low-cost, high-tech defenses against U.S. intervention. A third might be a messy situation that strikes at the interests of core states: disasters that threaten to spread quickly along a swift infrastructure, or irruptions best dealt with by evacuation, rather than full-scale conventional combat operations.

Adapting Forces

The strength of the U.S. military rests on power projection, C⁴ISR, jointness, lethality, and robustness. If the world stays benign, these features will remain its long suit; if not, these features could be called into question.

- Weapons of mass destruction (WMD) and long-range strike capabilities possessed by large or nasty foes could confound power projection by crippling over-the-shore operations and lines of communication.
- Information warfare (from large foes or masters of nasty technologies) could put C⁴ISR at risk; the ambiguity of messy situations could prevail, making it unclear who is friend and who is foe.
- Joint warfare alone could be inadequate if combined warfare is required for coalitions among core partners (e.g., to face large foes) or for reaching to local power centers (e.g., in messier situations).
- Lethality, the *sine qua non* of warfare, may backfire in messy situations where nonlethality is more appropriate.
- Robustness, a feature of organizations, would have to be a feature of systems to defend them against nastier foes or support warfighters in messier situations.

Adaptiveness helps bridge the gap between the expected and the actual future. Chapter fourteen suggested why a gap may

arise at the macro level. But microfactors also call for adaptiveness. A known adversary could have unexpected strategies. If its equipment is unfamiliar, identification based on recognizing a profile or electronic signature could be misleading. If its doctrine is unanticipated, new operational countermeasures will be needed. At the same time, unexpected opportunities (e.g., new technologies) can arise that an adaptive military will want to incorporate rapidly.

An adaptive military must have agile warfighters, trained in the known but capable of dealing with the unknown, aware that it will not have all the answers but capable of learning what is needed for victory. Yet, institutions matter because they form the context into which agile warfighters are recruited (thus they are mutually reinforcing), and they can enhance or impede the ability of warfighters to adjust to change. Systems can help or hinder warfighters, especially in extending their battlespace awareness. Systems and institutions both will need to adapt to the ongoing revolution in information technology—not just to the opportunities it presents but also to any challenges realized by adversaries.

Institutions

Troop levels, mobilization, doctrine, and alliance structures are all issues for the United States in adapting to a less friendly world of larger and nastier foes and messier situations.

Larger

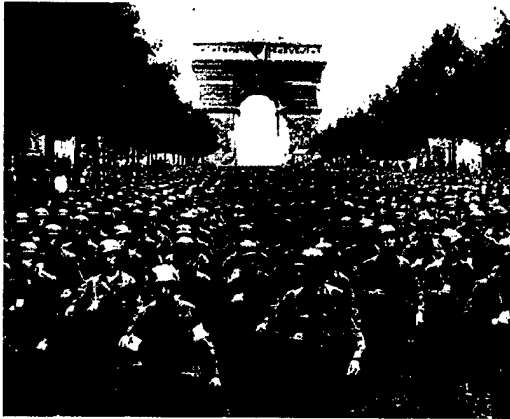
With the end of the Cold War, the DoD lost its large foe and, understandably, reduced its manpower and material. A new major power (and, to some extent, a messier world) could reverse that. How can the DoD best face the challenges of a reconstitution?

If size were a matter of scale-up, one approach would be to maintain an officer corps and training base to facilitate expanding from today's specialized high-technology military to one in which large cohorts of rapidly trained fighters man the front lines. This approach, however, has several problems. First, the day of the mass military here may have passed as early as 1970. Compared with their fathers, today's entrants have greater access to information, broader familiarity with networked rather than hierarchical organizations, and hence greater resistance

to rote discipline. Second, the skill levels of even front-line infantry today need to be much higher than popularly perceived. Not only is the gear more sophisticated, but in today's global fishbowl every mistake is likely to be widely broadcast. Third, without some reincarnation of the Cold War, the requirement for large armies is incompatible with a low public tolerance for casualties.

Reserves may be a repository of institutional adaptiveness. The Gulf War reinforced the notion that, in regard to major theater wars (MTWs), combat forces should be active and the reserves ought to specialize in support functions. Perhaps some of the reserve forces could be a repository for combat skills (e.g., riverine operations) that appear outmoded but may find unexpected use. Individual reservists could be rotated into combat units to return such skills to the active force. Conversely, nothing justifies retaining a skill to operate obsolete equipment.

Industrial as well as manpower mobilization has been a traditional response to the possibility of a large and active foe. As inventories decline, bases are consolidated, the role of contractors grows, the defense sector closes underused facilities, and the challenge of mobilization increases. Consolidation of the defense industry into



Massed forces

Two Experiments with Universal Networking

Two broad experiments—the Army's Force XXI (TF XXI), and the Navy's Cooperative Engagement Capability (CEC)—testify to both the U.S. military's eagerness to adapt and the conceptual models within which adaptiveness is pursued.

The purpose of Force XXI is to put tactical information into the hands of the soldier by automating the generation and distribution of battlefield information, orders, and related message traffic. The heart of Force XXI is called the Appliqué: a computer terminal for every vehicle (dismounted versions are being explored), which offers soldiers a constantly populated map of the battlefield and allows them to receive status reports on mission assignments, logistics, and ambient factors (e.g., weather). The Appliqué and its servers are linked by a tactical internet covering 1,000-plus users per brigade over constantly shifting network topologies. In March 1997, the Army Experimental Force (EXFOR: the 1st Brigade of the 4th Infantry Division) went to the National Training Center to see what difference its new configuration would make. It lost, as does every unit that trains there, but its performance demonstrated (1) that internetworking can halve the time required to plan and conduct operations and (2) that a lot of sensors are needed to stay current with enemy dispositions, but (3) that forcing others to gaze skyward for UAVs quickly tires them. Overall, the Army has concluded that, by providing a situational capability never before demonstrated, TF XXI was a successful proof of concept of the value and combat potential of digitization down to the platform level. The first digitized division is slated for the year 2000; the first such corps, for 2004.

Navy CEC was designed against the air threat (e.g., from cruise missiles), especially in littoral waters. Until now, each ship's radar would build incoming missile tracks by itself, on the basis of what it saw. CEC allows each radar to provide semiprocessed data to all other ships, supports a

Force XI: Wired soldiers



three large firms (Lockheed Martin, Boeing, and Raytheon) has narrowed the industrial base. An unexpected buildup could force the United States to look beyond traditional suppliers. Their learning curve might be uncomfortably long, but they would have sunk less intellectual capital in existing weapons, capital that could have gone to an RMA.

To face larger foes, the United States would have to have friends (a messier world also calls for partners, but political cover for unpopular operations is often the driving factor). The issue of how to structure coalitions becomes important. In the Cold War, allies manning the Central Front each had their zone to cover. By 1996, European allies had recognized U.S. preeminence in C⁴ISR and strategic lift, and NATO worked out arrangements by which U.S. intelligence, long-range lift, and strike capabilities would permit other countries to conduct out-of-area operations. Other combinations also might work, but they take up-front planning, mutual exercise, the careful integration of doctrine and expectations, and the mutual recognition that their consideration does not presage U.S. policy shifts (e.g., to allay fears that the United States expects NATO partners to take all the casualties).

Nastier

Unexpected nasty foes (and other potential large enemies with similar capabilities) may cause the failure of key warfighting assumptions and create the need for new doctrine. Constant experiments, battle laboratories, and what-if exercises ought to be the rule in the military, even at the expense of high readiness ratings.

common data-fusion algorithm, and creates a consolidated track. Data exchange reduces dimensional inaccuracies; permits more frequent data acquisition; allows sharper beam focussing; provides earlier alerting; and supports common IFF determinations. Passing tracks to other ships permits one ship to engage a target on the basis of what other ships see. Undergirding CEC is a robust communications system with several orders of magnitude in improvement to bandwidth and electronic countermeasures.

Similarities between CEC and TF XXI are telling. Both programs were accelerated after impressive demonstrations. Both seek operational improvement through improved command and control. Both exist, in part, to systematize advantages offered by the global positioning system (GPS). Both programs cost in the low billions. Most of that money went to improve communications systems according to each service's structural paradigm, with the Army widening and the Navy deepening their respective nets. Both reinforce each service's reigning paradigm—the Army, by giving soldiers what they supposedly need to know; and the Navy, by reinforcing the position of the capital ship.

Both programs will probably expand their coverage. TF XXI is capable of extending tactical internetworking to the Marines, allies, close air-support units, and missile defense. CEC may be adapted to underwater and power-projection operations. Meanwhile, the Ballistic Missile Defense Office has its prototype of the System of Systems. The Air Force is initiating programs to fuse information gathered by its four tactical intelligence aircraft—AWACS, JSTARS (designed to communicate only to special trailers), Cobra Ball, and Rivet Joint—into rapidly deployable squadrons for real-time data fusion. Eventually these programs are bound to grow into one another. Foresight today may determine whether the result is a smooth meshing of gears or the noisy fight over sectors, budgets, protocols, and standards.

System of Systems: Linear versus Adaptive

	Linear	Adaptive
Input	Complex sensors. Data from air and space sensors are fused into a common picture.	Plus a profusion of simple air and ground sensors also fused into the common picture.
Throughput	Voice-grade field connectivity (9,600 bits per second).	Video teleconference-grade connectivity (128,000 bits per second).
Processing	Fixed routing from sensors readings to data bases.	Content- and context-sensitive routing to narrative-oriented knowledge bases.
Anchor Desk	Preprogrammed consoles (e.g., for help on logistics questions).	On-call expertise supported by pop-up newsfeeds.
Mapping	One- to five-meter resolution.	Real time image overlays.
Output	Data reports supported by Web-based searches.	User-created displays, software agents, and natural-language inquiries.



Nonlethal weaponry

Although tomorrow's world is ineluctably joint, innovation may be enhanced when services compete for similar missions. Thus it may be healthy that the Army and the Marine Corps are exploring different and even antithetical concepts of how to use information on a dynamic battlefield, or that the Army, Navy, and Air Force each view the SCUD problem in various ways. As long as each service prefers to differentiate itself from others, each will probably develop a unique approach to problems. The more solutions there are, the greater the likelihood that one will fit the unexpected contingency (if losing approaches can be shed when proven less fit).

Because many of the nasty technologies work against power projection, the need for new doctrine in this area is critical. The United States would need ways to project force without necessarily projecting forces. Long-range, stand-off strike cannot be used for all aspects of warfighting, but it can destroy enemy platforms at a distance and thereby weaken foes in confrontations with the lighter forces that local allies would field. Small, lethal, highly mobile units on the battlefield (as advocated by the Defense Science Board summer 1996 study of *Tactics and Techniques for 21st Century Warfare*, and tested in the Marine Corps *Hunter-Warrior* exercise of 1996) can supplement or enhance stand-off strike. Such units would carry a two-week supply and most of their firepower would come from offshore units. Marines would "infest" enemy territory (rather than storm ashore), assess contested terrain, discern targets, and call for fire from over the horizon. Army officers now talk of "massing fires rather than forces" on tomorrow's nonlinear battlefield. Before the Gulf War, few airmen would have accepted, much less applauded, replacing manned aircraft with unmanned aerial vehicles (UAVs), but the Air Combat Command has since formed its first UAV squadron and sought and won tactical control of all UAVs in theater. UAVs were used more aggressively in Bosnia (despite worse weather than in the Gulf), and their numbers and roles will only increase.

The ability to field new equipment rapidly in response to contingencies is another attribute of adaptiveness. Both the 1982 shoot-out in the Bekaa Valley (where

Israeli jets shot down over 80 Syrian jets without loss) and the Gulf War suggested a growing gap separates what works well and what does not. In a crisis, one may need only the few really good items increased (and sharply). Yet picking winners prior to combat is hard; were it otherwise, production of the losers would have ended far earlier. The need for selective mobilization favors modularity in systems design (so components of losing weapons can be diverted to production lines for winning ones), commercial components (to extend the potential mobilization base), and software that can be rewritten in the heat of combat (as Patriot missile software was, to work against the SCUD—although a shortfall in performance suggests improvement is needed). To meet contingencies, systems may have to be fielded well before their

initial operational capability (IOC) has been certified. In a typical program, performance issues are worked on first, and the ability to test, maintain, and upgrade a product comes later. But the latter are what makes weapons fit for war. Otherwise they are fragile and vulnerable. Up-front attention to such factors, as well as interoperability and security, ease the task of fielding systems when needed, rather than when scheduled.

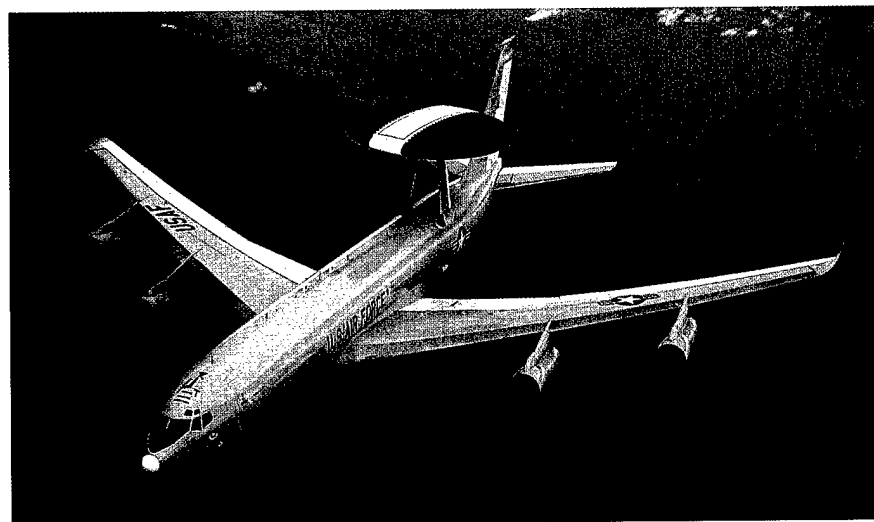
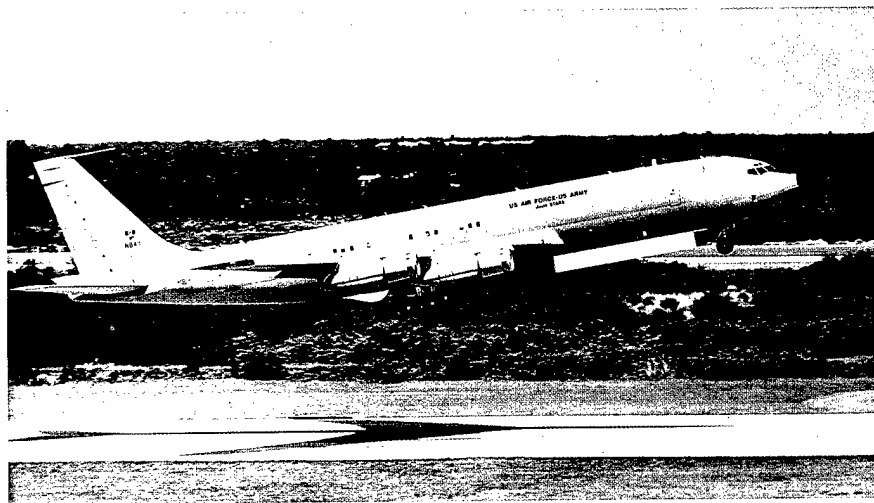
Messier

Coping with the stresses of a messier world may force the United States to cooperate with a wider variety of partners than it is accustomed to: not only coalition partners but NGOs, PVOs, local power centers, and commercial enterprises. U.S. military operations in politically unsettled regions mean working with local powers that may not meet U.S. standards in all respects. Adapting to such a future requires familiarity with the nuances and power relationships of other cultures. It means that, in a broad sense, the United States needs to be able to connect to and disconnect from them quickly.

Combined operations, like joint ones, are often a matter of developing standard doctrinal interfaces and a common set of concepts. Both permit innovation by all parties with less concern that evolutions by one may constrain the actions of another. Good interfaces allow the formation of task forces from elements trained and supplied by individual services, other countries, and nonmilitary institutions.

Messy situations also may call for the U.S. military to interoperate more closely with contractors. Their role has grown from near zero in the Korean War, to modest but vital in the Vietnam conflict, to critical in the Gulf War (JSTARS required Grumman employees on board), and to essential in the Haiti operation. Their use may very well have turned the Balkan war around for Croatia in 1995. When information accounts for 10 percent of operational effectiveness, it is the tail; when it is 90 percent, it is the dog. And information can be privatized in ways that the application of force cannot. The free market is a powerful adaptation mechanism, but one to be used with care.

JSTARS (top) and AWACS (below)
aircraft detect ground and air
targets, respectively



A Revolution in Military Affairs

A current revolution in military affairs (RMA) can be traced back to the late 1970s with the development of precision munitions and off-board sensors. Barring global conflict, it is likely to play out well past 2018. Such an RMA rests on two tenets: the ability to put ordnance precisely on target from stand-off distances and the ability to conduct military operations more quickly (and, thus, to operate inside an enemy's decision loop).

- **Precision.** Precision weaponry (PGMs such as tactical missiles, torpedoes, and laser-guided bombs and rounds, plus armor within 3,000 meters) can kill targets whose location is known in real space or by general position plus by traceable signature. Precision offers first-strike kills (by the second shot an enemy may have run for cover), less collateral damage, and a smaller logistics burden and thus faster responsiveness. Precision is not guaranteed: jamming, spoofing, and other tricks can break a target lock; targets can be out of range, or can outrun (rarely) or outmaneuver (more commonly) the PGM. Targets can be armored, bunkered, or buried or can shoot back (e.g., as the U.S. Navy's Phalanx gun shoots back against cruise missiles). Yet, over time, smart money must be on precision weapons as they get faster, more maneuverable, stealthier, and more discriminating.

The trend in precision weapons is toward information-based control. Shorter range PGMs (e.g., TOW antitank missiles, or laser-guided bombs) require the targeter to be within sight of the target, thus at risk. These are being supplanted by PGMs that can acquire a target based on their own internal intelligence, and those that can go to a specific point (e.g., cruise missiles or JDAM bomb kits)—and, ultimately, to a track provided externally. Stand-off operations make shooters more difficult to spot and reach and give them time to hide or get back to shelter after they shoot.

All this shifts the basic wellspring of military efficacy from firepower to information. If seeing a target is tantamount to killing it, then seeing others and staying hidden become the two reigning requirements of combat. The U.S. military has, by far, the world's best eyes: from space-based sensors to aircraft such as AWACS, JSTARS, Cobra Ball (infrared), and Rivet Joint (signals intelligence), UAVs (for video and synthetic aperture radar [SAR] imagery), sea-based and counter-battery radar, and a host of unmanned ground sensors. By 2018, the U.S. military will be fusing the various bitstreams produced by such sensors into a unified picture of the battlefield that can be sliced and diced to the needs of any warrior. As for hiding, some U.S. forces can use stealth; electronic warfare and operating out of range are other protective measures.

The United States will probably maintain its long lead over rivals in illuminating the battlefield to its own advantage, but the underlying technology is already available to all. UAVs and medium-range cruise missiles are international commodities. Commercial space-based assets can take communications up and return one-meter imagery down. Everyday electronic equipment may have great military applicability (a 17-gigabyte digital video disk could hold the entire United States imaged to five-meter accuracy). Thousands of Third World engineers trained in core states can integrate piecemeal into systems. What results may not meet U.S. standards, yet the additional capability others get by buying off the shelf may exceed what extra benefit the U.S. military gets by pushing the envelope. Information technology enables a revolution in U.S. forces; a like empowerment in Third World militaries may compel U.S. forces to move forward.

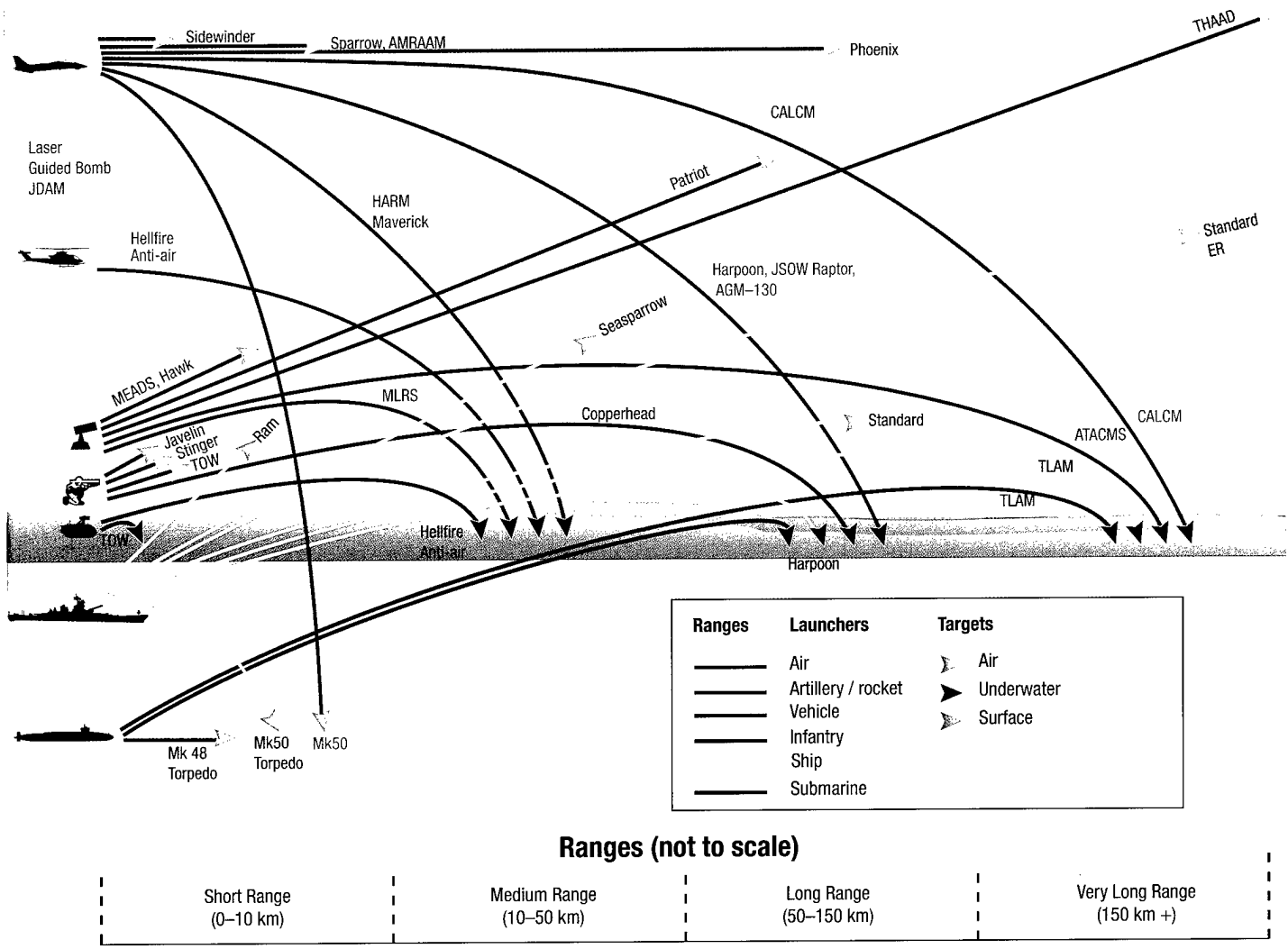
- **Reducing Cycle Time.** Information technology helps to reduce the time required to conduct operations, a critical factor when two cycles compete for primacy: taking advantage of suddenly vacant terrain; spotting and killing a SCUD launcher inside the time it takes to set up, fire, and take it down; and distinguishing between an innocent fishing boat and a hostile missile-launcher in a crowded port before the launcher fires.

Indicators of reduced cycle time are ubiquitous. It is becoming increasingly possible to rewrite Air Tasking Orders (a three-day re-planning process in the Gulf War) between launch and engagement. Tactical internets let armies disseminate orders more quickly, permitting faster responses to evanescent opportunities. A deft combination of networks and electronic tags permits lean logistics; depletions at the front are immediately reflected in production starts in CONUS, so the pipeline is always full—but with little waste.

- **Applications.** Information technology coupled with stand-off precision strike systems yields a mode of combat in which forces *scan* the battlefield, *sift* the few targets from the background, *sort* them by priority and weapon, then *strike*. Such warfare works better if terrain is open (e.g., air, sea, desert, plain, farmland), rather than closed (e.g., forest, jungle, mountain, swamp) or cluttered (e.g., city); in the latter, adversaries can hide or mask themselves as civilians. Dense terrain requires denser, more heterogeneous sensors. Separating targets from background in cluttered terrain requires a knowledge of things to be supplemented with a knowledge of habits and prior actions. But even in cluttered terrain, a good system helps by monitoring more of the terrain in less time; sending forces out against dangerous anomalies and massed units; helping forces interdict supply; and highlighting inevitable enemy mistakes in concealment that reveal them to be targets.

The RMA is more of an improvement in some domains than others. It will probably not suffice to make the U.S. public rethink its aversion to full-scale military intervention in messy conflicts. Yet it may allow U.S. forces to run the stand-off portion of the conflict, while the local friend (the adversary's intended victim, which has little choice in the matter) runs close-in aspects amply supplied with information and systems (with liaison) from the United States. Stand-off warfare should not be confused with hands-off interoperation. Current and foreseeable technology still means that making an ally's information systems work with the systems, forces, weapons, and doctrines of allies takes time, attention, and work—and will have to be performed over and over as technology and operations evolve.

Selected Precision Munitions

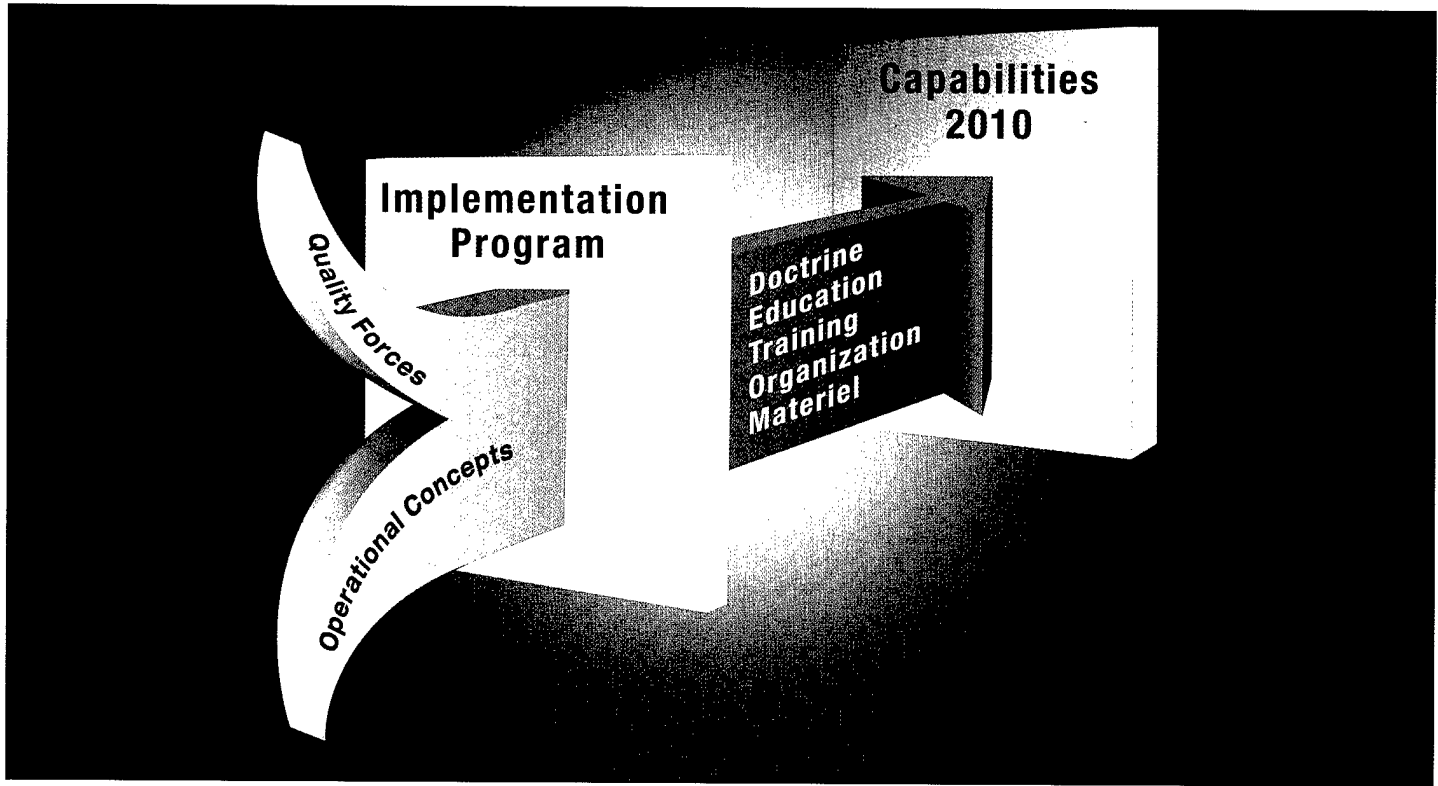


Systems

Over the last few years, some observers (such as Admiral Owens, former Vice Chairman of the Joint Chiefs of Staff) have argued that an emerging "system of systems" would link DoD sensors and weapons systems, enabling networks, databases, and what is often called the Revolution in Military Affairs (RMA). An ability to mix and match components within a broad defense architecture could contribute greatly to adaptiveness.

The adaptiveness of the System of Systems will rest in large part on how tightly linked its coherence is to any specific doctrine. One interpretation of *Joint Vision 2010*

envisions a typical scenario in which the United States gets involved by first sending out a panoply of sensors to overlook the battlefield. Interesting intelligence would be shuttled to fusion nodes staffed by intelligence analysts who translate bitstreams into targets. Moving targets would be posted to long-range attack aircraft, others to long-range missiles. Where discrimination is difficult or the risk of collateral damage high, small mobile teams (e.g., Rangers, Special Forces) would be inserted and supply the final go or no-go decisions. After stand-off strikes disorient and decimate foes, larger maneuver units storm in to put foes to flight.

JV2010: From Concepts to Capabilities

The temptation to build a System of Systems around such a doctrine is powerful. People prefer to counter knowable threats, determine their characteristics, devise countermeasures, and implement them in system design. How robust would such a system of systems be against the unknowns of the bleaker dimensions? War teaches the value of learning under fire and using lessons of individual engagements to come up with new ways to do business. Were doctrine hardwired into the System of Systems, the normal difficulties of changing complex software (e.g., the year 2000 problem) would aggravate and delay change and confound adaptiveness.

Larger

The need for adaptiveness calls into question the current preference for the complex, costly, hardened, and specialized systems that dominate defense acquisition. The assumption that foes can target neither sensors nor communications relays if they operate beyond 200 kilometers (e.g.,

JSTARS, Aegis, low-earth orbit [LEO] satellites) may not withstand serious challenge by a large foe. Less expensive commercial-grade items—especially sensors and off-board weapons—may be individually less survivable, but when networked may be collectively more robust. Communications will permit warriors to operate farther apart, but techniques to disperse ground command centers (with their copious electronic emanations) will have to follow if these centers are to survive.

Nastier

If the United States hones its ability to project force rather than forces, the role of information will change. Traditionally, intelligence prepared the battlefield by locating enemy concentrations and vectoring forces to encounter them. Technology is giving modern forces greater confidence in the ability to locate individual equipment

for precision strike. Exploiting such technology will require explicit attention to the requirements of battlefield illumination, not only in open but difficult terrain. Continuous, rather than intermittent, battlefield coverage will be needed to win contests between the U.S. cycle time (to spot, identify, and classify a target, assign it to a platform, engage the weapon, and hit the target) and the foe's (to emerge from cover, fire and move, and return to cover or bunker). Using such intelligence may require weapons that can be directed to a moving spot on the map (advances may be needed in geolocating image-identified targets). The combination of stand-off target acquisition and stand-off target prosecution drastically thins the need for forward projection.

Adaptiveness cautions against placing too great a reliance on looking for the expected. One common method of identifying adversaries is to generate a template of their assets and habits and then match sightings to them; this helps in interpreting electronic intelligence and defeating cover, concealment, and deception. Granted most rogue states use equipment of Russian design or manufacture (and in accordance with Soviet doctrine), but what if a nasty foe were to

adopt a cheap RMA by outfitting itself with commercial goods (or close derivatives) and use them according to commercial, rather than military, logic? Templates and doctrines hard-wired into intelligence and engagement systems might fail to recognize ground truth on the battlefield.

Against a nasty foe that would attack U.S. ability to project power, the United States would need to counter strategies to disconnect components of the System of Systems. Threats include the physical destruction of nodes and links, electrical shock (e.g., EMP), jamming, and computer hacker attack. Hiding and hardening techniques can mitigate the risk of physical destruction and electric shock. Jamming can be countered by many techniques, including beam focussing, steerable antennae, spread spectrum, and redundant encoding. Hackers can be stymied by cryptographic methods, semantic- and protocol-level firewalls, anomaly-monitoring software, and the use of read-only media. Redundancy, in number and niche (e.g., different systems would operate at different frequencies or use different protocols) is another approach, one that, incidentally, favors an

Making Systems More Adaptive

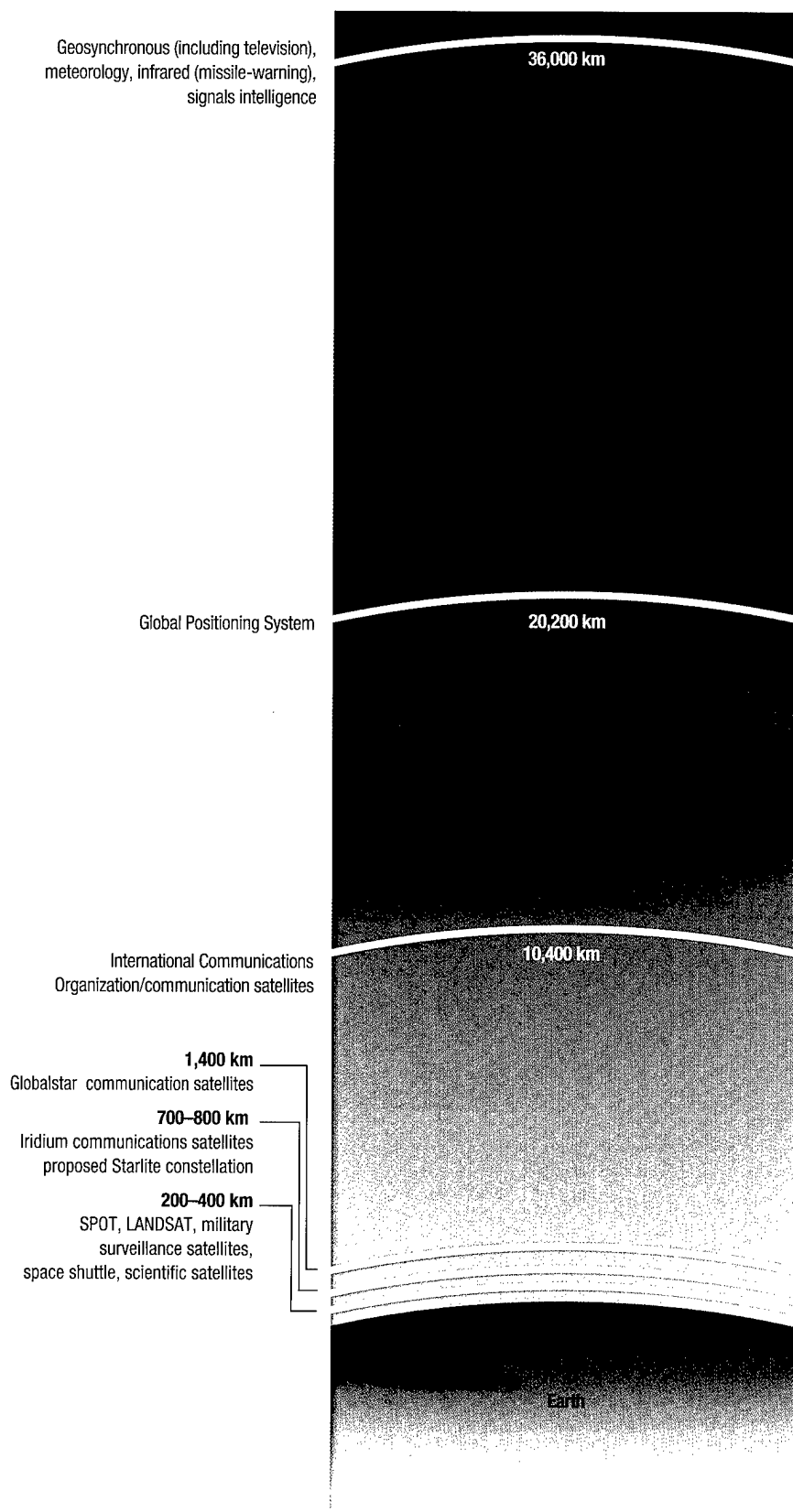
Some ways to make systems more adaptive are traditional and well understood:

- **Multifunctionality.** The Navy's Phoenix missile, the Air Force's B-1B bomber, and the Army all-source analysis system (ASAS) all were built to defeat dominant threats (Soviet naval aviation, air-defense systems, and tank operations, respectively). So highly tuned were they to the Soviet threat that, with its collapse, they proved less useful. Tomorrow's weapons systems need more generic capabilities.
- **Robustness.** A system needs to be able to degrade gracefully—that is, it must remain useful even after several features have been compromised by unexpected counters (e.g., information warfare).
- **Logistics.** The more easily a system can be transported, operated, and kept in repair under austere conditions or away from maintenance facilities, the more situations it is useful for. Systems that only specialists can work lose value if specialists are unavailable.

Other ways to enhance adaptiveness are newer:

- **Nonlethality.** The growing frequency of operations other than war (coupled with the ubiquitous presence of the media) has made a virtue of being able to control people without harming them. Nonlethal systems could have antipersonnel features (which incapacitate people or, at least, persuade them to leave), antimaterial features (which can dissolve rubbers and plastics, convert gasoline to gel, slick roads into impassability), and antielectronics features (e.g., high-powered microwaves, electrical shorts).
- **Interoperability and composability.** Jointness, networking, and the potential of data fusion all put a premium on designing systems that can be used with one another. Today's systems, by contrast, often wrap sensor, processor, communications channel, database, and workstation into one hardwired complex. Information would be more easily shared if a system's functionalities (e.g., sensor, processor, and display) were designed as standard modules. Interoperable systems facilitate the assembly of joint and combined task forces.

Satellite Vulnerability



agile, distributed network over a few complex platforms.

Adaptiveness often means making do with less connectivity. Warfighters can be trained to function under both copious and austere information conditions (as the Marine Corps is doing). Substituting mission-type orders for a commander's fingertip control has many advantages (even when links are secure). Filtering out low-priority messages and repeating critical ones help cope with constrained links. Images can be compressed or replaced by symbols and drawings. Bulk data can be deployed forward (e.g., digital video disk, CD-ROMs). Precise mapping, pseudolites, and inertial measurement systems can mitigate the loss of GPS.

Messier

Adaptiveness can also be fostered by pushing information down into the ranks so that operations can be devised and carried out within smaller units.

Meeting the canonical invasion (e.g., 15,000 pieces of equipment rolling over relatively easy terrain) by maneuver in corps is the basis for the organization of ground forces. The digitized Army empowers battalion-level headquarters with powerful tools—such as the maneuver control system (MCS), the all-source analysis system (ASAS)—and ties lower echelons into these tools by feeding soldiers maps and command-menus from higher level systems.

Yet much of this equipment remains too expensive, heavy, or just too rare for mobile field use. In Bosnia, although headquarters were richly supplied with data, information available to ground units below the division level was not appreciably greater than it was 20 years ago. Messy situations, by nature disorganized, often call for a capacity for context-related situational awareness and operational planning at the company level (roughly 200 persons) or lower. Without greater participation in the digital infrastructure, warriors will of necessity revert to stubby pencil work, guesswork, and learned doctrine.

To influence the evolution of messy but hazardous situations, U.S. forces may need to leverage their information superiority through local forces. Sharing intelligence

with allies and coalition partners (e.g., in peace operations) remains an ad hoc art, and even though no technology prevents sharing battlefield illumination at the rate of a billion bits per second, planning for plugging foreign forces into U.S. information flows is still embryonic. If nothing else, such adaptation must reflect the fact that local allies, especially in underdeveloped nations, start with different equipment, their own doctrine and rules of engagement, a reduced capability for either stand-off or precision warfare, and less advanced logistics systems.

A System of Systems

Those possessing only hammers tend to see the world as nails. A system optimized to confront armored invasions may see them in any environment, even one with other driving factors. At best, the system will be useless and the U.S. advantage in dominant battlespace knowledge vitiated.

At worst, conclusions drawn from the automated processing of bad data can drive out intuition from close experience.

Militaries composed of agile warriors can confront the unexpected and learn to use their tools as appropriate (e.g., when helicopters assume roles assigned to tanks). But as more responsibility is placed on information systems, those systems will need to be more agile. Building flexibility into a software-dominated system is complex, and its ramifications can only be discovered by experience. An adaptive system of systems would look to knowledge-processing, open construction, natural-language capabilities, and bottom-up systems integration for robustness and would require more from users consistent with giving them greater freedom. Such a system may be harder to build and control (although perhaps easier to manage). It may

Space and Adaptiveness

The use of space was once limited to a few advanced nations, but now even developing nations use it as a medium for global information collection and exchange. The United States is especially dependent upon space capabilities today for military uses, but also for economic, diplomatic, political, and social uses. Its global economy, international transfer of funds, telemedicine, telecommunications, conversations between world leaders, diplomats, scientists, and educators are dependent on operational space capabilities. Decisions about the environment such as knowing where to plant crops or where to replant the Amazon River Valley are enhanced by use of space capabilities. This carries implications for U.S. national interests as well as national security interests. As more militarily useful space capabilities are developed, the United States becomes increasingly dependent on them, which, in turn, translates into a recognizable vulnerability to potential adversaries.

Because satellites are more vulnerable to antisatellite weapons the lower they fly, they face a tiered vulnerability. Low-earth orbits support today's surveillance and tomorrow's communications (e.g., Iridium, Teledesic). Medium-earth orbits support today's navigation and tomorrow's communications (e.g., Inmarsat's ICO) and could also be used for continuous surveillance (four Hubble-class telescopes in a medium-earth orbit could depict most of the globe at two-meter resolution). Geosynchronous orbits support early warning, meteorology, and communications. Detailed ISR and low-power communications are most vulnerable; navigation and continuous ISR the next most; and high-power communications, early warning, and weather the most survivable. Other threats to the effective use of U.S. space assets include disruption (e.g., through jamming) as well as attacks on ground stations and other uplink and downlink components. Practically speaking, without access to space systems, U.S. forces would be lost, blind, and out of touch, and the economic and social fabric of the nation would be frayed.

Attacking U.S. space assets is not easy. Direct antisatellite operations require spacelift capability, which few outside the nuclear league possess. It takes a decade or more of concentrated work to build it from scratch. Even among spacefaring nations, antisatellite operations have yet to be perfected. However, exotic space weapons (e.g., directed energy weapons such as lasers, radio frequency, or high-power microwave systems; direct ascent or co-orbital kinetic energy weapons) are not needed to degrade space products and services. An adversary need only put debris in orbit in such a way that intersects other satellite orbits to have an effective, albeit nondiscriminating, antisatellite system. Information warfare techniques, such as logic bombs and Trojan horses or electronic warfare that severs links to space systems, can also be just as effective as high-technology space weapons. Whatever the method, the attack is likely to precipitate a U.S. counterattack, so a foe's first strike, given the consequences of failure, must be decisive.

Four responses are possible. First, the United States could launch satellites that are stealthier. Nevertheless some satellites must radiate power to earth and so will be hard to hide. Satellites could also be hardened, or configured to shoot back. Second, the United States could field enough satellites with overlapping coverage so as to withstand the loss of a few satellites (or keep enough spares on-orbit and move them into

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place as needed). Third, the United States could develop a rapid reconstitution capability. Very small satellites, capable of reaching orbit using rockets mounted beneath the wings of large aircraft, could support communications and surveillance. The potential vulnerability of launch sites to terrorist attack suggests that alternative launch mechanisms may be an attractive option for their own sake. Fourth, substitutes could be found for satellites: pseudolites placed in precise locations can substitute for GPS signals (and by 2018, much of the world will be mapped to one- to five-meter resolution); UAVs can provide surveillance and reconnaissance; fiberoptic lines (which might be streamed to the front) can provide long-haul communications. But these are highly imperfect substitutes (e.g., their use would require considerable software to be rewritten). There is really no good alternative to a vigorous presence in space.

U.S. military planners may also have to adapt to the strong possibility that adversary access to space may make forces visible and thus vulnerable in new ways. Commercial imagery with 1-meter resolution will be available commercially within a few years; 3- to 5-meter resolution is already on the market. Commercial-grade GPS services are open to everyone. Adversary access to communications constellations may complicate U.S. efforts to impede adversary command and control. As space capabilities become more sophisticated and accessible, they can be exploited by potential adversaries with minimal investment: networks, software, and computers. Arrangements in advance with allies and other spacefaring nations to deny rogue states the use of space may protect U.S. forces. Yet, with 500 satellites already in orbit, and an estimated 1,200 to 1500 possible over the next 10 years, adversary access to space will become easier and denying it will become harder.

Ought the United States to pursue space denial capabilities? Jamming and attacks on ground receivers are clearly legitimate, and information operations may be a routine feature of future warfare. The United States is developing some antisatellite capabilities. Yet, any decision to use such a capability must be carefully weighed. The United States could target adversary space assets, but many foes will rely on third-party assets, and it may be hard to know which assets are being used by whom and for what purpose. Even friendly countries may not want to let the United States know of its commercial arrangements with "customers." Absent such information, it is difficult to develop a space denial strategy.

Although space is not a region in the sense that, say, Europe is, it is a region of national strategic interest with unique characteristics. U.S. policy can seek to shape how the region of space is used and protected. International engagement on space policies and issues between the United States and other spacefaring nations via the United Nations, through country-to-country contact, or via dialogue with space consortia (e.g., the European Space Agency, the International Telecommunications Union, Intelsat, Inmarsat), will help shape and influence the international space environment. As outlined in the National Military Strategy, the United States can promote trust and confidence by encouraging measures that increase national security and that of allies, partners, and friends through our military contacts, international military education and training, and the sharing of information from space capabilities. In addition, cooperation among the U.S. Government, allied nations, and commercial players can inhibit the ability of rogue actors to enjoy unfettered access to space. Conversely, deterrence can be used to dissuade others from attacking U.S., allied, and commercial space assets.

not be more powerful—indeed, it would probably be less efficient at any one task because it must accommodate more heterogeneous input—but it would span a wider range of operational contingencies and should cope with heavy information warfare: physical, electronic, and rogue code attack. Such a system would be an expression of the point in scientific history when lessons from biology begin to cross paths with those from physics.

Conclusion

Adaptive institutions are characterized by broad rather than focussed capabilities, competing points of view, flexible rather than fixed doctrine, and the potential to grow by mobilization and linking with partners. Adaptive systems are open to new capabilities, robust under expected

stress, highly reconfigurable, relatively unstructured, and interoperable to facilitate mix-and-match recombination.

Adaptiveness is not free, and preparations made to adapt in one direction may not necessarily favor others. As it is, foes do not grow large overnight, and, if they do, the problem of scaling up existing assets and institutions is relatively straightforward. Messy situations, when they cannot be avoided, can be countered by an incremental shift in emphasis from conventional forces to those even now dealing with small-scale contingencies. But a truly nasty foe will require a response that stresses the adaptiveness of U.S. institutions and systems, which will involve long-run processes.

Future Posture

Decisions about where U.S. forces are placed in peacetime reflect many factors. U.S. forces shape environments, as observed in chapter two. The fact or the promise of their presence in a region can dissuade local bullies from aggression and reassure friends of their own security and of the U.S. contribution to it. Confident friends are likely to create military capabilities complementary to, as opposed to competitive with, those of the United States. A benign successful core suffused with U.S. presence can promote defense reform and, thus, a peaceful global polity.

Yet, the specifics of posture—who, where, when—must also reflect operational considerations: how to concentrate more power faster where needed than potential foes can. To have the wrong people in the wrong place at the wrong time means that operations take longer and cost more in terms of lives and resources. Poor posture may thereby affect the course and even the outcome of conflict.

As the United States shifts its posture over the next 20 years it must respond to the changing nature of the threat. But posture also has aspects that necessarily respond to operational factors. One is the proper mix of in-country, off-shore, and

virtual (i.e., based in the continental United States) presence. Another is the tradeoff between concentrating capability in a few places and distributing it widely but less thickly. These two are the subject of this chapter as viewed through the lens of the necessary (e.g., larger, nastier, messier challenges), and the lens of the possible as influenced by, among other factors, information technologies.

The Logic of Posture

In business, operations are located in a site that minimizes costs for a particular level of throughput. To some extent, decisions about military posture can be made on a similar rationale. Yet, militaries are ultimately judged not by efficiency but efficacy, whether they can protect the nation and its interests. A peacetime military ordinarily postures itself for wartime contingencies. Given enough time, the United States can put enough manpower and materiel anywhere, but early operations are particularly influential because they can:

- Frustrate an aggressor's snatch-and-settle gambit
- Limit damage to an ally or the forcible conversion of its resources into opposing strength

- Strike while an enemy is moving (thus easier to see)
- Strike an enemy's homeland from closer points
- Provide intelligence that might later be unavailable
- Help U.S. forces build a springboard for counteroperations (e.g., the Pusan perimeter).

And the promise of effective early operations can deter aggression more than might the prospect of eventual defeat (in time the United States might tire), and thus persuade allies to become cooperative, reliable partners. As such, posture decisions for the United States must logically respond to deployment requirements.

How much time the United States will have to move forces into combat will depend on the warning time available. Sometimes forces can be put on alert or sent forward on warning (e.g., what might have been a Soviet move to the inter-German border). But the warning must warn; preparations for invasion often look like raids (e.g., North Korea before the 1950 invasion), feints (e.g., Egypt prior to crossing the Suez in 1973), or exercises (e.g., Iraqi "maneuvers" prior to the invasion of Kuwait in

1990). When the ambiguity of possible precursors is added to the cost of rushing to the ramparts, leaders prefer direct evidence—especially if overt response to ambiguous information might provoke a conflict that might otherwise be avoided. Waiting leaves less time to react. Where terrain is open, important objectives lie near the border, or and where local defenses are weak, the United States must respond more quickly in order to influence the outcome. Transparency is a way to buy time, thus becoming a substitute for being close. If the United States can see a potential aggressor more clearly, it can more easily identify indications and warnings—positively (to move earlier) or negatively (to avoid moving at all). Deploying sensors rather than moving forces in response to a crisis tends to be less provocative.

A posture decision involves not only where, but what: operational units, logistics, or C⁴ISR elements. Should the United States own the facility outright (and, if so, under what restrictions) or as part of an alliance (e.g., NATO), lease it (again, under what restrictions), or only gain rights to it? What role should private contractors and their facilities play? Should units be assigned there permanently or rotate? What kind of transit rights should the United States seek? What kind of radio frequencies can it use in the neighborhood? Logistics, too, are part of U.S. force posture. The Berlin airlift of 1948 resolved a crisis without war. Intermediate U.S. basing (e.g., in the Azores) permitted rapid resupply of Israeli forces in 1973. On-site and off-shore capabilities help in the transfer of materiel to friends who may neither need nor particularly want to see U.S. forces (e.g., Israel during the Gulf War).

Finally, the overall posture of the United States has to be considered part of an integrated *system* that cannot be easily analyzed as individual parts (even if Atlantic and Pacific facilities can be considered separately). Forward presence in one zone may require support facilities stretching back to CONUS. An air base here may obviate the need for a similar facility there.

The Cost of Forward Deployment

Usually, the cost of stationing a soldier overseas rather than at home is higher, because of support requirements (social and physical infrastructure that must be replicated overseas), the expenses of moving and transportation, and the psychological burden of imposed separations and disrupted family life. Some nations have charged the United States rent, explicitly or implicitly (e.g., though foreign military assistance). Some overseas postings, however, are considered an inducement to military service, and some nations (notably Japan and Kuwait) defray the costs of U.S. overseas postings.

On the other side of the ledger, a military on constant or recurrent deployment can realize savings from operating forward. The expense of supporting no-fly zones in Bosnia and northern Iraq was eased by having bases in Aviano, Italy, and Incirlik, Turkey. Not having bases in the Persian Gulf added \$20 million a month to the cost of Operation *Earnest Will* (the Kuwaiti oil-tanker reflagging operation). Another consideration is that bringing together U.S. and allied forces for joint training is cheaper and easier if U.S. forces are already there (although allies could come to North America, as the Germans now do).

What would be most cost effective if rapid deployment were not an issue? Although some countries are generous hosts, with basing costs running to several billion dollars a year, the economics tend to favor keeping forces at home and transporting them as needed.

Lessons from World War II and Cold War Basing

Before 1939, the United States had a thin basing structure with one string extending to the Canal Zone and another past Honolulu to the Philippines and Shanghai. World War II led to the largest basing expansion in the history of the world, first to support Allied shipping to Britain, North Africa, Australia, and the China-Burma-India theaters, then to support operations in the Mediterranean, France, and the Pacific Islands. By 1945, 3,000 new bases had been built.

This U.S. basing structure proved dynamic and sensitive to changes in conditions and technology. As the threat to shipping receded, for instance, intermediate bases in, say, South America and Africa were judged redundant. Aircraft operational ranges determined the best distribution of bases, even though aircraft accounted for only 1 percent of goods and 3 percent of human transport. But planners could not bring themselves to rely on projected, rather than actual, operational parameters. Iwo Jima, assaulted mainly to secure basing for the shorter range B-25s, might have been avoided had planners bet (correctly) that the longer range B-29 would be available by July 1945.

Half the World War II bases were closed by 1948 as some friendly countries sought to reassert national control over their lands. Others were closed later as some countries (e.g., China after 1949, Libya after 1970) turned hostile. The base structure of the Cold War reflected the containment policy against the Soviet Union (and sometimes China) and the continually longer legs of U.S. aircraft. The key bases were all far forward, rather than strung from the United States outward. Events such as the Korean War and France's withdrawal from NATO had important secondary effects. By 1988, half the overseas bases used by U.S. forces were less than 40 years old.



Berlin Airlift

The Necessary

There are still places in the world—the Persian Gulf and South Korea—where an invasion without warning may be undertaken to attain important military objectives, but such threats are less urgent than 10 years ago. North Korea is weak and may not last until 2018. Russia is two-and-a-half countries farther from the Rhine than in 1988. China, a potential major threat, does not share many easily crossed borders with nations the United States might defend. With the end of the Cold War, fewer wars can be reasonably described as proxies for a larger struggle (much as the Korean War was seen as a harbinger for a possible Soviet thrust into Europe).

Many invasions do not mandate a direct U.S. military response: border disputes not affecting U.S. interests (e.g., Libya versus Chad); places with little strategic value; and circumstances either too difficult to handle directly (e.g., Afghanistan) or where victims are at odds with the United States (e.g., Vietnam's invasion of Kampuchea in 1978) or might welcome liberation (e.g., India's move into East Pakistan in 1974). In

the expected world of 2018, a few forces in or near the Gulf, and, for the moment, in Korea, might suffice.

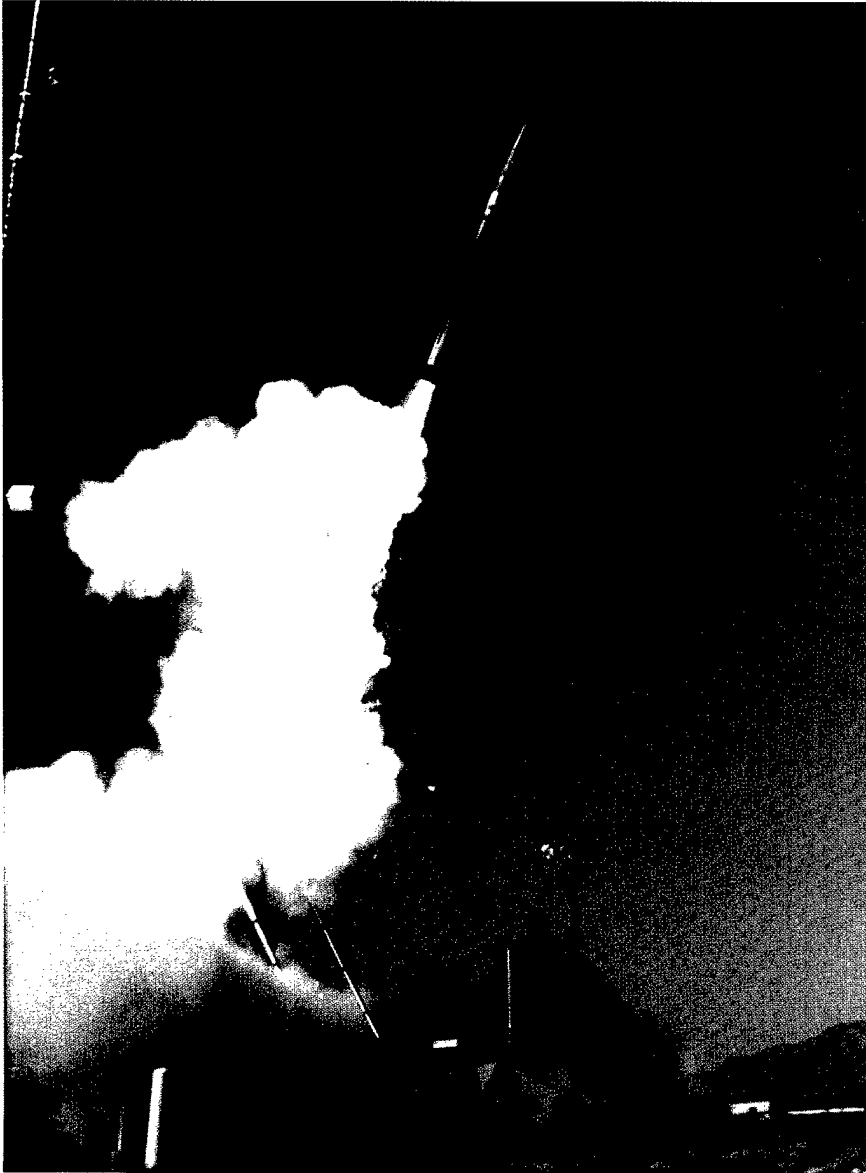
But what if the international security environment deteriorates?

Larger

If the United States were to find itself oriented against a theater peer, it would want forces arrayed accordingly. To create a new military base may be viewed as provocative and potentially dangerous if the theater peer is strong enough to do something about it (e.g., threaten the host country before U.S. power can arrive to stiffen resistance). Expanding or upgrading key facilities incrementally as a threat grows or becomes increasingly evident may raise fewer hackles (particularly if no threshold exists where crossing one could create a fuss).

The rise of a theater peer raises the importance of having friends and the ability to work with them. Today's force posture should reflect the need to support:

- Joint exercises, to encourage mutual familiarity and to test the compatibility of operating practices and rules of engagement



THAAD launch

- Adaptation of U.S. equipment to the host nation's infrastructure, including, at times, leaving equipment behind to facilitate a rapid reintroduction of force
- Melding the "system of systems" with compatible equipment in other nations.

Nastier

A smarter foe that could impede lines of communication and hold bases and debarkation points at risk with weapons of mass destruction (WMD) or smart weapons could cause the United States particular difficulties with power projection. Redundancy in communications and operational areas, however, offers flexibility against this contingency, as would preparations for operating by standing farther back.

WMD may pose a special problem. Against nuclear weapons, no base is likely to survive (without a leakproof theater missile defense), but equipment may survive most biological and chemical weapons. A lightly manned but otherwise well-provisioned facility (a pre-positioned capability, as it were) that can be reentered rapidly might be more robust than a heavily manned base from which forces operate.

Messier

A series of messy situations in unpredictable places requires the ability to move light forces and associated logistics with C⁴ISR support into and out of area quickly. Chances are that if the world should become sufficiently messy it would be because of broad forces (e.g., the rise of a messianic ideology, environmental catastrophe, global trade war) that affect many

Theater Missile Defense as a Posture Decision

Seemingly modest differences in performance capabilities among competing systems may have wide ramifications for posture. Consider theater missile defense. The current four-layer architecture envisions strikes against missile sites, airborne lasers to kill missiles in boost phase (a program still in the early stages), upper tier missiles for the trajectory phase (a program being tested), and terminal missiles for the descent phase (an ongoing program of upgrades).

Two programs compete for the upper tier—the Navy area-wide standard missile and the Army theater high altitude area defense (THAAD) system. It is unclear whether both programs will go ahead.

Assume, now, that a continental power threatens an island friend of the United States. War has not broken out, so U.S. forces cannot hunt for launchers in country or deploy airborne lasers inland (and thus can do little against missiles launched from deep within national territory). If the United States were to support its island friend, it would have to rely on upper and lower tier missiles—preferably upper tier if the incoming warhead



DMZ Korea

Photo: AP/Wide World Photos

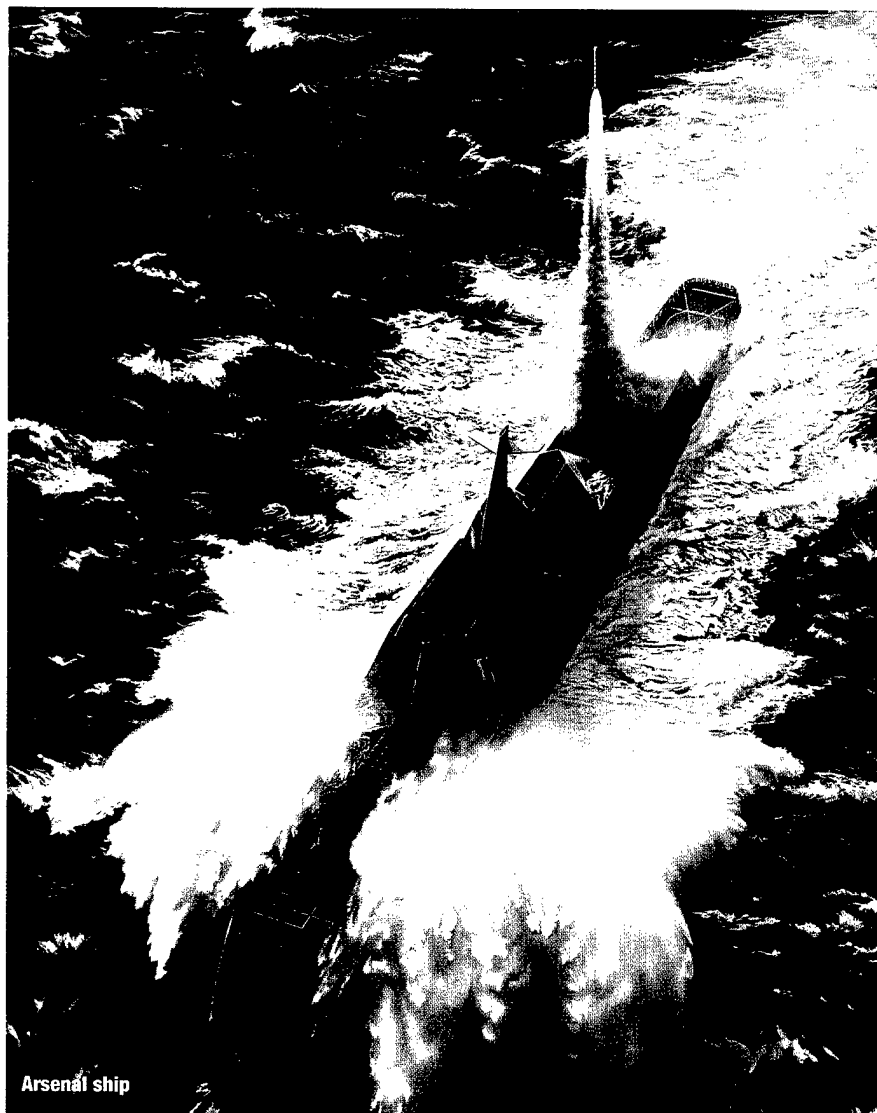
places at once; chaos will be widespread. Concentrating capabilities in any one location may be less useful than dispersion, deployable capabilities, and lift. Should a large-scale noncombatant evacuation (NEO) or the restoration of national services come to matter, the need for rapid re-deployment of essential infrastructures

will call for facilities that can be taken down, transported, and turned on quickly.

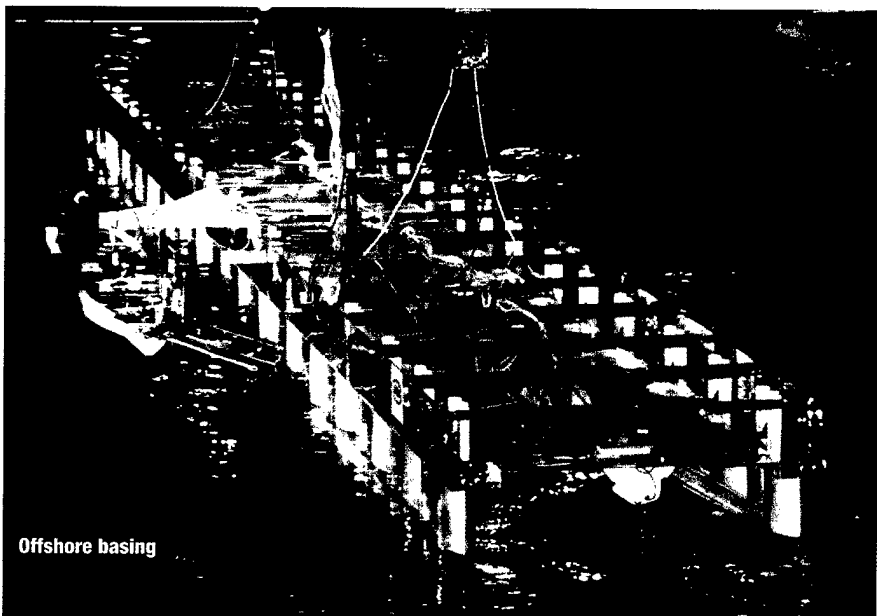
The core could respond to a messy situation by identifying what it values most and protecting it (as opposed, for instance, to an evacuation or broader remediation strategy). If so, force and facility protection issues will arise. Otherwise, it must deal with

carries poisons. But which one? If THAAD alone were to survive, the United States could offer to base THAAD on the threatened island. This would put the island's government on the spot. It may see deployment as provocative—a prelude to war and public reconfirmation of its defense link to the United States, the continental power's special foe. Thus the island's government might reject THAAD deployment, leaving itself vulnerable and more easily swayed. Were the Navy area-wide Standard missile to survive, the United States could deploy missile-carrying ships into international waters without anyone's say-so (just as it moved two aircraft carriers into the Taiwan Strait in March 1996). The island's government, under U.S. protection, could take time to sort out its position. Unless the United States wants to force the island's government to declare itself, ship-based missile defenses have important advantages.

Upper tier is only one component of the four-layer defense, and engagement systems are but one part of a complex antimissile architecture that includes early-warning sensors, peripheral sensors, threat processors, civil defense (including NBC detectors) and complex command-and-control arrangements, many of which extend into the host country. A first response to a threat may be not moving hardware but seeing to technical and operational interoperability of equipment and hierarchies.



Arsenal ship



Offshore basing

New Concepts for Off-Shore Presence

The collapse of the Soviet Empire eliminated the blue-water challenge to the U.S. Navy, which therefore turned its attention to power projection on shore and the supporting technologies. Two emerging concepts are mobile off-shore bases (MOBs) and arsenal ships.

A MOB is like a small floating island, with a 1,600-meter runway (for C-17s and other cargo aircraft) alongside port facilities, C⁴ISR assets (e.g., UAVs), logistics transfer equipment, weapons bunkering, and related inventory. With room for 10,000 troops, a MOB can provide staging facilities. By operating for years in a given region (e.g., outside the Strait of Hormuz), it could magnify the staying power of the fleet without requiring local access rights.

An arsenal ship with Sea Tactical Missile Systems (TACMS) (200-km range) and cruise missiles (2,500-km range) could provide firepower from far away, much as the battleship traditionally did from within 40 kilometers. Stand-off range makes ships harder to hit even if found, while features that reduce the ships profile and other facets of its signature (e.g., coatings, geometries) frustrate finding it. Extensive automation can reduce manning levels to 50, in contrast to the typical complement of a battleship of over 1,200. The chief alternative to the arsenal ship is the submarine with its proven design and stealthiness. But at a billion dollars apiece, submarines cost twice as much as arsenal ships are expected to, their load-out is smaller, and they cannot host tactical rockets.

MOBs and arsenal ships remain concepts, with neither fully supported by funding streams. They make sense as long as the threat to ships comes from mines or volleys of short-range land-based cruise missiles. Yet as (not if) cruise missiles and diesel submarines proliferate and gain range, more of the cost of a MOB will go to self-defense. Arsenal ships are harder to find (yet a swarm of UAVs equipped with synthetic aperture radar could search the ocean and look for an absence of expected waves) but easier to damage. In the long run, neither MOBs nor arsenal ships are foolproof for off-shore presence—but the long run could be 20 years away.

the fact that while infrastructure is burgeoning elsewhere in the world, it may actually be deteriorating where most needed militarily (e.g., in former Zaire). A protection strategy must necessarily be a broad rather than focussed program that provides security, hardening, and connectivity.

The Possible

Power projection is rapidly evolving. The model of inserting ground forces has already been amended to include air power and will soon include information power. Because the United States cannot be everywhere with everything, it must mix and match forces to offer the most presence for the least cost. Take the broad issue of on-site, off-shore, and CONUS-based presence.

On-site presence is responsive but expensive, both in dollars and lost flexibility. Being on site permits contact with enemy forces in minutes or hours. A local missile defense can engage an opening salvo of ballistic missiles. Even if war starts elsewhere, forward-deployed forces (e.g., in

Europe) often are closer to the ultimate objective (e.g., the Persian Gulf) than if they were in CONUS. But being *here* makes it harder to be *there*. If storm clouds rise, the United States may want to redeploy forces—but if the world is generally inching toward crisis and everything is clouding over, host-nation objections may frustrate moving forces away to where they may be more needed.

Off-shore presence—a combination of naval assets and air assets projected from nearby bases—offers greater flexibility. Because new technologies make it possible to measure the effective radius of off-shore presence in thousands of kilometers, broad regions can be covered with fewer assets tied to any one spot. Off-shore presence is also a more flexible instrument of U.S. power because it is less likely to be constrained by host nations. But apart from long-range strikes (e.g., by cruise missiles), reaction times are measured in days, not hours or minutes, whether by an Aegis

Presence and Nuclear Weapons

Physical presence is often assumed necessary for military power to be credible. Nuclear weapons, however, are a clear exception and this exception may speak to tomorrow's conventional warfare.

By 1960, intercontinental ballistic missiles (ICBMs), nuclear ballistic missile submarines, and the refinement of air-to-air refueling allowed the United States to maintain nuclear forces without any overseas bases. Yet it *did* maintain a forward nuclear presence: on surface ships, in air bases, and with Army units in Europe and Korea. Although these weapons added fractionally to the country's total nuclear punch, deployment was designed to weave a seamless fabric of deterrence that stretched from conventional forces through tactical nuclear capability to strategic systems. Extended deterrence reassured allies and complicated Soviet military planning. Unfortunately, it also complicated U.S. military planning, and many analysts raised concerns about command and control over such weapons should war erupt.

Since the mid-1980s, attributes of strategic systems have crept into conventional systems. Some strategic systems, such as long-range bombers, space surveillance, or high-altitude reconnaissance, have been adapted for conventional roles. Cruise missiles can also carry conventional warheads. The ultimate expression of this capability could be an infrastructure of ICBMs, each filled with hundreds of antiarmor projectiles, standing alert against a canonical invasion (pending ways to distinguish such a launch from a nuclear strike). At the \$20 it now costs to loft a gram into low-earth orbit, such a system may be too expensive for tactical missions. But billions are being invested to drive the \$20 per gram down to \$5 to \$2, where such a scheme may become cost effective (as long as their use does not look to others like a nuclear attack).

Even if such a scheme proved worthwhile, long-range strike, nuclear or conventional, remains an instrument of dissuasion, rather than control. The nuclear analogy does, however, suggest precedents for the psychology of virtual presence. Consider Bosnia: during the 1995 Dayton talks, U.S. negotiators used software to overlay source-based terrain and imagery data to make a technical point (the width of the corridor connecting Sarajevo and Gorazde, which had been behind Serbian lines). The same information served to convince the Serbs that where they lived was nakedly visible to NATO. This visibility was reinforced repeatedly during IFOR operations, as suspected weapons dumps were photographed by Apache gunsight cameras with cross-hairs plain in the pictures handed over to their owners. The psychological effects of having to fight exposed may well have convinced the Serbs to leave the IFOR/SFOR peacekeepers alone.

ship providing radar coverage for missile defense, a carrier with attack aircraft, or a Marine detachment coming in over the shore on V-22s. Continuous naval presence requires an initial investment of about \$50 billion (for the three carrier battle groups required to keep one carrier continuously on-station) and an ongoing operational budget of \$5 to \$10 billion a year—and the seas do not reach everywhere.

CONUS-based or virtual presence is the most flexible of the three in that it presupposes the least about where trouble may break out. Long-range bombers can respond within a day, although their capability is limited. If in-theater C⁴ISR is thin, the only

targets that can be effectively targeted will be fixed facilities, dense troop concentrations, or very obvious, slow moving platforms. Close air support or close-in combat forces would be out of the question.

Operations and basing are closely linked in that the shorter the range at which one would fight, the more important it is to be near where the next front line might be. Conversely, if one would operate from around the world, there is no need to take the risks of placing vulnerable facilities far forward. A combination of distributed basing and medium-range (e.g., 200 kilometers) engagement distances can cover a large swath of the world to a roughly equal degree without having to take the effort and, worse, time to move forces.

Four parameters influence the optimal mix among these three models of power projection: deterrence, logistics, long-range strike, and C⁴ISR. Deterrence and logistics affect the ability to project *forces* forward, whereas strike and C⁴ISR speak to projecting *force*.

Deterrence

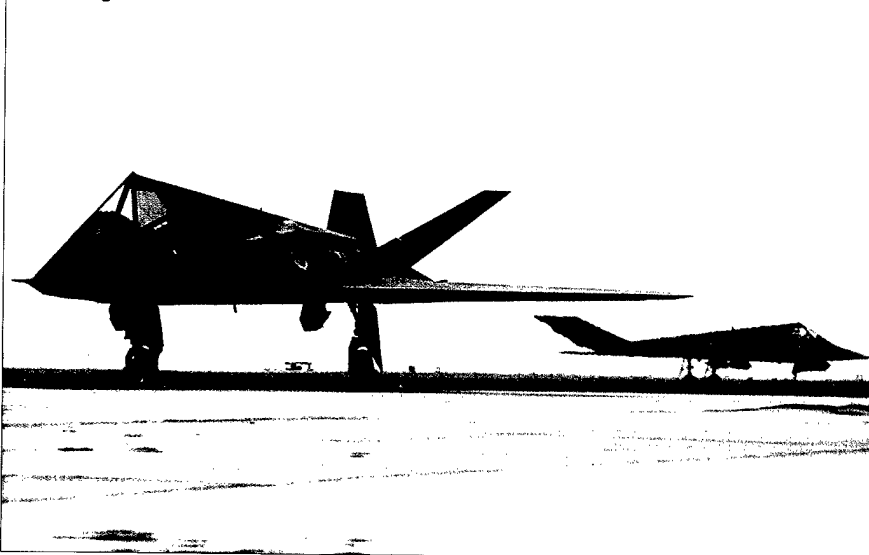
Because others perceive that killing American soldiers would bring the full military power of the United States into combat, being on scene is often held to have deterrent value. But what, in fact, actually deters? Unfortunately, only the failure to deter can be known for sure. Measuring

Information Technology and Logistics

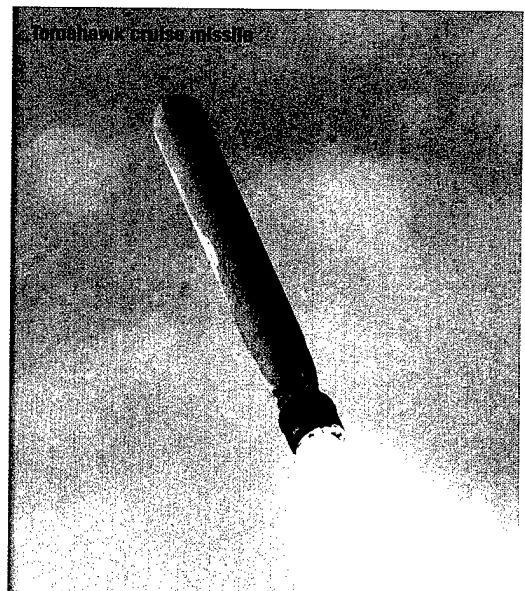
Information technology can make logistics leaner. Global networking, software to support logistics anchor-desks, the Total Asset Visibility program, radio-tagging of reparable items, and containerized cargoes all make goods in transit easier to trace. This reduces re-supply time (up to 60 percent in test cases in Bosnia) and the amount of logistics that must be kept forward in potentially vulnerable locations. Although a perfectly taut pipeline conflicts with the real-world need to buffer against the frictions of war, modeling and simulation should tell logisticians how to cover contingencies with the least overhang.

Information technology can help disperse logistics by making a network of smaller supply centers work almost as well as one big one. A related challenge is integrating U.S. logistics systems (and those of coalition partners) with facilities of a host nation. Standardization helps (e.g., for networking, electronic commerce, database manipulation, measurement, and product description).

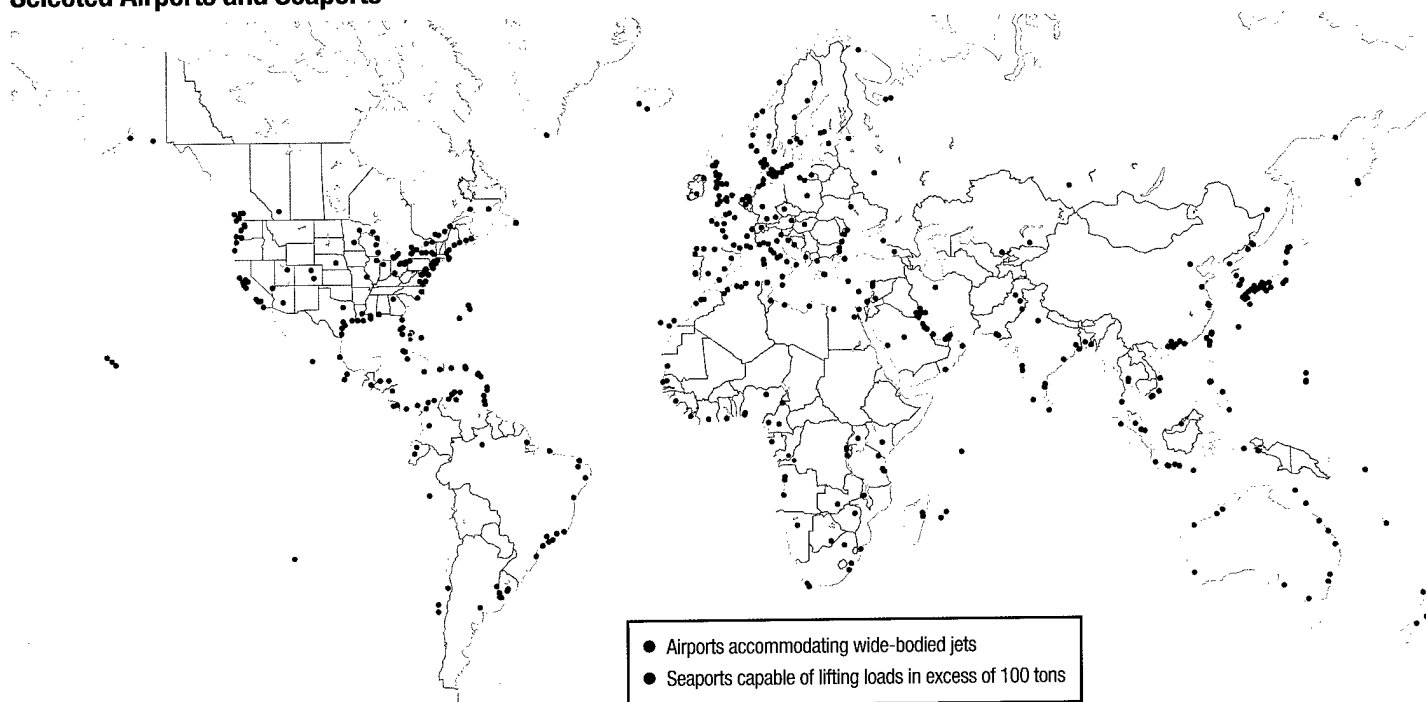
F-117 Nighthawk



Tomahawk cruise missile



Selected Airports and Seaports



SOURCE: Defense Mapping Agency, *Official Airline Guide*

NOTE: Wide-bodied jets include Boeing 747 and 777, McDonald-Douglas DC-10 and MD-11, Lockheed L-1011, Airbus 340, and Ilyushin IL-86.

A Burgeoning Global Infrastructure

A growing consideration in optimizing tomorrow's force posture is the world's expanding infrastructure: airports, seaports, roads, and communications. Because less of the world needs to be viewed as austere in terms of logistics support, more may be available to U.S. forces and less must be supplied from its own supply bases.

Major airports can support wide-bodied aircraft; they feature long runways, adequate traffic control, and generous loading and unloading facilities.

The burgeoning communications infrastructure is evident in the spread of cellular telephony (particularly in areas with weak wireline systems), the proliferation of satellites and very small aperture terminals (VSATs), and the pace at which new fiber-optic lines are being laid across ocean floors. One proposed line from New Jersey to the Mediterranean can carry 10 billion bits per second (bps) and will later support 40 billion bps—enough for 600,000 simultaneous phone calls. By 2018, the world will be able to use serial space-based phone systems (e.g., Iridium, Globalstar, or ICO) and at least one high-bandwidth Internet-based system (e.g., Teledesic or Hughes Aircraft's Spaceway).

Military access to airports and other commercial infrastructures may not be automatic. The terms under which impressive facilities in, say, Arabia or Brazil could be used are neither clear nor explicit. Access may be blocked politically; for instance, military communications are explicitly forbidden on the Inmarsat satellite system—although this rule may have been skirted in past years. Capacity may be committed to nonmilitary users. Military bases have equipment and supplies (e.g., repair parts for weapons systems) that must be hauled to commercial sites—assuming that they are compatible with such equipment. Commercial facilities are poorly hardened against physical attack (e.g., most commercial airports lack revetments) and information attack (e.g., switches, concentrators, or other nodes are unguarded, radio communications are subject to jamming and other interference, and systems software is penetrable). In many cases, the command-and-control software that runs commercial infrastructures both differs from and is incompatible with comparable military systems.

Increasingly, the fastest and cheapest way to take advantage of commercial infrastructure is by subsidizing upgrades in advance of war (e.g., the Civil Reserve Air Fleet program) or prepackaging upgrade kits to support quick deployment. Software patches offer the advantage of leaving a smaller footprint than corresponding hardware upgrades.

Korean War**Yom Kippur War**

Photo: AP/Wide World Photos

Operation Vigilant Warrior

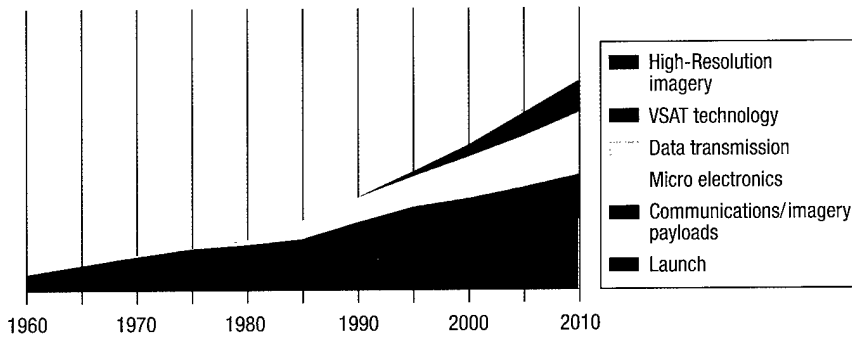
what any increment of forces adds to deterrence is almost impossible, even if its value did not vary with each instrument, opponent, location, and circumstance, as it does.

An enemy that knows that gaining military objectives must bring it into contact with U.S. forces must calculate where the tripwire lies. A few dead Americans have sometimes been enough to bring on a war (e.g., the Mexican War) or considerable punishment (e.g., the 1986 raid on Libya). Yet casualties taken when interests are unclear may not lead to further intervention. The bombing of the Marine barracks in Beirut in 1983 or the killing of 18 Rangers in Somalia in 1993 appeared to have had the opposite effect. Several hundred U.S. soldiers in Macedonia may pose a tripwire to deter a Serbian incursion, but only if political backing for engagement exists. Conversely, few doubt that the United States would honor its Article V obligations if a NATO country were violated, even if no U.S. servicemen were hurt in the invasion.

As the Khobar Towers incident (1996) suggested, the U.S. military cannot provide presence without addressing issues of force protection. More broadly, concentrations of U.S. forces hold American policy hostage both to foe and friend. U.S. attitudes toward North Korea are affected by having 37,000 troops within range of WMD (but millions of South Koreans also live within artillery range of the border).

If war erupts, is having ground and air forces up front necessarily the best way to meet military objectives? No U.S. forces deployed forward today carry enough firepower to win on their own (although they may affect the outcome of an otherwise close contest). Their role would be to hold off invading forces long enough to permit reinforcements to land as far forward as possible. The vulnerability of visibility heightens the advantages of trading space for time. Armies moving forward often must mass or otherwise reveal themselves in the process of overwhelming resistance; they are even easier to detect if they advance into terrain that is wired with a dense sensor grid. Armies moving backward encounter less resistance and thus can move more stealthily. Attackers may therefore incur heavier casualties than defenders. As attackers are thinned out, they

Growth in International and Commercial Capabilities



SOURCE: U.S. Space Command

are likely to overextend themselves. But basing ties U.S. military behavior to the natural desire of host countries to concentrate power for goal-line stands (a historical problem for NATO). It also concentrates forces and tempts aggressors to use weapons of mass destruction.

Logistics

The faster U.S. forces can get to the theater, the farther away they can be stationed and still show up on time. Rates of surge into theater can be determined by dividing deployable assets by throughput, which equals lift capacity divided by turnaround time. Between now and 2018, C-17s will replace retired airlift aircraft, but the result will be little gain in airlift capacity. Although global inventories of wide-bodied cargo jets will grow over 20 years, unless the Civil Reserve Air Fleet (CRAF) keeps pace, they will be inadequate to meet the requirements for military airlift. Personnel movement presents little challenge: any major metropolitan airport (measured by air traffic control and runways) can land 5,000 people per hour; many can land 10,000.

In rough numbers, if half the expected U.S. heavy air transport fleet of 2018, that is, 60 C-5s and 60 C-17s, were available to run a 42-hour turnaround cycle, it could lift roughly 150,000 metric tons in three weeks—enough for a heavy division or two light ones. After that, a surged rate of lift could move one division a week (although shipping space would also need to be allocated for air squadrons, allies, and naval fa-

cilities ashore). The shorter the distance, the greater the lift capacity, but only slightly: every 1,000 kilometers closer adds only 5 percent to throughput rates. Sealift is cheap but slow, and capacity is unlikely to undergo dramatic change over the next 20 years.

Maintaining a tight cycle puts a premium on minimizing port congestion at both ends, fast loading and unloading, and fast or reduced maintenance. Pre-positioned supplies help, but only if the war's location is known correctly in advance. Advances in information technology can modestly reduce logistics requirements.

Air power can be moved more quickly, but unless strike assets are there when fighting starts, it takes roughly a week before they can arrive in meaningful numbers. As one response to Iraq's "exercise" in October 1994, the Air Force started working on its Air Expeditionary Force concept, in which combat power equivalent to half a squadron can be brought into an improved base with prepositioned equipment within 48 hours; five sites are planned for the Persian Gulf area.

Strike

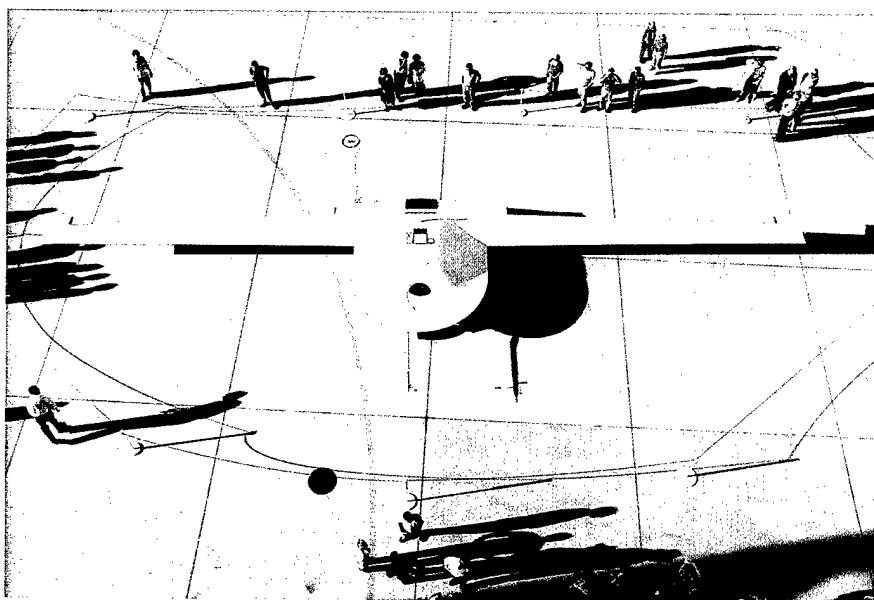
Shooting from close up is cheaper and faster, but shooting from stand-off distances is less risky and more flexible (more shooters can reach any one target). Knowing how well U.S. forces can shoot from far away influences where to put them.

Accuracy—the first consideration—is no longer the best reason for shooting from up close. Direct fire is accurate against moving targets within 3 kilometers (or fixed targets within 5 to 10 kilometers). Beyond that, precision-guided munitions (PGM) must steer themselves to the target, and the global positioning system (GPS) makes accuracy distance-independent. Without GPS, a PGM needs inertial guidance; if fiber-optic gyroscopes work, their .01 degree/hour drift rate should put any PGM within sufficient homing range even if launched from several hundred kilometers away.

Cost is a second consideration. Hypothetical conventional intercontinental sys-



Sender UAV



Dark Star UAV

tems aside, cruise missiles have the longest range, more than 2,500 kilometers, but at \$500,000 apiece, they are costly. A canonical 15,000 aimpoint invasion requires an inventory of 24,000 cruise missiles (some miss) or roughly \$12 billion worth (perhaps less: unit costs fall as production rates rise). Within 200 to 300 kilometers, the land-launched Army tactical missile system (ATACMS) or sea-TACMs can do the same job more cheaply (each ATACM costs more but contains multiple bomblets).

Missiles launched from manned aircraft have a maximum range of 20 to 80 kilometers depending on type. Most aircraft, in turn, have a flying radius of several hundred kilometers, and air superiority aircraft can go a few thousand kilometers. Very-long-range missions require either air-to-air refueling or trade fuel for ordnance loadout. Manned aircraft (with precision weapons) begin to become more cost effective than stand-off precision munitions only if full-scale operations continue for more than a month. To amortize just the purchase cost of an F-117 over the cost of a 30-day war (roughly 100 bombs), the cost per bomb is \$500,000—before maintenance is factored in. In the long run, dumb munitions are the cheapest weapon against diffuse targets, but they are also the heaviest to haul and the most expensive to man, and their delivery systems are the most difficult to protect.

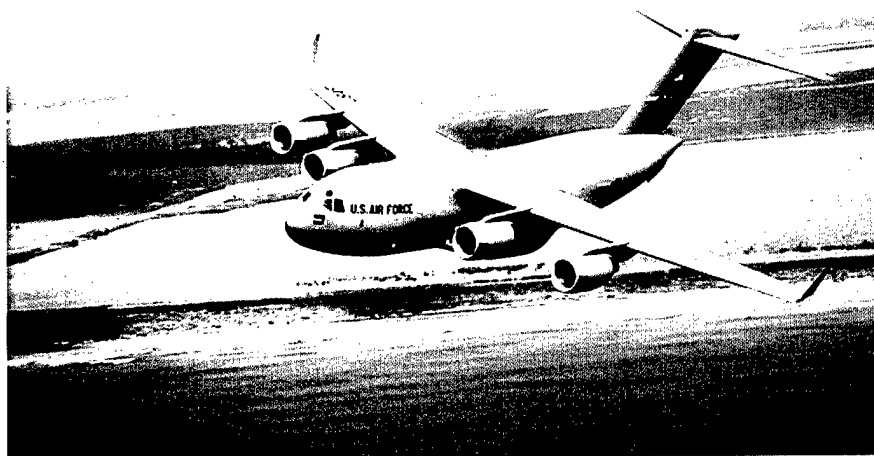
Meanwhile, the United States is steadily reducing its air-breathing intercontinental punch. By early in the 21st century, the United States will have no more than 22 B-2s, 70 B-52s, and 95 B-1s, and no warm production lines for more. As many or half of these aircraft will be devoted to strategic nuclear missions.

Flight time is a third consideration. The two hours a cruise missile takes to go 2,500 kilometers limit its value against moving targets. Loitering cruise missiles may be available by 2018 (the Tacit Rainbow antiradiation missile program failed, but the low-cost autonomous attack system, LOCAAS, is still going). The ATACMS can reach any target within four minutes, and short-range, air-to-ground munitions take roughly 30 seconds to reach target.

Enemy aircraft cannot now be killed from distances farther than 20 to 100 kilometers, whether from land or air attack. By 2018, the United States may have stealthy (and relatively small) unmanned aerial vehicles with the sole mission of dispatching air-to-air missiles when cued. Untested directed-energy weapons may permit air-to-air engagements from as far away as 500 kilometers.



747-400 cargo plane



C-17 Globemaster II

C⁴ISR

The ability to watch the world in general and a battlespace in particular may be expensive to set up but, once established, may be relatively cheap to use or extend. Most costs of technology (e.g., software development, systems architecture, testing, training, and user adaptation) are paid for regardless of who is being watched or where. Orbiting surveillance assets do not need be augmented to add new targets (even if today's constellation must evolve to support more continuous coverage, links to the field, data compression, and automatic scene preprocessing). Once global communications are in place, thickening them to meet the needs of a particular theater is secondary (ground terminals constitute much of the extra cost).

Detailed battlespace intelligence, surveillance, and reconnaissance (ISR) require local sensors. Some feature great mobility and long sensing range (e.g., joint surveillance target attack radar system [JSTARS], airborne warning and control system, [AWACS], comparable UAVs, Aegis ships); others must be scattered densely and repeatedly. The cost of achieving adequate coverage with unmanned long-range sensors, for instance, depends on terrain, weather, and use. Flying at 20 kilometers, one UAV can cover a territory as large as Kuwait with a vertical viewing angle within 45 degrees. To cover a notional 200 by 200 nautical mile battlefield would require 100 to 150 UAVs on station; using the most expensive UAV for that mission would require \$2 to \$3 billion in investment (depending on availability on-scene). Some UAVs are cheaper: tactical UAVs run several hundred thousand dollars each, and DoD labs have flown smaller UAVs that, at \$5,000 each, are almost disposable. With computer-mounted video cameras at \$9 apiece and microphones at three for a dollar, it would take quite a few disposable sensors to drain the Treasury. Coordination software is expensive to write, but once written can be used repeatedly.

Basing geography does dictate some C⁴ISR costs. Central Asia, for instance, would cost more to monitor than Korea. UAVs capable of making round-trip flights of several thousand miles cost more than those that need go only a few hundred miles. Beyond a few hundred kilometers, aerostats are too far away; airborne sensor delivery is more problematic; and longer transit times raise the odds of accident or interception. Radio networks are hard to maintain over long distances.

Fundamental Parameters

Force posture therefore must be viewed in terms of a number of fundamental parameters:

- The world's commercial logistics and communications infrastructure is burgeoning, but all facilities are vulnerable to precision strike.

- In 2018, deployment times will probably be similar to today's (barring unexpected purchases, lift assets, or pre-positioning).
- The tradeoff between moving forces and moving force constantly shifts toward the latter. After all, manpower is expensive and casualties are prohibitive, but things (e.g., PGMs) are cheap.
- Weapons accuracy, communications bandwidth, and the ability to take a snapshot of the battlespace do not vary much by distance. The ability to keep a battlespace under constant watch, however, requires assets within airborne-relay distance.
- Range affects the cost of weapons laydown and their usefulness against fleeting targets. Breakpoints are roughly 20 kilometers for artillery and laser-guided weapons; 300 kilometers for helicopters, short-legged aircraft, and rockets; and 2,000 kilometers for cruise missiles and long-legged strike aircraft.
- Interoperability, doctrinal and technical, with foreign forces and infrastructure is emerging as the key prerequisite for the projection of U.S. power.

Conclusion

What should the U.S. posture be in 2018, particularly for futures that may feature larger or smarter foes and messier operations? From an operational viewpoint, trends both positive (what U.S. forces can do) and negative (the risks of similar technology in adversary hands) favor standing increasingly farther back from the battlefield. Other trends both positive (e.g., the greater ease of networking and transportation) and negative (e.g., the shadow of weapons of mass destruction) favor dispersion over concentration. The increasing emphasis on day-to-day engagement with allies and coalition partners argues for a posture that makes it easier for U.S. forces to go to others rather than have allies come to us.

As a practical matter, it helps to start within a few hundred kilometers of the action so as to operate with cheap UAVs, air-dropped sensors, upper atmosphere communications relays, over-the-horizon radar, precision rockets (e.g., ATACMS, upper-tier theater missile defenses), and rapid insertion forces (e.g., helicopters, V-22s). The ideal coverage is a network of thinly manned listening posts and potential stock points, all integrated into commercial infrastructures for transportation and communications. Such off-shore presence would be provided by land if possible and by sea if necessary. Strike could be provided from stand-off distances. This structure points to an inevitable evolution away from today's strategy, left over from the Cold War, of concentrating forces forward.

Payloads in Orbit (as of end of 1996)

Launcher/Operator	Objects	Launcher/Operator	Objects	Launcher/Operator	Objects
Argentina	2	India	14	Portugal	1
Australia	6	Indonesia	8	Russia	1,353
Brazil	6	Israel	2	Saudi Arabia	7
Canada	17	Italy	7	South Korea	4
China	16	INTELSTAT*	50	Spain	4
Czechoslovakia	3	Japan	57	Sweden	5
European Space Agency	30	Luxembourg	6	Thailand	2
France	30	Malaysia	2	Turkey	2
France/Germany	2	Mexico	5	United Kingdom	25
Germany	14	NATO	8	United States	701
		Norway	1		

Source: U.S. Space Command

*International Telecommunications Satellite Organization

Conclusion

The traditional way of judging the need for U.S. forces was to determine what it would take to prevail in a specific contingency—such as a NATO–Soviet global war—until about 1990, and since then in a conflict resembling the Gulf War. But the world is now too fluid, change too rapid, and the future too hazy for such a narrow method. The United States has already experienced, in a few short years, a wide variety of contingencies, violent and not, in which the U.S. military was used. Threats are constantly rising, ebbing, and shifting. In a world of flux, U.S. forces can help shape desirable change but might instead have to respond to undesirable change. For these reasons, this volume, like the report of the Quadrennial Defense Review, breaks from the old way.

But how, in a disorderly world, can the United States take a more comprehensive view of the need for its forces without importing that disorder into the setting of U.S. defense priorities and programs? To help solve this problem without ignoring change and uncertainty, this volume suggests a way of thinking about the post-bipolar world:

- At the center is a *core* of democratic, free-market, peaceful and responsible states that

encompasses North America, Western Europe, and Northeast Asia and is spreading eastward and southward. The core is increasingly integrated economically, has common interests, and stands for a set of norms.

- Outside this core but on a path of reform and integration are large *transition* states—China most importantly, but also India, Russia, and others. Their uncertain fate is a defining question, since their successful transition would vastly increase the core, extend its norms, and lessen the dangers beyond it, whereas failed transition would pose greater security problems than the United States has faced since the demise of the Soviet Union.
- Currently, a handful of relatively weak *rogue* states are openly hostile to the core's interests and norms, though their destructive potential could grow as technology spreads and if any large transition states turned hostile. In addition, a host of elusive nonstate rogues poses such transnational threats as drug trafficking, terrorism, and WMD smuggling.
- Finally, despite the impressive gains in global economics, politics, and security in the past decade or so, a number of states have not participated and are *failing*, confronting the core with major humanitarian and transnational challenges. Rogues that fail (as North Korea might) can pose severe hazards. If the transition states abandon reform and integration, they might not become powerful rogues but instead immense and dangerous failing states.

This way of "classifying" world politics and security lends itself to contemplating both futures. The overarching international goal of the United States is to extend the core and strengthen its norms, looking toward *a commonwealth of freedom and security encompassing most of the planet and all the leading powers*. To make progress toward this future, the United States must: (1) induce its *core* partners to take on more responsibility; (2) encourage those in *transition* to stick with reforms and integration; (3) weaken and, when threatened, defeat *rogues* (state and nonstate); and, (4) ease the humanitarian and transnational effects and causes of state *failure*. While U.S. military forces alone cannot produce such an international environment, they can play a key role as part of a wider U.S. political, economic, and security strategy.

But those forces must also be prepared for a deterioration in the world security environment, in which the vision of a commonwealth of freedom and security is eclipsed by a world of more dangerous rogues, large transition states turned hostile or chaotic, more frequent and messy state failures, proliferating transnational threats, and friends who flee from responsibilities.

This complex of requirements, imposed by the world as it is and as it could

be (for better or for worse), constitutes a tall order, not only for U.S. forces but for those who plan, manage, and lead those forces. With this as the challenge, this volume has analyzed U.S. forces from three perspectives:

- Their peacetime role in affecting the strategic environment to advance U.S. interests and bolster peace (chapters two through eight)
- Their ability to prevail in military contingencies (chapters nine through thirteen)
- Adaptations that would be needed if strategic conditions take a turn for the worse (chapters fourteen through sixteen).

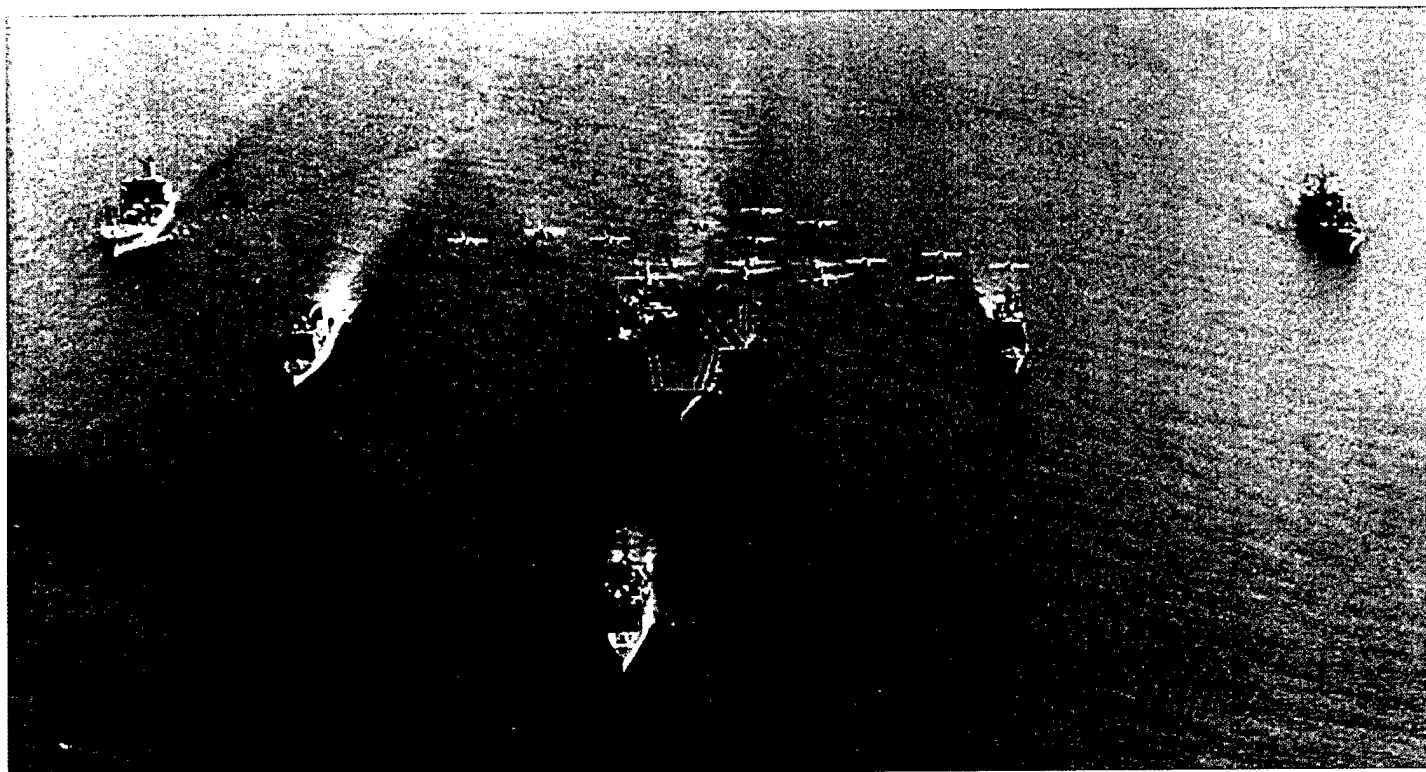
These perspectives correspond to the three elements of the QDR: *shape, respond, prepare*.

Broadly stated, *Strategic Assessment 1998* concludes, first, that how U.S. forces engage internationally—not just how many are kept where—is key to shaping a world in flux. Second, if, despite its shaping strategy, the United States must use force, its current military capabilities are particularly well suited to defeat familiar enemies in a familiar way. This should come as no surprise, since the forces have specifically been designed to meet the threats we know. At the same time, they are adequate but less well suited for conducting peace operations and other small-scale contingencies (SSCs) and for overcoming the asymmetric strategies of outgunned adversaries. Third, preparations for the future should be motivated principally by the need for the United States to project military power globally despite the growing dangers to its forces from the spread of dangerous technologies, especially WMD. Finally, the United States needs to renovate its coalitions with core partners, lest it find itself with increasingly unilateral strategies, capabilities, responsibilities, and burdens.

The QDR has offered a framework for assessing U.S. force needs in this fluid world. Likewise, the recent versions of the "National Security Strategy" and the "National Military Strategy" take this broader, dynamic view, as does the report of the National Defense Panel. This is a fertile and formative moment in U.S. defense strategy. The challenges of the new era are being framed—challenges that *Strategic Assessment 1998* seeks to sharpen and address.

Structuring the Problem

	Examples	Norms	Capabilities	U.S. Interests
Core Partners	NATO Japan	Core	Underutilized	Avoid divergence Recast as partnerships More contribution
Transition States	China Russia Southeast Asia South America	Undecided	Helpful or harmful	Complete transition Be prepared for rogue or failing states
Rogues	Iran Iraq Cuba North Korea	Opposed to core	Increasingly destructive	Restraint Push toward transition
Failing States	Central Africa Southern Balkans Middle East	None	Drain	Multilateral capacity



Carrier battle group

Presence Plus Using Power Judiciously

Compared to the Cold War, the peacetime role of U.S. forces in the new era is as important but quite different. Instead of confronting, containing, and deterring a global power along a fixed line, U.S. forces must deter a changing assortment of threats in a changing variety of places, relying less on stationary presence at every possible conflict site and more on a credible ability to project dominant power wherever U.S. interests might face danger. At present, the United States has both the need and the potential, unless its will is doubted, to deter aggression without basing forces in the direct path of every possible aggressor. As chapter two explains, the United States must tailor its peacetime deployments both to support and to draw upon its global power projection strategy.

The concentration of U.S. forces in Western Europe and Japan can no longer be justified by some fear that these partners might otherwise be invaded. Rather, they are now critical locations, within the core,

from which U.S. power can be projected. There is thus a need for change in the way the United States relates to these other core powers. They are now successful, wealthy, and secure partners who ought to share responsibility with the United States for the health, safety, enlargement, and norms of the core. This will require a shift in the military strategies and capabilities of these allies, stressing the protection of distant interests more and the defense of their (unthreatened) home borders less. The continued stationing of U.S. forces in Japan and Western Europe will make it more likely that when those forces are deployed to nearby or distant contingencies, U.S. partners will provide at least more support and perhaps forces of their own. This will be difficult to achieve in the case of Japan and Germany, but if the old protector-protectee security relationships are not transformed into more balanced partnerships—in deed, not just in name—they could soon outlive their usefulness. Recent steps in NATO and the Japanese-American security agreement point the way, but the transformation has only begun.



F-22 Raptor

To that end, the United States, acting in part through the forces it operates abroad, must draw these partners into its peacetime preparations, plans, and contingency responses. To accomplish this, it must retain its partners' confidence, lest they go off on their own; yet, it should also keep asking them to shoulder more of the burden of global security. The United States must impress its partners with its military capabilities and resolve, which they obviously find reassuring, but it must

do so in a way that does not make them feel either that the United States has hegemonic motives or that it will meet every challenge whether they help or not. If its closest friends conclude that the United States wants vassals, not partners, they might embark on divergent strategies or, alternatively, become content to be free-riders. If the U.S. body politic perceives allies evading responsibilities, burdens, and risks, it will favor unilateralist if not isolationist U.S. policies.

For the large transition states, especially China and Russia, the United States must leave no doubt of its *ability* to maintain stronger military forces and to prevail if they turn hostile and aggressive. But it is equally important to communicate that the United States has no *intention*, and no cause, to use its power against them unless they threaten its interests or peace. How U.S. power is demonstrated to these transition states, especially near their territory, is a crucial and touchy matter. The United States has told Russia, in effect, that it has no plans permanently to station combat forces on the soil of NATO's new members (as long as they are unthreatened, of course). In China's case, the United States has said that the purpose of U.S. forces in East Asia is not to "contain" China but to preserve regional stability. In both cases, the course chosen by a transition state should determine how U.S. forces engage. Accordingly, when Beijing attempted to intimidate Taiwan in 1996, U.S. power—in the form of two aircraft carriers—was interposed. But as China shows that it does not intend to pursue its regional goals by force or coercion, U.S. forces should increasingly cooperate with their Chinese counterparts, as they would with any core partner-to-be. Thus, whichever broad path China takes, robust U.S. forces need to be engaged in East Asia.

These cases illustrate how the United States must exercise its military superiority in a measured, sensitive way toward core partners and large transition states alike. Indeed, the same should be said for U.S. relations with *all* states, except for the rogues, who, by their own admission, would unhesitatingly threaten U.S. interests, values, and friends, were it not for U.S. power.

How can the United States use its power to shape the international environment in its favor without appearing hegemonic? How can the United States reassure its partners of its military prowess, will, leadership, and steadfastness, while also inducing them to take greater responsibility? How can the United States convince other powers, from its allies to China, that it does not regard their advancement as a challenge to itself?

From Presence to Active Engagement

These questions can be answered, in part, by *how* U.S. forces operate internationally during peacetime. The static concept of forward presence, Cold War-style, is inadequate for the challenge of shaping a dynamic world. The key is *engagement*: actively seeking to make contact, train, exercise, and operate with the forces of current and prospective (i.e., transition) core states. In time, the intensity and extent of such engagement should surpass stationary presence—and static measures of that presence—as the truest expression of U.S. involvement and as the most fruitful way to shape the international security environment.

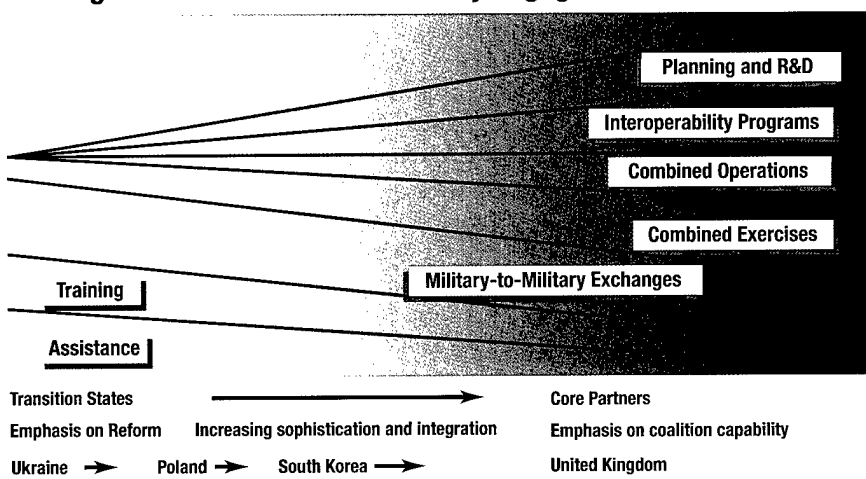
Active peacetime engagement is hardly new. It aptly describes many aspects of U.S. overseas deployments during the Cold War, especially in NATO. It was later given strong impetus in the effort to encourage reform in the new democracies when Soviet

communism collapsed. And it has been an increasingly important motive and mode of U.S. defense activities in the past few years. New or not, it is worth specifying why active engagement is the preferred shaping concept for the current era:

- Active engagement is crucial to promoting defense reform and civilian control, which are in turn crucial to democratization among transition states from Eastern Europe to Russia to Latin America to Asia—half the world.
- It is ideal for displaying U.S. military strengths to the large transition states without painting them as the target.
- There is no better way to reassure core partners of U.S. abilities and steadfastness while also inducing them to accept more responsibility and to adapt their forces for coalition operations with U.S. forces.
- It is the most effective way to prepare for multilateral operations, be they major wars or small-scale contingencies.
- Cooperation in defeating transnational threats (e.g., terrorism and drug trafficking) requires intensive interaction with partners and transition states.
- In this era of uncertainty and flux, engagement is an important way to gain and maintain a “feel” for international change, including in the capabilities and intentions of others.
- It is more flexible, giving the United States needed freedom to move forces in response to crises and changes in strategic conditions.

In concept, engagement means “to entangle, to attract and hold, to interlock, to mesh, to bind, to induce [another] to participate.” In practice, it means a spectrum of activities in which U.S. forces and other defense organs cooperate with their counterparts. Different methods of peacetime military engagement should be emphasized across the spectrum of transition states and core partners. In all cases, the United States wants others to understand the qualities of its Armed Forces without flaunting their superiority. In addition, it wants to aid reform and build trust among transition states and to foster complementarity and greater burden-sharing among core partners. As transition states develop into core partners, for example, the way Poland, Hungary, and the Czech Republic are now, the content of engagement with them shifts to more organic and more sensitive cooperation.

Shifting Content of Peacetime Military Engagement



Engagement relies more on what U.S. forces *do* than on their exact size. A squadron of naval combatants homeported abroad might once have been so important as a symbol of the U.S. defense commitment that its operations were of secondary significance. Now, however, if that same squadron is to produce the desired effects on the international security environment, what it *does* is critically important. Put differently, a platoon that continually works with a partner's forces may be worth a company that does not.

This is not to say that it matters little what forces, with what capabilities, are deployed where. Engagement is impossible without substantial U.S. deployments overseas, especially in East Asia and Europe, where the dual challenges of enhancing core partnerships and encouraging transition are greatest. In tailoring that presence, though, more attention should be given—and is already being given—to the uses of U.S. forces. U.S. interests argue for more combined exercises, involving not only allies but also transition states. Such exercises should bear on shared concerns: deterring rogues, defusing crises, conducting peace operations, delivering humanitarian relief in failing states, and combatting nonstate threats.

An increasing emphasis on active engagement also fits with plans to *prepare* for the longer term future. Chapter fifteen points out that as U.S. military doctrine, organization, and capabilities adapt in the information age, like so many other institutions, they should be more networked than they are now. Moreover, uncertainty about the location of future threats argues for a more dispersed approach, connected by information technology, and then concentrated when necessary in crises.

The globalization of trade, investment, and technology is producing a more robust, more integrated infrastructure, from air- and seaports to utilities, communications, transportation, and computing. So the distribution of U.S. military power in the world not only will be important but could be easier to support.

This vision, based on military necessity and technological possibility, dovetails with the concept of active engagement to shape the security environment. It suggests that the international deployment of forces will be a key feature of the U.S. posture of the next century, albeit with new purposes and patterns, and with rigidity replaced by interactivity. Engagement underscores the crucial role of core partners and transition

Global Engagement of U.S. Forces: A New and Enduring Rationale

The United States has a fundamental stake in the vitality, security, and expansion of the world's democratic, free-market core. To protect its stake, and as the leading partner of this core, the United States must engage its forces internationally in peacetime, even as they are kept ready for war.

By engaging abroad, U.S. forces can improve the compatibility of allied forces, thus building stronger partnerships, better burden sharing, and political cohesion within the core. They can also encourage reform and cooperation among states in transition—partners-to-be—including China and Russia. They can deploy rapidly to deter attacks by rogue states, improve multilateral responses to genocide and other humanitarian disasters in failing states, and develop cooperative solutions to transitional threats.

In light of these purposes, and the fact that U.S. forces cannot be kept everywhere they might someday be needed, most of those stationed abroad should be in Europe and East Asia (where most are anyway, as a legacy of the Cold War). There they can readily engage core partners (NATO allies, Japan, and Korea) as well as key transition states (Russia and China). Thus, in Europe and East Asia, U.S. forces can both strengthen and extend the core.

From bases in these regions, U.S. forces can be projected into areas where dangers to the core from rogue states and failed states are greatest, especially in the Middle East and Africa. And by virtue of their engagement in Europe and East Asia, they can be supported and joined by the forces of core partners, thereby sharing the burden and risk now faced by the United States.

Because the world has become so fluid, it is now essential for U.S. forces to interact regularly and intensively with those of core partners and increasingly with those of transition states. In light of this, and the fact that the United States can move its forces with great speed, the static presence and precise size of U.S. forces overseas are becoming less important than how actively they engage and what they do.

U.S. Regional Goals and Strategies

Region	Goals	Strategy
Europe	Draw old and new allies into a new partnership to consolidate security in Europe and respond to threats elsewhere.	Engage full spectrum of U.S. capabilities. Integrate with core partners (NATO allies) to project power in or beyond Europe. Emphasize programs and forces that support defense reform and encourage transition states.
Greater Middle East	Deter rogues that use asymmetric strategies to threaten world oil supplies. Reinforce peace process.	Display ability to project robust and lethal power into the region. In light of regional sensitivities, limit permanent deployments to quick-response forces and pre-position materiel to deter rogues.
East Asia	Encourage peaceful unification of Korea. Build new partnership with Japan. Encourage transition of a powerful China.	Engage full spectrum of U.S. capabilities. Remain deployed "forward" in Korea. Increase combined operations with Japan and other partners. Expand interaction with China. Demonstrate military power to China when Chinese behavior warrants.
New Independent States	Facilitate democratic transition while protecting against the consequences of failure in Russia and the rest of the NIS.	Intensify programs that foster reform. Expand Russian military contact with U.S. strengths without posing threat.
Latin America	Further the process of reform and democratization. Develop partnership based on shared interests and responsibilities within and beyond the hemisphere.	Expand contacts that share U.S. defense management methodology combined with civilian control. Emphasize exercises that bolster capacity for multilateral operations, e.g., Latin American participation in SSCs.
Africa	Work with core partners and Africans to avert state failure, promote reform, and improve humanitarian operations.	Improve NATO capacity to act in African crises. Expand contacts aimed at creating African competence in crisis management.

states—not simply threats—in U.S. strategies to shape international conditions with its military capabilities.

Strategies

Chapter two offers a view of basic U.S. security goals in each region. With the benefit of the analysis of those regions in chapters three to eight, it is possible to summarize how U.S. forces and related programs could help achieve those goals.

From a global vantage point, these strategies suggest an increase in the intensity and extent of interaction of U.S. forces with those of the core and transition states. U.S. forces should, over the long term, remain concentrated in Europe and East

Asia, where the most important core and transition states are. Those forces should engage frequently in combined and integrated exercises, with particular emphasis on power projection, C²ISR, and joint doctrine. This, in turn, will remind rogues, from North Korea to Iraq to Iran, that the United States has able partners prepared to help defeat them if need be. When such rogues can threaten vital U.S. interests, as Iran and Iraq have the potential to do, the demonstrable ability of the United States to surge overwhelming power must be augmented by quick-response deterrent forces in the region. Finally, with transition states accounting for more than half of the world's population, U.S. forces and other defense programs and contacts should be energetically used in *every* region to encourage reform.

In sum, the forces that the United States deploys abroad should become more interactive, operate with greater flexibility, and emphasize key U.S. strengths. As they do, U.S. military and environment shaping strategies will be brought into harmony, the United States will be well-prepared for this era of uncertainty and change, and the American people will understand and support the rationale for U.S. deployment abroad.

A Moving Target Winning Wars

The United States can be confident of its ability to defeat any rogue state that threatens U.S. and core interests with traditional military power—in fact, any two rogues nearly at once. The ideal scenario is brief and to the point: U.S. forces nearby establish at once that the aggressor is at war with the United States. A robust joint force is dispatched to the theater. With its predominance in speed, information, and lethality, the force maneuvers freely, destroys enemy forces and infrastructure, and renders the rogue defenseless. The more rational the enemy leadership, the quicker the surrender.



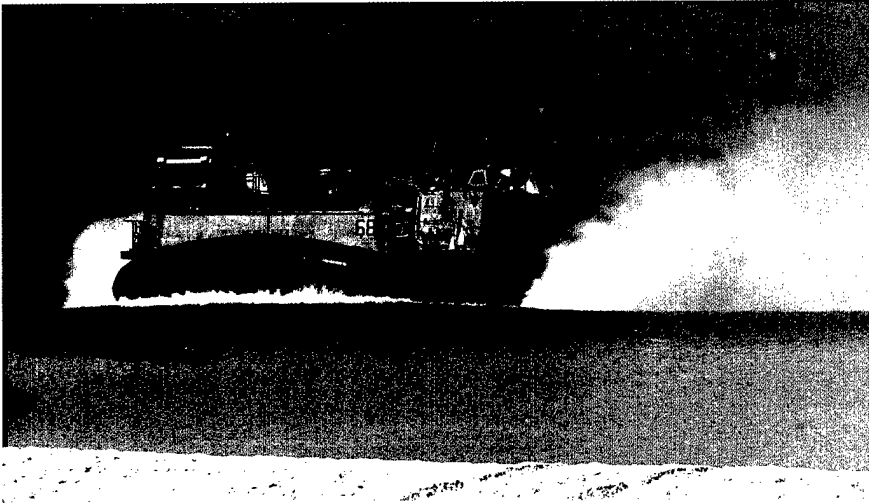
M-1A1 tanks during *Desert Storm*

The ideal scenario is one-sided in capabilities, execution, losses, and outcome. American defense planning and management pay off in the smooth way key U.S. advantages—power projection, C⁴ISR, joint doctrine, lethality, and robustness—are integrated. To be sure, risks exist that not all will go as well as planned—logistics being one potential weak link in the chain. Moreover, a clever adversary exploiting a difficult (e.g., urban, wooded, or mountainous) battlefield could increase the uncertainty and losses facing the United States in a major theater war (MTW)—ample reason not to grow too attached to any specific planning scenario. But the chance that the United States would ultimately fail in such a conflict, unless of course its will fails, is extremely low.

Since “fighting and winning the Nation’s wars,” in the words of former Joint Chiefs Chairman, General John Shalikashvili,

is the benchmark of U.S. military effectiveness, today’s situation is cause for some satisfaction. In a nutshell, the main interests of the United States are secure because none of its few outright enemies would likely dare such certain and complete defeat, and U.S. losses would be tolerable—if any casualty can be deemed “tolerable”—in the event that one did.

Of course, “snapshot” security is not good enough for the United States in the unsettled world described in this volume—a world of deepening U.S. dependence on a spreading world economy, of wily and fanatical rogues that will not readily abandon their causes, of giant transition states that could fail or become rogue-like if their reforms are abandoned, of failing countries whose human agonies cannot be ignored, and of amorphous nonstate groups with



Landing craft air cushion (LCAC)

the means and motivation to threaten U.S. security. The years since the Gulf War show that crises smaller and thornier than the last major theater war (MTW) are the norm. And the determination with which rogue states are acquiring the means to make and deliver weapons of mass destruction confirms that they will not stand pat in the face of U.S. power but instead seek a way to deter the United States despite its advantages. A broad and flexible view of missions and threats is therefore imperative. And thanks to the high confidence the United States has today in its ability to prevail in a war against today's rogues, it can afford to prepare for other missions, other threats, and other futures.

By stating that U.S. forces must be able to respond to small-scale contingencies (SSCs) and to asymmetric threats, the QDR has recognized that winning MTWs under current conditions is but one test of the sufficiency of U.S. capabilities. The QDR "raises the bar" by requiring that U.S. forces be able to respond to the multiple demands of the world as it is, instead of a simpler world. Having done so, confidence of success drops off, as expected, when plans depart from the principal mission and type of threat U.S. forces have been optimized to confront. This is evident in the contrast between the general bullishness of chapter nine and the concerns expressed in chapters ten and eleven. It also is the basis for the

QDR's conclusion, reinforced by the National Defense Panel, that U.S. forces should be prepared for contingencies and adversaries other than wars with the rogues of today.

The "Small Scale" Challenge

At least three lessons have been learned from Somalia, Haiti, Bosnia, and other such experiences over the past five years. First, the conditions that cause states to fail—tribal, ethnic, and religious violence, government malfeasance, and economic desperation—are not disappearing and could spread. Second, despite congressional misgivings, American presidents of both major parties have taken the view—and in the end have prevailed—that the United States often cannot remain aloof from most large humanitarian crises. Although military forces are not the most suitable instrument for some aspects of the response to such crises, the danger or reality of armed conflict often makes a military component indispensable. Third, all the capabilities needed to respond effectively to multiple SSCs (e.g., peace operations, humanitarian relief, and large evacuations) are not inherent in a force designated to win major theater wars. If SSCs were merely small versions of big theater wars, there would be no need to stipulate that they be considered a different requirement.

The failing state phenomenon will not vanish, despite the impressive recent progress of the "global" economy. States with no ability to attract foreign investment, to add value, and to export to global markets can fall prey to rapacious corruption, crumbling infrastructure, tribal violence, and disintegration. Despite some recent promising signs in Africa, the pattern seen in Somalia, Liberia, Rwanda, Zaire, and Sierra Leone may not have peaked. Nor is this phenomenon confined to Africa, as Cambodia, Afghanistan, Haiti, Bosnia, and Albania indicate.

Additionally, rogues can end in collapse, as both North Korea and Cuba may. Even larger states in transition that fail to stay the course can see their progress turn to turmoil and fragmentation—Russia being of greatest concern because of its nuclear weapons.

Easing human suffering from state failure is not the only purpose to which U.S. forces could be put other than waging a major war. Other sorts of ethnic conflicts, territorial disputes, violent breaches of international law, insurgencies, and natural disasters could give rise to needs for peacekeeping, relief deliveries, sanctions enforcement, and even forcible intervention that the United States will opt to meet. Experience suggests that more than one such operation could be in train at any time. Non-state rogues and transnational threats (often due to failing states) cannot be countered by traditional combat operations. Moreover, the absence of both "life-threatening" adversary and clear delineation of vital interests that marked the Cold War has left the United States with a need for options short of the all-out destruction of enemy forces and infrastructure. Dangers to less-than-vital economic or security interests, or perhaps to core norms, could justify some involvement of U.S. forces to prevent or contain a crisis, especially if it could harm the long-term U.S. purpose in the world suggested above. This has been the case in Bosnia and Haiti (both of which of course could also be viewed as failing states).

Thus, the bright prospects for the core and most transition states do not readily translate into an end to calamities and crises short of war outside the core, in which the United States will opt to intervene, out of some mix of interest, responsibility, and moral impulse. Whenever the United States must decide whether or not to commit forces in such circumstances, the argument is made by domestic skeptics that U.S. lives and treasure should be sacrificed only to defend "vital" interests. But the decision reflected in the QDR is clear: the United States should have an *ability* to perform these missions. It may or may not get involved in specific crises, but it needs the option.

This will be a formidable challenge. The demands such operations place on U.S. forces differ markedly from those needed to defeat a rogue, as the contrast between the requirements set forth in chapters nine and ten—or between the Gulf War and the Bosnian operation—shows. At a basic level, of course, the ground, air and sea forces needed for large theater wars provide ample "raw materials" for these other

needs. Moreover, C⁴ISR, joint doctrine, and sound defense management are crucial in both cases. But SSCs do not call for the projection of massive strike power to destroy enemy forces, infrastructure, and resolve. Generally, they entail small units, repetitive patrols, face-to-face contact, humanitarian deliveries, even-handedness, restrained rules of engagement, and performance of certain civil functions. (If Clausewitz considered war an extension of politics, he might have viewed SSCs as a reverse extension of war into politics.) Moreover, such operations are much smaller—as the name suggests—but more frequent than the huge but rare wars that U.S. forces have been designed to fight.

Broadly speaking, this is a fundamentally different class of military operation than major theater warfare. When a corporation finds itself in two different businesses, it is not necessary to spin one off, but it is crucial to manage the firm's operations and assets in light of this duality. So it is that the Department of Defense must manage forces in light of how different, operationally, the "typical SSC" is from the "typical MTW."

Small-scale operations are also more likely than large-scale combat to entail integrated *multinational* operations. Major wars tend to be fought when U.S. vital interests are directly threatened. Consequently, while it would prefer to be supported by a coalition, the United States must have the capability to wage such wars whether or not its partners join it. Small-scale operations, in contrast, tend to concern lesser stakes or less direct threats—in general, they are more discretionary than major wars. Those of the last five years, for example, have not involved the essential vitality or security of the United States, but rather disputes or human suffering beyond the core (though of some importance to the core). Because the argument for committing U.S. forces in such cases is often predicated on a sense of international responsibility, it is hard (though not impossible) to justify independent U.S. action. After all, others, starting

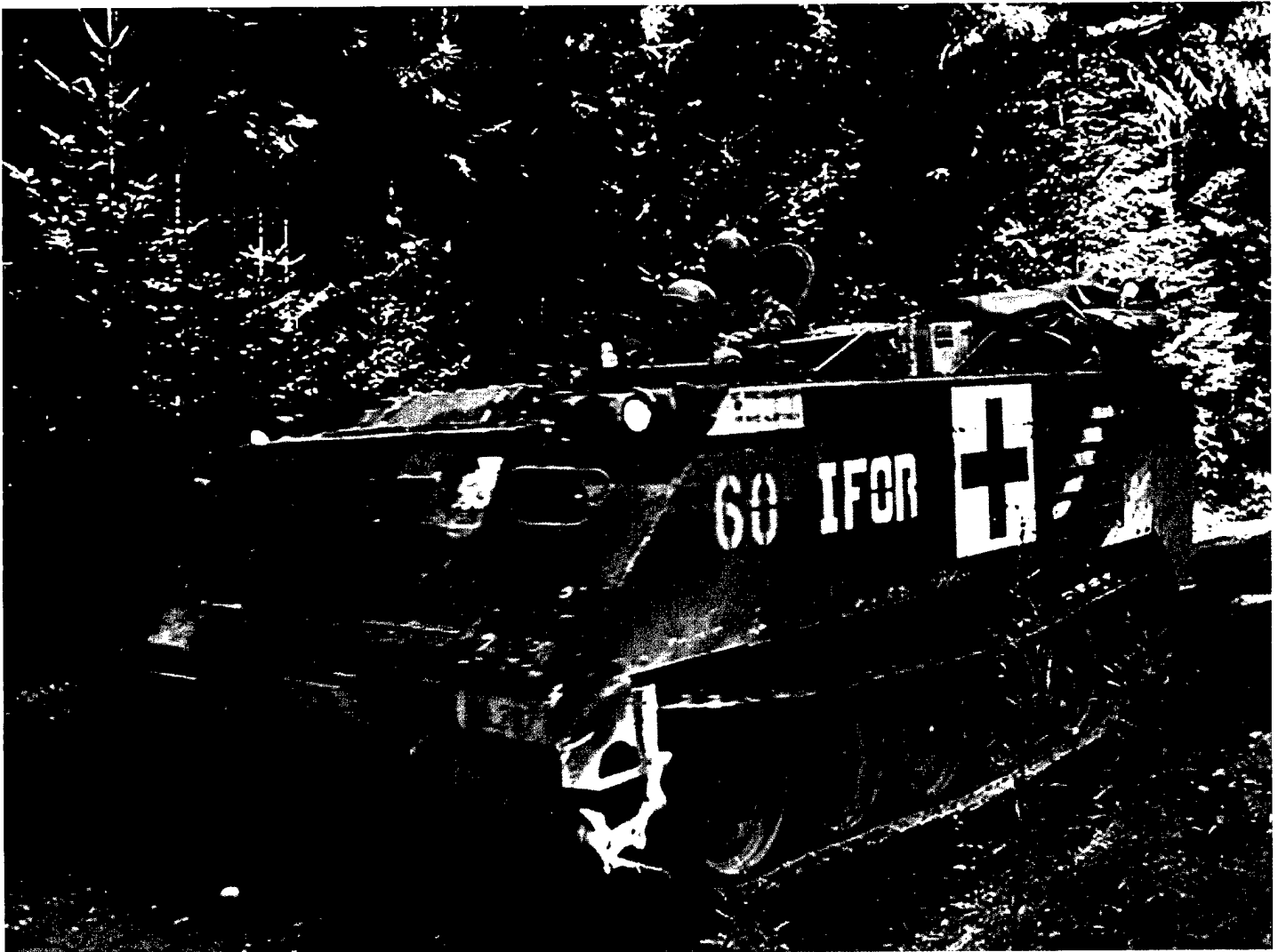
with wealthy core partners, also have responsibilities—or should. Thus, while U.S. forces must be able to conduct major wars independently, they must be geared to carry out smaller operations multilaterally, while of course keeping open options to conduct the former multilaterally and the latter independently.

Because of their purpose and character, small-scale operations often involve U.S. and international civil organizations. This has been the case in Somalia, Bosnia, and Haiti. At a minimum, this poses jurisdictional and coordination problems. At worst, it can lead to cross-purposes (e.g., between the use of U.S. air power and allied ground forces in Bosnia, before the Dayton Accords) or U.S. forces being called on to perform tasks best done by others.

Of all the challenges detailed in chapter ten, the most important and difficult are tailoring U.S. forces to succeed in frequent, even multiple SSCs without detracting from their ability to prevail in major wars; and preparing for multinational and civil-military operations, i.e., situations in which U.S. forces are not functioning alone and independently.

The first challenge originates from a paradox and points to a dilemma. U.S. military power is more likely to prevent large security problems than small ones. Outright aggression against vital national interests can normally be deterred by U.S. forces, but other international crises can occur regardless of those capabilities. So it

M-113 ambulance, Bosnia



can be assumed that SSCs will continue to be relatively frequent, irrespective of U.S. military strength. Major wars will be rare, thanks to U.S. military strength. If certain U.S. forces are earmarked and honed for the demands of SSCs, they will be used in live operations far more than those maintained only for major wars. This has been the case in recent years, less from design than necessity. The units of that overworked fraction will be under much greater stress while also, potentially, seeing their ability to fight major wars eroded, for example, because of gaps in combat training, equipment fatigue, and excessive demands on personnel.

Alternatively, all U.S. forces could be kept "multimission capable," in which case readiness for major wars would have to be maintained by forces engaged in SSCs. This way, the burden of responding to SSCs could be spread out across the entire force, and all units would have to be prepared for the different and frequent demands of such contingencies. The strain on particular forces could be eased, but U.S. forces as a whole would not be optimized either to fight wars *or* to conduct small-scale operations.

Whatever approach is taken, for budgetary reasons the United States will not elect to maintain a larger force structure than that needed to win two nearly simultaneous major wars. Consequently, it might have to face the additional problem of having to back out of a large peacekeeping commitment if a war looked imminent somewhere else. Would U.S. forces have left Bosnia if Saddam Hussein threatened Kuwait in 1997 (as he did in 1990 and 1994)? If so, what would have become of the NATO coalition, and thus the fragile peace, in Bosnia? If not, would the United States have had enough of the right forces in reserve to deter a *second* major war, lest North Korea, for example, have perceived an opportunity to attack the South? This illustration underscores the need to have forces of core partners available for both large wars and smaller contingencies.

Indeed, the second big challenge posed by SSCs is to be prepared for combined, or integrated, multilateral operations. This is a politically vexing problem. The United States has an interest in improving the capacity of the United Nations and other international institutions to perform peacekeeping, humanitarian relief, and the like; otherwise, it will be under intense pressure to take on the task itself whenever a large-scale human disaster occurs. Precisely because of the competence of U.S. forces, the worse the crisis, the greater the pressure for the United States to accept the bulk of the responsibility, overall command, and possible pressure to escalate if the crisis is not contained. Yet important voices in the United States doubt that the United Nations has, or should have, the practical or constitutional ability to handle such responsibilities.

Relatedly, Americans are not keen to see their troops operate under foreign commanders. But since the United States cannot insist on being in command if it does not provide a large contingent of forces, this stance means it must have the leading role or no role at all—not a good choice to have to make. It is easier to solve this foreign-command conundrum in Europe than elsewhere, because NATO is a capable multilateral military coalition that has the confidence of the United States; it has proven its competence in peacekeeping under trying conditions in Bosnia. Yet future needs in Europe appear to be limited to the Balkans, which, while serious, are unlikely to grow or spread. Meanwhile, the security challenge outside Europe is greater and growing. Therefore, the use of NATO forces beyond Europe will be one of the most important questions in national security policy in the years to come.

Chapter ten offers several ideas for improving operations that combine U.S. forces with civil entities. The answer is not to avoid such circumstances; most of the future's messy situations, especially those caused by state failure, will demand both civil and military responses. But an essential principle should be that U.S. forces not be thrown into every predicament merely because they are capable and civilian agencies are lacking. This is no way to use U.S. forces and no way to avoid the actions and

costs needed to improve civil capabilities. Congress, DoD, and various civilian agencies—perhaps nongovernmental entities, as well—need to fashion a rational division of labor and management systems.

Because they involve peculiar operational demands, multinational and civil-military action, and often less-than-vital U.S. interests, SSCs (despite the innocuous term for them) present a substantial challenge for U.S. forces that are designed mainly to win big wars. The QDR identifies the issues that will need to be settled, e.g., withdrawing from SSCs in an MTW appears likely, but makes no claim to settle them. Unless the Bosnias and Haitis of the world are behind us, which seems unlikely, these issues will occupy U.S. defense leaders, resources, forces, and debates for years to come.

The Asymmetric Challenge

Just as the QDR recognizes that “winning the nation’s wars” does not encompass all that U.S. forces must be prepared to do, it acknowledges that winning future wars could prove much tougher than defeating today’s rogues.

It is important to remember several things about rogues: First, as a rule, they are not mere opportunists, ready to drop their reckless ambitions or destructive causes simply because they are frustrated by *current* U.S. project-and-strike capabilities. Second, it is virtually impossible to block altogether their access to the technologies—dangerous and otherwise—that are spreading across the world, partly through illicit trade but to a large degree *via* the integration of the global economy. Third, even though prospects are not bright for several of today’s broken-down rogues—North Korea, Serbia, and Cuba—this class of actor does not face early extinction. Their future ranks might include new and larger ones, even one or more current transition states. They might include sinister and sophisticated nonstate actors, or networks, such as a South American cocaine syndicate, a Russian Mafia dealing in nuclear material, and Middle East terrorists dealing in truck bombs or deadly toxins.

We should assume that rogues will have every incentive and considerable means to outflank, undermine, defy, disrupt, and even defeat available U.S. forces, potentially leaving the United States with military capabilities that are nominally superior but not fully able to defend U.S. interests and preserve international security.

Indeed, every key U.S. military advantage discussed in chapter nine could be weakened or neutralized, to a troubling degree, by any or all of the three salient asymmetric threats analyzed in chapter eleven—weapons of mass destruction (WMD), selective use of new military technologies (“cheap high-technology”), and information warfare (IW). Although the focus here is on the *capabilities* of possible asymmetric response, it is also important to plan for more threatening *tactics*, such as concealment, short-warning offensive, attacks on sea lanes, and coordinated attacks on U.S. interests outside the conflict theater. Indeed, it is the combination of more dangerous means and doctrines that makes planning for asymmetric threats imperative.

The striking message here is that *the ability, and therefore perhaps also the will, of the United States to project power and destroy rogue targets without suffering unacceptable casualties could be undermined by a combination of asymmetric threats*. So the consequences of not planning forces to counter these threats could be grave, especially because not planning for them will make them all the more likely to happen.

To illustrate, imagine that the United States, along with its partners in the core and in the region, is again confronted with aggression in the Persian Gulf. This time, the enemy uses information warfare to destabilize the Gulf monarchies, disrupt U.S. military communications as it attempts to send forces, and interfere with computer and telephone systems in Europe and the United States. U.S. carrier battle groups find that thousands of cheap but effective mines have been placed in the Strait of Hormuz. And the adversary warns that its several hundred recently acquired, accurate (enough) missiles are armed with chemical warfare agents and can hit U.S. forces as well as allied bases and population centers in the region. In these circumstances, U.S. skill, muscle, and will *could*

still yield eventual victory, but at considerable cost and perhaps without the political and material support of an international coalition. Unless it prepares to counter these threats, the United States might face and pay a severe price—in lives lost or interests damaged—if and when they arise.

Because a rogue might be acting out of fanaticism, irrationality (perhaps due to sketchy or skewed intelligence), or desperation, it could prove hard to deter from executing such threats. Moreover, since rogue regimes care little for their own citizens or even their soldiers (as Saddam Hussein showed), U.S. retaliatory threats might not work. In contrast, unless the stakes for the United States are so compellingly vital as to leave no choice, it could be deterred by the prospect of high casualties and uncertain success, despite its overall military muscularity. Strategically, then, the danger is that asymmetric responses, unless preempted or countered, could reduce the ability and resolve of the United States to project power to protect its own and core interests around the world. In essence, U.S. forces might not be able to fulfill their central purpose.

The QDR states that the United States should anticipate such asymmetric threats, rather than await them. It prescribes intensified efforts to counter nuclear, chemical, and biological weapons, to combat terrorism against U.S. forces, and to frustrate hostile information operations. The United








States has thus signaled to rogues that it is already anticipating their *next* moves. If this signal dissuades them, so much the better. But because cannot be counted on, the full investment must be made.

Such initiatives should be viewed as part of a wider strategy to counter asymmetric threats having these elements:

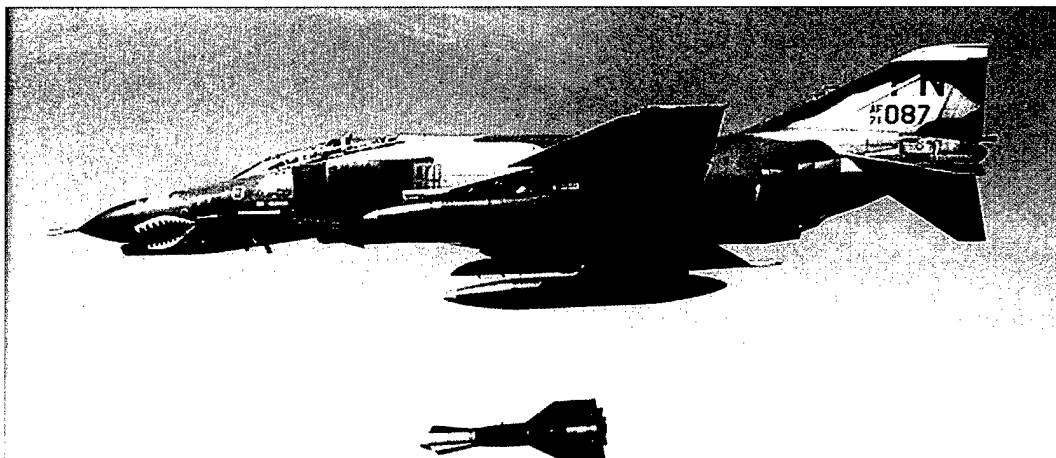
- **Focus.** In judging the adequacy of current and planned U.S. forces to *respond* in major contingencies, it should be assumed that whatever asymmetric threats are within the means of adversaries *will* be encountered. While taking into account both the intentions and capabilities of transition states, the United States should assume rogues have hostile intentions and base its defenses on their capabilities. Thus, if North Korea can use nuclear, biological, and chemical weapons, the United States should anticipate that it will and evaluate U.S. forces and plans accordingly. In planning jargon, plausible asymmetric threats that could upset U.S. strategy and confidence should not be “excursions” but “best case.” The entire military establishment, not just those charged with special responsibilities, needs to come to grips with WMD and other asymmetric threats.

- **Deny.** U.S. efforts to *shape* the international security environment (of the sort discussed in chapters two through eight) should be targeted especially at the trends and actors that breed asymmetric threats. New strategies are needed to deny or at least retard the acquisition of those dangerous technologies whose spread can be regulated. Information technologies are of course hard to control, especially in an integrating global economy. The key is to make this a concern and responsibility for U.S. core partners no less than for the United States. For example, the United States does not want its partners to trade with Iran or other rogues in technologies that could be used against U.S. forces. Therefore, Washington might consider insisting that those same partners accept a greater role in the defense of shared interests (e.g., oil supplies) if threatened by those rogues using those technologies. This could help produce a more united front, both in restricting the technologies and in deterring the threat.

Impact of Asymmetric Threats

	Power Projection	C ⁴ ISR and Jointness	Strike
Weapons of Mass Destruction			
Niche High-Tech			
Information Warfare			

F-4 dropping GBU-15 unpowered glide weapon









● **Deter.** It is critical that rogues that have and might consider using chemical and biological weapons are aware that the United States does not preclude using nuclear weapons in response to such attacks on U.S. interests. Otherwise, while such states might appreciate the risks of using or even obtaining nuclear weapons, they will be drawn toward chemical and biological weapons, which the United States has forsworn through international treaties. While such a retaliatory threat might be credible only vis-a-vis large-scale chemical and biological attacks resulting in U.S. casualties, this could augment defenses against more limited attacks.

● **Defeat.** Plans and initiatives to *prepare* for the more distant future (2018) should include concepts to trump asymmetric threats. Ballistic missile defense and defensive information warfare are thus high priorities. Instead of counting on *deus ex machina* solutions the answers might be found in the ingenuity of U.S. soldiers and strategists. Not only the weapons and platforms of U.S. forces but their doctrines, tactics, and organization should be critically evaluated in light of asymmetric threats. In particular, as the United States finds ways, using communications and sensor technology, to give small and dispersed units access to more and better stand-off precision strike power, it can sustain its ability to project power in the face of such threats—

delivering force but not large forces—since deployment would be easier and fewer troops need be risked on battlefields made more deadly by weapons of mass destruction and other rogue capabilities.

● **Adapt.** The way U.S. forces are planned, like the forces themselves, needs to become more *adaptive*—operationally and strategically. Rigidity could be as great a threat as the nastiest rogue—indeed, its unwitting ally. Fixation on one or two exquisitely specified operational scenarios could endanger U.S. interests and lives if the scenarios prove even partly wrong, perhaps because enemies have consciously worked around them. *Desert Storm* was unusual. The odds that war will be conducted, by both sides, as scripted by U.S. planners are about as good as a baseball game being played exactly as intended by the manager of the better team. Strategically, the basic suitability of today's forces, doctrines, programs, and plans should be tested against asymmetric strategies devised to neutralize them. Today's computing power provides the means to analyze a virtual universe of possible operational and strategic circumstances, to see where investment is needed to neutralize or hedge against the ever-changing capabilities and tactics of adversaries, current and future.

Globalization of Interests versus Technology

	Weapons of Mass Destruction	Niche High-Tech	Information Warfare	Terrorism
Project and Strike (capabilities)				
U.S. Sanctuary (will)				

In sum, in a world of uncertainty and change, it is possible to bracket without affixing what it is that U.S. forces might be called upon to do. Versatility must not be sacrificed at the altar of total confidence in the ability to defeat the threat du jour. The U.S. defense establishment planned on responding to a defined threat throughout the Cold War, and then extended that habit for some years afterwards, with its attention exclusively on the Iraq and North Korea scenarios. The QDR signals an important departure, calling for the ability to respond to a full spectrum of crises. That call raises a number of tough but crucial questions, which this volume has tried to frame.

The Unpredictable

Understanding the Unknowable

Predicting the world beyond 2008 today is probably no harder than predicting today's world was in 1988—in both cases, it is exceedingly hard. Policymakers may be just humbler now, and maybe a bit wiser, than before the changes of the last 10 years ambushed their confidence in precise prognostications. Perhaps, with a little hindsight, an understanding of how current conditions *might* affect the future is more possible now. After all, some trends detectable in 1988 could have helped explain broadly what ensued: Soviet communism was moribund; East Europeans were

restless; the Persian Gulf was volatile; the Chinese economic system was being transformed; and East Asia had become a magnet for investment and technology. But because specific intervening events were unpredictable, and even surprising, so was today's world. Fortunately, those events were favorable to the United States, and its economy, technology, military capabilities, alliances, and political system proved robust and flexible.

Because predicting a "point" future in a fluid world is, well, pointless, preparing U.S. forces for the long-term future should not be based on such a prediction. Rather, the question is how those forces might need to be altered in view of all plausible future worlds. The method employed in this volume for tackling this question is to identify the principal axes along which international change—especially adverse change—would require a significant adaptation of U.S. forces. Thus, instead of specifying alternative futures, whether one or many, this study seeks to understand possible future challenges.

The Gulf War was fought against a relatively small foe (albeit with sizable forces on paper), one not especially shrewd in deploying its forces or exploiting U.S. vulnerabilities on an accessible battlefield. U.S. forces today are ideal for such a war. They would see and destroy most enemy forces, eliminate the danger to U.S. personnel and operations, demolish the enemy's infrastructure, and force a surrender. To prepare for the future, the Pentagon should examine how those same U.S. forces might fare and how they would need to be retailored if the United States had to face a *larger* or *nastier* enemy, possibly in *messier* conditions—tough terrain, crowded cities, or dense jungle, with unclear limits, lines of battle, and distinctions between combatants and civilians. When the United States faced some of these conditions in Indochina, it did not succeed. North Vietnam was a wily adversary, with substantial and well-dispersed forces that exploited unfavorable geography and other U.S. vulnerabilities, including America's flagging will.

Change along one, two, or all three of these axes is plausible. Numerous *transition* states are quite large—from China and India to Russia, Indonesia, and Brazil.

While it is unlikely that any one of them would turn against the United States and the core, neither is it implausible that at least one would do so. Then, too, one or more current or future *rogues* could acquire and brandish a much nastier arsenal than today's Iraq or North Korea: an arsenal of nuclear, biological, and chemical weapons and delivery systems; cheap but "smart" weapons; of offensive information warfare capabilities. The *failing state* phenomenon, which can produce especially messy circumstances, could sweep across sub-Saharan Africa and afflict other regions such as South and Central Asia, North Africa, the Balkans, and even the Caribbean. Finally, dangerous nonstate rogues and other sub- and transnational threats could aggravate the security conditions in virtually any plausible future, because these dangers could be connected to the large transition states turned hostile, nastier rogues, or state failures.

A combination of larger foes, nastier foes (state or nonstate), and messier battlefields would pose especially severe and complex challenges for U.S. forces. In the worst case—unlikely but usefully provocative—the United States and its (possibly shaky) core partners might be confronted with a budding alliance of a powerful, hostile China, an aggressive, nuclear-armed

Iran, and a desperate, nuclear-exporting Russia, or a global network of vicious terrorists and criminals. Such a combination would possess nearly every type of weapon fielded by the United States and would be poised to control most world oil and gas supplies of Southwest and Central Asia. U.S. territory would be no sanctuary, and the ability and will of the United States to project power successfully would be in doubt. Simultaneously—and not unrelated—Africa could become a cauldron of famine, refugees, and genocide. This case illustrates that it would not take a single "peer challenger" to confront the United States with a worldwide set of threats.

Chapter fifteen details the sorts of adaptations U.S. forces might need to undergo if change occurs on any of these three axes, but also adaptations that ought to be undertaken in any case, because they would help the United States in virtually any plausible future. One conclusion drawn from that analysis is that the United States needs agile warriors, versatile forces, flexible systems, and adaptive institutions. While this is certainly so, the search for hints about how the United States could be better prepared for the future need not stop there.

Every step taken by the U.S. defense establishment—new weapons systems, tactics, R&D—into the space of plausible futures will inevitably imply a sense of direction and a view of which of these three axes is of greatest concern. Because the problems that could crop up along these axes are different and require different responses, the United States needs to invest wisely. With a defense budget of approximately \$250 billion, it cannot prepare for the worst case on every axis. Making a bee-line toward a single-point future is not wise, so Washington should watch for signposts to help adapt its plans and forces. What *can* be decided when the direction and signposts suggest that plans are on the right bearing *should* be decided—but planners should defer when not confident of the need or effect. This is the essence of adaptive planning.

WMD environment



Verities, Clues, and Signposts

Today's conditions contain a lode of information about plausible futures that can help in gaining a sense of direction. Some are obvious but nevertheless enduring and strategically significant facts: the United States is separated by vast oceans from its leading economic partners; population growth is greatest outside the core; the world's primary source of energy is fossil fuel; many of the world's political borders do not conform to ethnic distinctions; illegitimate governments will, over time, become unstable. Information technology reduces the importance of distance in industry, politics, and warfare. But the particular characteristic of world affairs that will most define the future security environment is *globalization*. It is to the new era what bipolar confrontation was to the old.

The integration of the global economy is manifested in the growth of trade, the quest of investment capital for competent low-cost labor, the diffusion of technology and knowledge, and the enhancement of the systems and networks that process and move information. These are not easily reversible processes, especially because they bring rewards—greater economic efficiency, prosperity, and freedom—that condition human behavior. In the information age, disintegration of the world economy borders on the implausible, not only because it would be cataclysmic but also, to some extent, impractical. Even if nation-states reverted to mercantilism, multinational enterprises utilizing information networks will not be brought back into national confines.

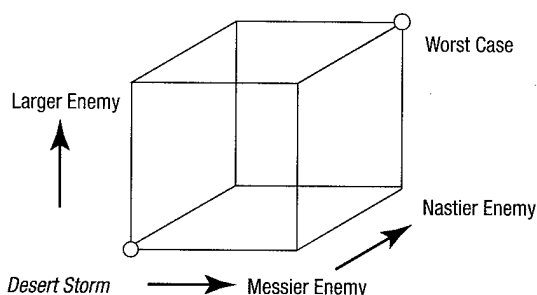
As it proceeds, globalization will affect U.S. security in four basic ways:

- *The United States will have increased global economic interests.* As a consequence of its integration in the world economy, which will include in time at least a portion of the states currently in transition, the United States will be concerned with crucial markets, product sources, energy sources, infrastructures, and flows that make the global economy function. These interests will take traditional geographic forms (e.g., key countries, oilfields, and borders), as well as new functional forms (e.g., financial and transport systems). On the assumption that there will still be rogue states and failing states—not all current transition states will succeed—threats to those interests will persist. The United States will therefore continue to depend vitally on its ability to project power to defend them.

- *The spread of technology will be hard to control.* For the most part, this is desirable, as it strengthens and extends the global economy upon which the United States thrives. But it cannot be confined to the core. "Controlling information technology" is an oxymoron, because it is so pervasive in civil economies, so crucial to the globalization of multinational enterprises, and so fungible. Rogues and nonstates will have an ever-growing access to technologies that are or could be dangerous. While they will be hard-pressed to create or master these technologies and will remain generally backward compared to the countries in the core, they can use them asymmetrically to damage international security and U.S. interests.

- *The transition states will probably gravitate toward the core.* Transition states—even the largest of them—will find it difficult to develop and sustain "world class" economic, technological, and military capabilities if they abort their reforms and fail to integrate into the world economy. Integration does not guarantee that such states—most importantly, China—will embrace the values and adopt the international norms of the current core democracies. But it does suggest that they will

Prepare for "Space of Future Worlds"



increasingly identify with the overarching U.S. interest in the vitality and security of the world's economic core. If they reject that basic interest, they could create severe security problems, becoming, in effect, large rogues, able to use technology destructively even if they cannot master it economically. But they would have difficulty becoming peer competitors and mounting a broad strategic challenge to the United States and to the interests and norms of the core.

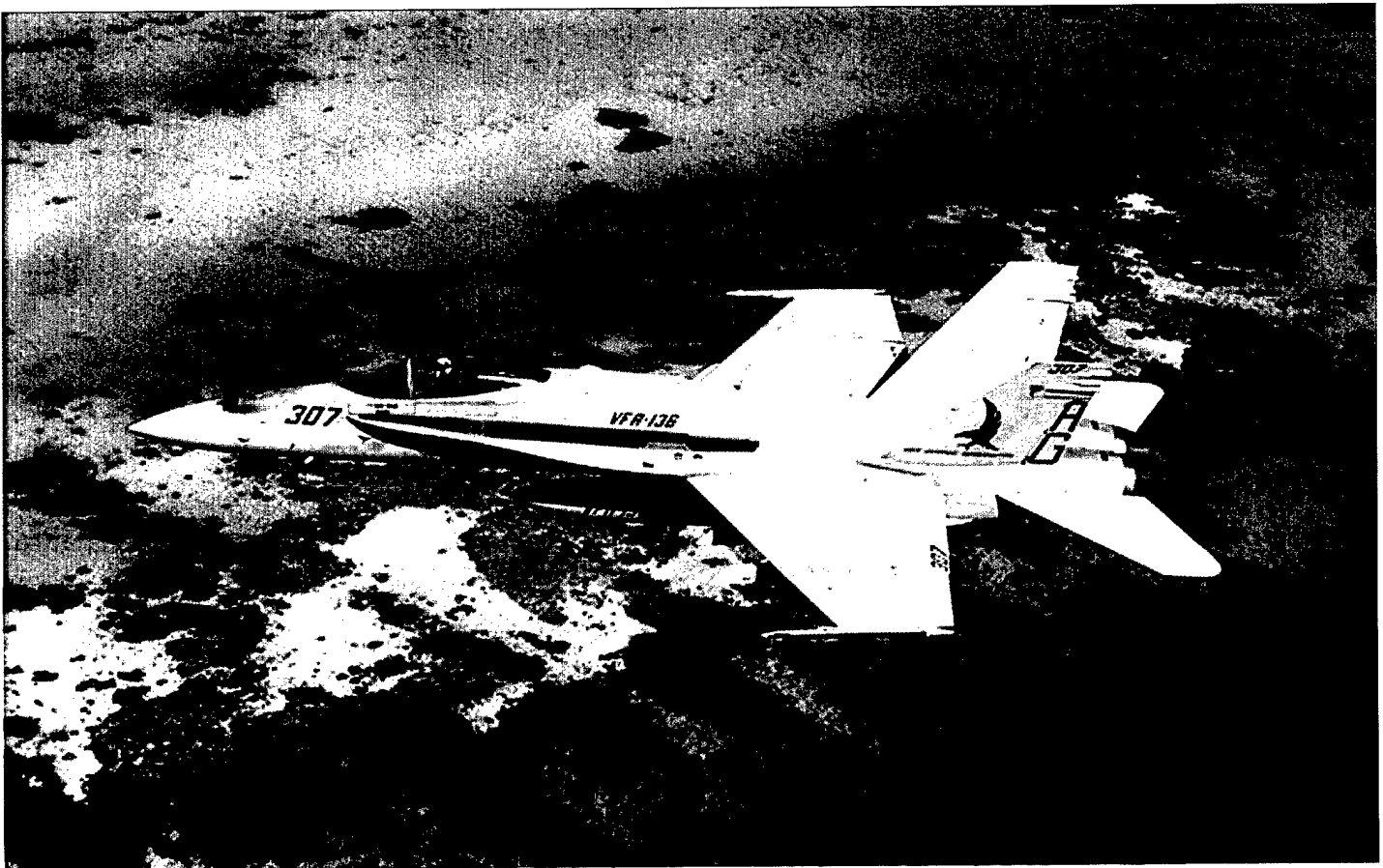
● *Uneven and incomplete globalization will exclude states and regions.* Globalization is, in large part, driven by combining information technology, high-potential labor, capital, and the demands of world markets. There are signs that this phenomenon is not spreading uniformly and will not soon occur throughout the entire world. Where it does not, economic exclusion and decline can result. This is, of course, the danger in parts of Africa, where it has already contributed to state failure and where demographic and food-production

trends are unfavorable. Even in states that reform and integrate, large sectors and strata can be left out—and thus left to deteriorate or turn against the successful, posing increased transnational threats. As globalization progresses, this undertow will create “messy” situations that the United States and its core partners will find hard to ignore.

A Sense of Direction

The first three “clues” about the future, taken together, suggest that the most salient defense challenge to be faced by the United States over the next 20 years will be to *project power globally to defend core interests threatened by adversaries with increasingly destructive means at their disposal.* The destructive means of greatest concern are WMD. Today's breed of rogue state, having acquired technologies to pose asymmetric threats, or less likely, today's large transition states turned hostile, could have both

F/A-18C Hornet



the incentive and improved ability to hold the United States at bay. Such adversaries could disrupt or deter U.S. power projection both by posing greater dangers to U.S. forces in the theater and by threatening to attack the United States itself, which has been a sanctuary since the end of the Cold War. Thus, the United States will find it both more important and more hazardous to defend its global interests, even in the absence of a new global challenger.

This *power-projection challenge* should energize plans and preparations for the future, unless and until conditions point in a different general direction. This does not mean that future adversaries will be no larger than, say, Iraq or North Korea. But more important than sheer size is how shrewdly rogues turn available technology, especially WMD, against U.S. vulnerabilities and its public's strong aversion to casualties. The best illustration of this is the case of China, with its ability to turn aggressive in Asia while preventing a successful U.S. intervention. If so disposed, China might seek the means to destroy U.S. forces projected near China and threaten the U.S. homeland if China proper is threatened, thus affecting both the ability and will of the United States to use its power in the region. This example is in essence a "high end" variant of the power-projection challenge.

The challenge, whether from China or sundry smaller rogues, follows the logic of the more immediate asymmetric threats identified in the QDR and analyzed in this volume, especially the WMD threat. Therefore, by anticipating the near-term need to *respond* to asymmetric threats in designing its forces (chapter eleven), the United States can get a head start in *preparing* for the more distant future (chapter fourteen). Moreover, because it takes time to reap results from R&D and other investments needed to be able to project power against nastier adversaries, such a focus ought to be a high priority now.

But what if the *size* of an adversary were to become the dominant problem for the United States (e.g., a hostile China that not only can frustrate U.S. power projection in its vicinity but can threaten core interests on a wide front). One reason this

might be considered improbable is that for China to have that sort of power it would probably be so integrated into the core that it would not be inclined to threaten the core. Even in such a case, the United States could "scale up" its forces, increasing end-strength, force structure, and weapons and platform production. This would be an enormous undertaking, to be sure, but it would not require as much time as does creating the means—new technologies, institutions, doctrines, and structures—to counter the nastier adversary.

Moreover, because the probability of a global challenger is low and the costs of "scaling up" high, investments to prepare for it should not be undertaken unless and until there are warnings that one is emerging. In the meantime, measures to address the power projection challenge will *also* have value if the adversary turns out to be large (e.g., the WMD threat to U.S. forces and territory). This suggests that the military problems posed by size alone should not drive U.S. preparations for the future, though the United States must be adaptive enough to change course if the world develops in a way considered unlikely here. In short, Washington should *watch for* but not substantially *prepare for* a significantly larger foe.

The "principles for force 2018," which carry forward ideas in *Joint Vision 2010*, are in line with this logic. They call for an emphasis on the ability to "project force, not just forces," based on a system of systems that would give the United States advantages in illuminating the world, staying out of sight, and relying on "plugged in" coalition partners. Simply put, the United States can extend its ability to project power to defend its global interests in the face of nastier, better armed (including WMD) adversaries by giving small, networked, and rapidly deployable forces all the remote firepower they need to destroy larger enemy forces. It might also have to rely on nuclear deterrence against not only nuclear but also biological and chemical threats.

Of course, it is quite plausible that the challenge of the nastier (possibly larger) rogue will be aggravated by having to fight it on a more ambiguous, less visible ("messier") battlefield, where the problem

is not as simple as destroying armor and facilities in the open. Such a battlefield might not be within easy range of littoral strike forces or standoff platforms; it might hamper joint operations; and it might not lend itself to "high-tech" C⁴ISR and weapons. The terrain and accessibility of future battlefields are as diverse as the range of possible future enemies. U.S. forces must be able to deploy and destroy enemy forces in unfavorable surroundings, not just ideal ones. While this will tax U.S. "information dominance," the answer is not to abandon that

as a goal but to invest in achieving it even when conditions are poor.

The fourth "clue" presented above suggests that power projection against more dangerous enemies is not the only concern about the future that should inform current U.S. preparations. Because of uneven globalization, economic exclusion, and political instability, SSCs will continue to crop up, and they could be both larger and messier than those of recent years, particularly if state failures become more catastrophic. "Crash landings" by North Korea and Cuba, for example, could be extremely dangerous. Subnational and transnational rogues will pose unconventional threats. At least some U.S. forces (e.g., special operations, security services, light and agile mechanized units) might have to be tailored for these threats and contingencies rather than for major wars.

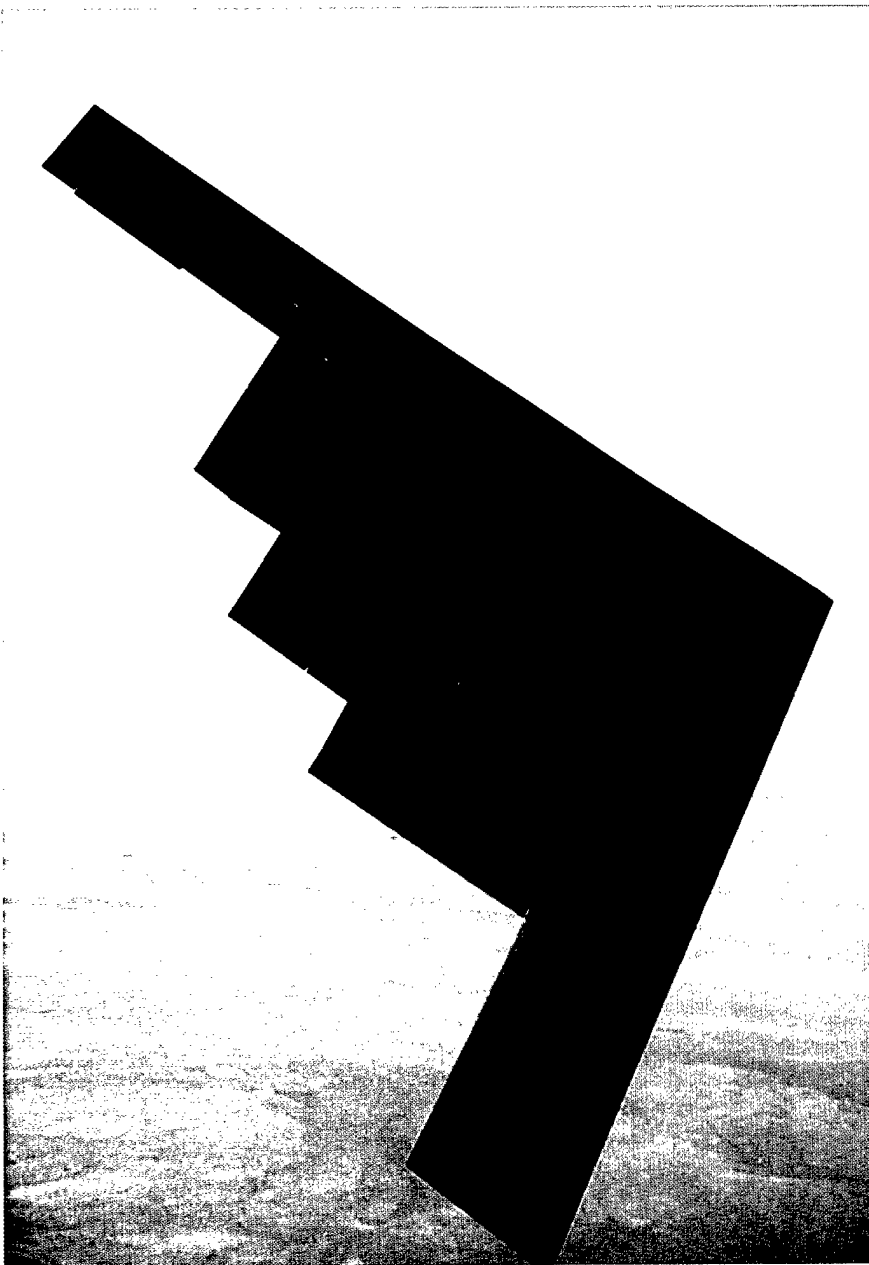
Thus, without embracing one specific view of the future, it is possible to identify—and important to prepare for—two broad classes of problems in the "future space" that require long-lead preparations: *projecting power against WMD-armed adversaries, and conducting a wide range of operations (MTWs and SSCs) on messy battlefields and/or against transnational threats.* These two concerns could tend to pull U.S. forces in two quite different directions, thus requiring that the dilemma described earlier—to specialize and devote a part of the force for small-scale operations, or not—be resolved.

U.S. Military Superiority

During the Cold War, the yardstick for judging the adequacy of U.S. forces was rough across-the-board "equivalence" with Soviet forces. (The United States led in some categories such as naval forces and the Soviet Union in others such as tank armies.) While arbitrary from a purely operational military standpoint, this standard was widely accepted and indeed deemed crucial by the United States both for its peacetime global competition with the Soviet Union and for acting with confidence in crises.

With the end of the Cold War, U.S. military superiority has become a fact of life, accepted at home and abroad. Indeed,

B-2 bomber



the resiliency of public support for a quarter-trillion-dollar annual defense budget can be explained not by the intricacies of MTWs, SSCs, and environment shaping, but by broad sympathy with the idea that maintaining unmatched military capabilities is worth the cost. To some, this is a prerequisite of U.S. international political leadership. To others, what matters most is that U.S. forces never enter a war they cannot win, with the lowest possible casualties. Still others believe that it is important strategically for the United States to preserve the so-called "unipolar moment." In any case, having backed into military superiority, thanks to the collapse of the other superpower, the United States now must learn to use it wisely.

The national preference for unmatched military capability gives the U.S. Department of Defense the fiscal resources needed to meet its more specific operational requirements. A fortunate alignment thus exists between the political consensus favoring military strength and the sufficiency of U.S. forces relative to various threats, none of which begins to compare to U.S. capabilities. There has been no need to define "superiority" or its purposes. Yet the more the QDR's two important additional considerations bearing on the adequacy of U.S. forces are considered—*environment shaping* and *preparing for the future*—the harder it is not to ponder military superiority: What is it? What good is it? How much of it is enough? How does Washington want others to regard it? How should it be used?

Make WMD Acquisition and Use Seem Futile and Risky

- Use nuclear deterrence for nuclear and high-end biological and chemical threats. More explicit declaratory policy is required.
- Employ theater missile defenses (TMD), equipment, and counterforce to defend battlefields and signal preemptive options.
- Pursue ideas to project force with smaller and dispersed units.
- Reduce dependence on vulnerable routes and bases.

In approaching these questions, it is helpful to recall the U.S. "equity" in the world introduced in chapter one: the health, expansion, and security of the democratic, free-market core and its norms of responsible state behavior toward other states and their own citizens.

These interests and norms are linked: the stronger the core, the more its norms are likely to be respected; the firmer the norms, the better the outlook for the core's health and security. As the core grows, deviations from its norms become more isolated and, because of gathering strength, more easily defeated and punished.

Consider a future in which China, Russia, and all other major transition states come to identify with the key interests and norms this volume has stressed—unlikely and certainly beyond the means of the United States to bring about, but not implausible by 2018, and certainly worth striving toward. The few remaining rogue states would have nowhere to turn and much to lose when violating the norms and threatening the interests of what by then would be a nearly global core. Such an "outcome" for the period considered in this volume would obviously be of enormous benefit to the United States, which is at the heart of the core and second to none in its commitment to the norms. Simply stated, a larger core with widely respected norms is a favorable world for the way of life, quality of life, and global interests of U.S. citizens. Therefore, the goal of an inclusive *commonwealth* of freedom and security, based on norms, could animate U.S. strategy in the new century, as suggested by the 1997 National Security Strategy.

Such a vision of a desirable future underscores the special importance of the current core partners and transition states in American strategy. The cohesion and increased international responsibility of the former and the reform and integration of the latter are the paramount objectives of the United States. And of course, U.S. success in aligning its closest and most capable friends, the EU and Japan, with its global strategy is indispensable for the goal of encouraging large transition states, especially China and Russia, to stay on a course of reform and moderation.

Principles of Force 2018

To decide now what would be the best U.S. force for the year 2018 would be both premature and unnecessary. The need may change as signposts become more readable. But it is not too soon to consider the general directions in which the DoD needs to move (and is already, to some extent, moving) to ensure the effectiveness of U.S. forces 20 years from now. The following principles are offered in this spirit:

- *Project Force, Not Just Forces.* U.S. forces will soon be able to destroy a large share of an adversary's invasion force by standoff strikes and the rapid insertion and retraction of ground units. Because similar capabilities are proliferating globally, it is important to change according to a schedule the U.S. chooses rather than one others choose.
- *Drive Cycle Time Down.* The greater the speed with which the United States can project force decisively, the greater the deterrence. At the operational level, a goal for 2018 is for the United States to be able to project force in all contingencies within a single day anywhere in the world. At the tactical level, a goal of U.S. forces is a cycle of operations—showing up, completing a mission, and dispersing—that can be measured in minutes.
- *Illuminate the World.* To support force projection and reduced cycle times, the United States needs a system to illuminate most of the world all the time. This system requires establishing, maintaining, and exploiting a network of strategic and operational sensors.
- *Keep the Magazines Full.* Precision weaponry is getting cheaper as the cost of electronic components falls, even as the cost of operating platforms grows. The United States must be prepared to use very large numbers of precision weapons in a slugfest with a capable opponent.
- *Use What's There.* The more the United States can empower local allies, the less work it will have to do itself, and the smaller the risks of exposure. The same is true for using facilities: at the same time that militaries everywhere are shrinking, the world's commercial infrastructure for moving materiel and information is growing. Using this infrastructure will allow U.S. forces to do more and do it more quickly.
- *Defend What is Depended On.* Most commercial infrastructure is not well protected against physical or information attack. While this problem is mitigated by the sheer profusion of infrastructure, some critical nodes may have to be secured.
- *Connect With Friends.* The System of Systems—the emerging U.S. federation of sensors, switches, and processors—is becoming a core competence of its military. Careful attention needs to be given to enhance adaptiveness and create links to core partners, civilian agencies, and even transition states.
- *Never Stop Learning.* The DoD needs to evolve concepts and tactics more quickly than any adversary can evolve countermeasures. Every core competence should be continuously and critically examined. To deal with an uncertain world, doctrine must always be challenged for relevance.

This line of reasoning has two important implications for planning U.S. forces and their role in the world. First, although those forces are designed for *operational* contingencies mainly involving rogue states (in the case of MTWs) and failed states (SSCs), their role vis-a-vis the main U.S. core partners and transition states has profound *strategic* importance. Second, and related, how U.S. military superiority is presented to both partners and transition states is a crucial and delicate matter. In neither case is it helpful to suggest that the goal of the United States is to maintain primacy relative to them.

What, then, is a sound rationale for maintaining superior U.S. military capabilities? Promoting and protecting the norms and interests of the core present a major challenge for the United States as it approaches the new century, arguably as great as the challenge it faced in 1945. Superior military capabilities are a necessary,

though not a sufficient, condition for the United States to fulfill this purpose. By the same logic, maintaining the capacity to promote and protect this equity against plausible threats—such as, projecting power when and where needed, even against WMD-armed rogues—is a reasonable standard for U.S. military sufficiency.

It is a standard that does not necessarily require treating the growth in the power of others as a challenge—only if their actions threaten the U.S. stake (its interests and norms). This is both the most principled and most practical way of dealing with the rise of China. It does not mean that the United States is determined to frustrate China's goal of becoming more powerful, but it does mean that the United States will maintain an ability and, if need be, will act to protect its own stake in the

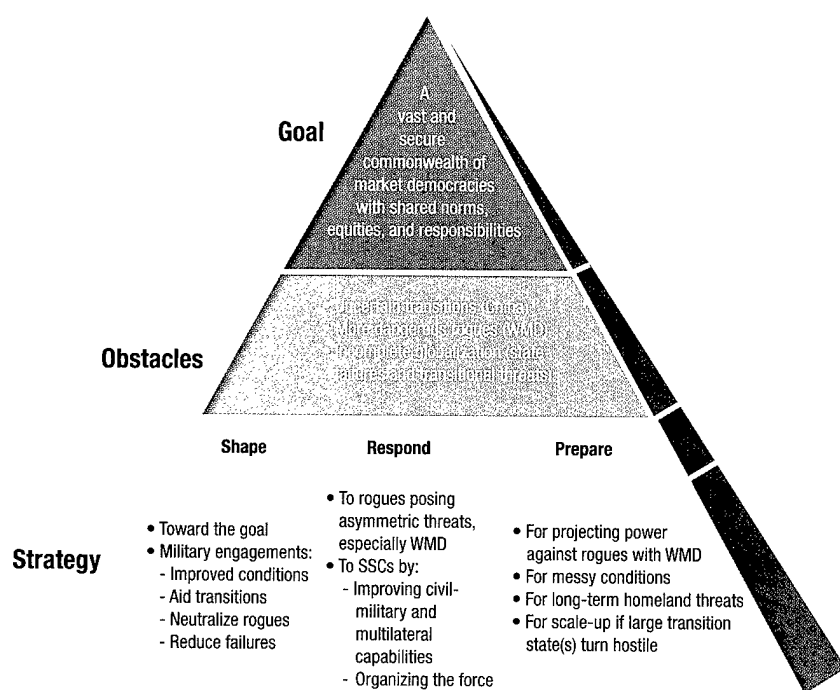
world. Moreover, because U.S. partners share the interests and norms that comprise that stake, making it theirs, too, the United States should regard the growth of their power, and of course their responsibilities, as desirable, not somehow threatening to its standing. In this sense, superior U.S. military capabilities are not intended to preserve a pecking order but to advance increasingly shared purposes.

The U.S. motivation is thus quite the opposite of hegemonic.

In practice, as this volume has emphasized, U.S. military power is all the more likely to be accepted and thus useful in promoting U.S. interests and norms if the United States actively *engages* that power cooperatively, e.g., to promote coalitions in the core, to help transition states reform, and to encourage an understanding that U.S. power is threatening only to those that threaten the U.S. stake. Such a concept for overseas deployments, and for environment shaping in general, dovetails with American purposes and with the world of fluid challenges and opportunities.

In closing, the QDR is a significant and timely departure from a way of thinking about the need for U.S. military capabilities that has served well in the past but is no longer right—namely, reliance on a known enemy (or two) to motivate both plans and public support for U.S. forces. This is a hard habit to break. But with the possibility of North Korea disappearing as a threat if not as a state, the habit is best broken now. The United States does not require an enemy to justify maintaining and improving its military capabilities. Those who believe that it does would either slash U.S. defense spending or find a new enemy, neither one being the right course for national security. Rather, the United States needs forces, with the qualities discussed in this volume, mainly because *globalization* increases the U.S. stake in the world while also placing more destructive means within reach of any number of states and other actors that could threaten that stake. The United States needs forces able to respond to the current security environment, to prepare for a less secure world, and to help shape a commonwealth of security and freedom.

Sketching a Strategy



The U.S. Stake in the World

Interests	Norms
Cohesion and improved burden-sharing among partners	Nonaggression, peaceful conflict resolution
Completed reform and integration of states in transition	The rule of law in the functioning of the world economy and other transnational endeavors
Weakening and peaceful disappearance of rogues (state and nonstate)	Respect for the rights, equality, and freedoms of all human beings' endeavors
Broad international responsibility to relieve the human suffering and transnational threats from failing states	Collective responsibility for international security

Acronyms

ABL	airborne laser
ABM	antiballistic missile
ACM	advanced conventional munitions
ACOM	U.S. Atlantic Command
ACRI	African Crisis Response Initiative
ACRS	Arms Control and Regional Stability (talks)
ACSS	African Center for Security Studies
AEF	Air Expeditionary Forces
AFSOUTH	allied forces south
AID/OFDA	Agency for International Development/Office of Foreign Disaster Assistance
AIP	airindependent propulsion
ALCMs	airlaunched cruise missiles
ARF	ASEAN Regional Forum
ARG	amphibious readiness group
ASAS	all-source analysis system
ASEAN	Association of Southeast Asian Nations
ASW	antisubmarine warfare
ATACMS	Army tactical missile system
ATO	air tasking order
AWACS	airborne warning and control system
BALTBAT	Baltic Peacekeeping Battalion
BAT	brilliant antitank munition
BDA	bomb damage assessment
BPS	bits per second
BUR	Bottom-Up Review
BW	biological weapons
BWC	biological weapons convention
C ²	command and control
C ³ I	command, control, communications, and intelligence
C ⁴ ISR	command, control, communications, computers, intelligence, surveillance, and reconnaissance
CARICOM	Caribbean Common Market
CBDCOM	U.S. Army Chemical and Biological Defense Command
CBW	chemical and biological warfare
CCP	Chinese Communist Party
CD-ROM	compact disk with read-only memory
CEC	cooperative engagement capability
CENTCOM	U.S. Central Command
CENTRASBAT	Central Asian Combined Peacekeeping Battalion
CFE	Conventional Forces in Europe
CINC	commander in chief

CIVPOL	United Nations Civilian Police
CJTF	combined joint task force
CM	cruise missile
CONUS	continental United States
COSTIND	Committee on Science and Technology for National Security
COTS	commercial off-the-shelf
CRAF	Civil Reserve Air Fleet
CRC	Conflict Resolution Center
CS	command support
CSS	combat service support
CSAP	Conference on Security and Cooperation in the Asia Pacific
CTBT	Comprehensive Test Ban Treaty
CTR	cooperative threat reduction
CVBG	carrier battle group
CW	chemical weapons
DEA	U.S. Drug Enforcement Agency
DMZ	demilitarized zone
DoD	Department of Defense
DPRK	Democratic People's Republic of Korea
DSAA	Defense Security Assistance Agency
DVDs	digital video disk
EAPC	Euro-Atlantic Partnership Council
ECOMOG	ECOWAS Military Observer Group
ECOWAS	Economic Community of Western African States
E-IMET	Expanded International Military Education and Training
EMP	electro-magnetic pulse
EMU	European Monetary Union
EPW	earth-penetrating weapon
ESDI	European Security and Defense Identity
EU	European Union
EUCOM	U.S. European Command
EW	electronic warfare
EXFOR	experimental force
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FEWS	Famine Early Warning System
FIS	Islamic Salvation Front
FMF	Foreign Military Financing
FMS	Foreign Military Sales
G-8	Group of Eight
GCC	Gulf Cooperation Council
GDP	gross domestic product
GLONASS	Global Navigation Satellite System
GNP	gross national product
GPS	global positioning system
HEAT	high explosive antitank weapon
HOC/CMOC	Humanitarian Operations Center/Civil Military Operations Center
HPM	high-powered microwave
HQ	headquarters

IADB	Inter-American Defense Board
IAEA	International Atomic Energy Agency
ICBM	intercontinental ballistic missile
ICITAP	International Criminal Investigative Training Assistance Program
ICO	International Communications Organization
ICRC	International Committee of the Red Cross
IFF	identification friend or foe
IFOR	Implementation Force
IGAD	Inter-Governmental Authority on Development
IMET	International Military Equipment and Training
INF	Intermediate Nuclear Forces Treaty
INS	Immigration and Naturalization Service
IOs	international organizations
IOC	initial operational capability
IR	infrared
IRC	International Rescue Committee
ISR	intelligence, surveillance, reconnaissance
IT	information technology
IW	information warfare
JDAM	joint direct attack munition
JIATF	joint interagency task force
JSOW	joint stand-off weapon
JSSAM	joint service stand-off attack missile
JSTARS	joint surveillance and target attack radar system
JTF	joint task force
JV 2010	<i>Joint Vision 2010</i>
KDP	Kurdish Democratic Party
KM	kilometer
LEO	low-earth orbit
LIC	low intensity conflict
LO	low observables
LOC	lines of communication
LOCAAS	low-cost autonomous attack system
LOTS	logistics over the shore
MBD	million barrels per day
MCC	Multinational Counter-Narcotics Center
MCS	maneuver control system
M-Day	day on which mobilization begins
MEAD	medium extended air defense system
MEF	Marine Expeditionary Force
MEII	Minimum Essential Information Infrastructure
MERCOSUR	Mercado Comun del Cono Sur
MET	Military Education and Training
MEU	Marine Expeditionary Unit
MFO	multilateral force and observers
MIF	multinational interdiction force
M/IRBM	medium/intermediate-range ballistic missile
MIRV	multiple, independently-targeted reentry vehicle
MNF	multi-national force
MOB	mobile off-shore base

MOMEF	Military Observer Mission, Ecuador/Peru
MOOTW	military operations other than war
MP	military police
MRC	major regional conflict
MTCR	Missile Technology Control Regime
MTOE	modified table of organization and equipment
MTW	major theater war
NAFTA	North American Free Trade Agreement
NATO	North Atlantic Treaty Organization
NBC	nuclear, biological, and chemical
NCA	National Command Authorities
NEO	noncombatant evacuation operation
NGO	non-governmental organizations
NIS	New Independent States
NMD	national missile defense
NPR	Nuclear Posture Review
NPT	Non-Proliferation Treaty
NRDC	National Resources Defense Council
NSI	national strategic infrastructure
NTC	National Training Center
OAS	Organization of American States
OAU	Organization of African Unity
OECD	Organization for Economic Cooperation and Development
OFDA	Office of Disaster Assistance
OPCON	operational control
OPTEMPO	operational tempo
OSCE	Organization for Security and Cooperation in Europe
OSD	Office of the Secretary of Defense
PA	Palestinian Authority
PACOM	U.S. Pacific Command
PCC	Partnership Coordination Center
PERSTEMPO	personnel tempo
PfP	Partnership for Peace
PGM	precision guided munition
PKK	Kurdistan Worker's Party
PLA	People's Liberation Army
PLO	Palestinian Liberation Organization
POL	petroleum, oil, and lubricants
POMCUS	prepositioned organizational materiel configured in unit sets
PRC	People's Republic of China
PSYOP	psychological operations
PUK	Patriotic Union of Kurdistan
PVOs	private voluntary organizations
QDR	Quadrennial Defense Review
R&D	research and development
RAF	Royal Air Force
RBA	revolution in business affairs
RCMP	Royal Canadian Mounted Police
RMA	revolution in military affairs

ROE	rules of engagement
ROK	Republic of Korea
SADC	Southern Africa Development Community
SAR	synthetic aperture radar; search, and rescue
Sea TACMS	sea tactical missile system
SECDEF	Secretary of Defense
SFOR	Stabilization Force
SHAPE	Supreme Headquarters Allied Powers Europe
SLBM	submarine launched ballistic missile
SLOC	sea lines of communication
SOCOM	U.S. Special Operations Command
SOE	state owned enterprise
SOF	special operations forces
SOUTHCOM	U.S. Southern Command
SSC	small-scale contingency
START	Strategic Arms Reductions Treaty
STRATCOM	U.S. Strategic Command
TBM	theater ballistic missile
TCO	transnational crime organization
THAAD	theater area air defense
TMD	theater missile defense
TPFDD	timephased force deployment data
UAE	United Arab Emirates
UAV	unmanned aerial vehicle
UN	United Nations
UNDHA	United Nations Department of Humanitarian Assistance
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNITAF	Unified Task Force in Somalia
UNMIH	United Nations Mission in Haiti
UNOCA	United Nations Observer mission, Central America
UNOSAL	United Nations Observer mission, El Salvador
UNPROFOR	United Nations Protective Force
UNSCOM	United Nations Special Commission
U.K.	United Kingdom
U.S.	United States
USAF	U.S. Air Force
USAID	U.S. Agency for International Development
USAREUR	U.S. Army Europe
USMC	U.S. Marine Corps
USN	U.S. Navy
USSR	Union of Soviet Socialist Republics
VSAT	very small aperture terminal
WFP	World Food Program
WMD	weapons of mass destruction
WTO	World Trade Organization