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Future Prospects for the U.S. Defense Budget and Their Implications for Our Asian Alliance Commitments

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Future Prospects for the U.S. Defense Budget and Their Implications for Our Asian Alliance Commitments *

This talk addresses two issues. First, given the level of American defense spending, are there enough resources available to sustain the U.S. presence in East Asia, over the long term, along the lines of the current commitment of approximately 100,000 troops? Second, even if there is adequate funding to maintain forward deployed troops, are these the kinds of investments we ought to be making, given the transformations we are seeing in the geopolitical environment and, I would argue, the military-technical environment? Will these investments, in other words, achieve American security objectives in East Asia over the next ten to twenty years?

Defense and the Budget

In considering whether we have sufficient funds to sustain the current defense program, we need to look at the budget. There is much to be learned from budgets, but much also that budgets do not reveal. Benjamin Disraeli's dictum about "lies, damned lies, and statistics" reminds us that budget data can be easily misused. For example, more liberal think-tanks looking at defense spending since World War II in constant dollars would observe that today's level is only about 16 percent below the Cold War baseline. They might then conclude that the Cold War threat has disappeared, the budget is too high, and the solution is to reduce the overall level of defense spending. Indeed, at the beginning of the second

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Clinton administration, the Brookings Institution published its defense monograph advocating a reduction to \$175 billion. The libertarian Cato Institute states that a \$170 billion budget is feasible.

Using the same budget figures, more traditionally conservative Washington think-tanks, such as the Heritage Foundation, note that defense spending now represents less than 3 percent of the U.S. Gross Domestic Product—the lowest percentage since before World War II—and call for spending much more, about \$330 billion. Thus, there is a range of some \$160 billion between the most economical and most generous notions of a defense budget.

Of course this figure should not be determined by abstract criteria, but should be a function of a variety of factors, including our perceived global military competition, both short-term and long-term; our security objectives; the mission of the United States military—be it to police democracy's empire, maintain favorable regional balances, or some other role; and the relative priority attached to domestic programs, tax cuts, and deficit reduction.

Defense costs depend on performance standards. The basic objective during the Cold War was to hold out on Europe until somehow we could amass our industrial might with the other democracies and win. Now, we want our forces to be able to win two regional wars nearly simultaneously, quickly, decisively, and very one-sidedly. And some would like us to win "antiseptically," without suffering any casualties. That raises the performance bar, which requires paying a premium.

Defense expenditures are also a function of how efficiently we purchase the military capability we think we need. That has become a major theme as budgets grow tighter. In addition, defense spending is a function of the level of risk considered tolerable. The country can set ambitious objectives and high performance standards for the military, but it makes a difference whether we are comfortable living with a high level of risk in terms of our ability to meet the standards we set.

U.S. defense budgets have declined in real terms every year since 1985. With the end of the Cold War in 1989 and a lessened security threat, it was hoped that the corresponding fall in defense budgets would yield a so-called peace dividend. [Former] Secretary of Defense Dick Cheney once observed that the peace dividend is peace, but most people want to know how much money is being saved with the Cold War over.

From figure 1 (page 6), we can compare the requested budget for fiscal year (FY) 1998, the budget now being debated, with the Cold War peak during the Reagan build-up. Defense spending has declined measurably, whether it's a drop of \$58 billion from the Cold War average or a drop of \$165 billion from the Cold War peak. The area experiencing the greatest decline is procurement, which is the purchase of new military equipment, sometimes referred to as modernization or recapitalization. The FY 1998 request is almost 70 percent less than the FY 1985 Cold War peak and 48 percent below the Cold War average. Active forces in the U.S. military since the end of the Cold War have been reduced by about one-third. Meanwhile the military has over time become more capital intensive. In recent years, [former] Secretary of Defense William Perry has said that as long as we are drawing down forces, we are in reasonably good shape because we will discard the oldest equipment first, keep the newest, and take a "procurement holiday." But the drawdown in our forces is now effectively over.

For the last several years, the question of when the United States is going to turn the corner and begin recapitalizing the military has become a major issue. We have lived off the Reagan build-up, and we have lived off the drawdown; now, we need to recapitalize. In his last Chairman's Program Assessment, an independent evaluation by the chairman of the

joint chiefs of what is needed to sustain the defense program, General John Shalikashvili essentially said that a procurement level of \$60 billion was needed by FY 1998 to maintain and modernize the current force levels. Yet the administration's procurement request is not even close to that \$60 billion figure. So there will be hearings, especially given that the Republican Congress may want to make an issue of this. Nevertheless, separating political rhetoric from the bottom line, there is little difference in the Clinton administration's defense proposals and the Republican-led Congressional Budget Resolution. (See figure 2, overleaf, for comparisons.)

A couple of things stand out from these numbers. First and foremost, the Republicans are not talking about anything like a Reagan defense buildup; rather, their budget resolution calls for a slowing of the rate of decline in defense spending. Indeed, of the \$1.6 trillion dollars projected for defense between now and 2002, there is less than a \$20 billion difference between what Republicans and Democrats are proposing.

Figure 3 (page 7) breaks down the defense budget by title: personnel, operations and maintenance, procurement, research and development, and so forth. These are expenditures in constant dollars, so it is clear that there was a decline from FY 1996 to FY 1997. The administration projects another decline in spending in FY 1998, before the cuts essentially bottom out. (See figure 4, page 7.)

Defense experts are increasingly coming to question whether the administration's defense program is sustainable. The program calls for forces capable of fighting two major regional wars like the Desert Storm contingency of the Gulf War and also engaging in a range of peacekeeping operations, forward presence operations, and other activities. During the current drawdown, the number of active-duty troops has fallen from 2.1 million to 1.45 million today, a decline that many see as problematic for the administration's defense program. In terms of personnel and operations and maintenance costs, even if the number of people and military organizations remains the same, we are going to be spending less and less on them in real terms. That runs counter to a strong historical trend showing 1 to 2 percent average annual growth in those two areas. Thus, a new kind of solution will be needed to reconcile our ends to our means.

Even the administration's large projected increase in procurement does not achieve General Shalikashvili's prescription of \$60 billion. It is not clear at present if there will be even a small increase in FY 1998 over FY 1997, let alone a large increase. If budgets are decreasing and the core structure staying the same—and if the administration's priority is to maintain high readiness, keep the core structure well trained and well supplied with spare parts, and provide a good quality of life and pay raises—how can there be a dramatic rise in procurement or modernization? The Defense Department's own office of Program Analysis and Evaluation estimates a shortfall of \$90 billion over the next five or so years. My organization and the Congressional Budget Office estimate the shortfall to be in the order of \$50 billion to \$100 billion.

There is speculation that this situation will lead to some sort of catastrophe for defense, but that seems unlikely. On the other hand, it points to increasing difficulties. Military leaders and [former] Secretary Perry have discussed remedies from time to time, including a reduction in the size of American military forces and a reduction in forward presence. Indeed, addressing this problem is a motivation for undertaking the Quadrennial Defense Review.

The figures provided by the Congressional Budget Office indicate an annual shortfall of \$20-30 billion in the years beyond the current FY 1998–FY 2002 plan. This is one way of

Figure 1

Figure 2

Figure 3

Figure 4

saying that the problem does not disappear beyond the FY 1997–FY 2002 period, but could actually worsen. In defense of the administration, it should be pointed out that such mismatches are not new. They existed in the Bush and Reagan administrations. However, they do create inefficiencies and must be redressed at some point. The longer the wait, the greater the dislocation and inefficiency.

How might shortfalls in defense spending be covered? The fact is that it is unlikely additional funding will be made available for defense. If anything, Republicans and Democrats will be looking for further ways to reduce the size of the defense budget. In part, this has to do with balancing, or nearly balancing, the budget. The deficit has been declining every year since President Clinton has been in office and will approach \$100 billion this year. However, the Congressional Budget Office has predicted that the deficit will again start to climb after FY 1998. A big part of the deficit problem is mandatory spending, or entitlements (see figure 5). Attempts to come to terms with this—for instance, health care reform and Republican consideration of slowing the rate of growth of Medicare—have failed. Thus, the entitlement problem is likely to grow. Discretionary spending, divided roughly equally between defense and domestic programs such as education and highways, is already feeling the strain and will be progressively squeezed to help close the budget gap. Without increased taxes or an accelerated rate of national economic growth, defense may face even greater fiscal challenges down the road just to keep the deficit at around \$100 billion.

Figure 5

As a footnote, lower than expected inflation could reduce the cost of the defense program. Last year the administration argued that this was the case and that \$46 billion was available because of lower than expected inflation for the goods Defense planned to buy. The administration took \$15 billion of that and let the department keep \$31 billion. Unfortunately, at least in the area of aerospace, a large component, inflation estimates recently have been revised upward, I believe, by a percentage point. So the question is whether the Department of Defense will now get a portion of that money back, which is unlikely.

What does the defense budget mean for U.S. forces in East Asia? There are many ways to deal with the question. One might argue that given the high priority of East Asian security, reductions will be made elsewhere, such as troops in Europe, to accommodate the continued presence of American forces in Asia. Typically, though, that is not the way the Pentagon operates; "salami-slicing" is the rule rather than the exception for reductions. There are other ways of addressing the problem. The 100,000 troops could be maintained in East Asia, and the pace of defense modernization—investment in new technologies or new kinds of military equipment—slowed considerably. In the near term, the 100,000 troops would have relatively modern equipment but, as the current equipment wears out and new equipment does not come on line, there might be an erosion of capability over time, even though there would still be 100,000 troops in East Asia.

Given geopolitical changes in Asia and a worldwide military technical transformation, looking at a figure of 100,000 troops or measuring things in terms of Marine expeditionary brigades or tactical fighter wing equivalents or carrier battle groups may not be the most helpful way of determining how the U.S. military can support its national policy objectives, which appear now to be different from the Cold War period.

Military Transformation and East Asian Policy

Next, I would like to discuss what we are focusing on at my organization: the issue of military transformation and what that implies for how the military supports overall policy in East Asia. The U.S. military's function in East Asia is no longer to deter Soviet aggression. There also seems to be a growing consensus that perhaps in five years' time, deterring aggression by North Korea may no longer be a primary function. In that case, there will be a number of alliances which were created to oppose the Soviet Union, a state which no longer exists, or to combat an ideology, communism, which is in thorough disrepute.

What new objectives will the United States undertake in terms of those alliance relationships? America entered into them because of deep-rooted common values, such as self-determination, market economies, trade, and peaceful resolution of disputes. How will those values be manifested in this new geopolitical environment, and what role will we want the American military to play in supporting these new geopolitical objectives?

One long-term concern is the strong historical pattern whereby great powers compete more than cooperate with each other. It often takes inspired diplomacy to keep great powers cooperating. How can a lapse into competition be avoided early in the next century, and what role can the American military play?

There are a number of challenges. One is managing, if managing is the word, China's rise as the region's predominant power with an economy projected to be on the order of America's in twenty-five years—the first time another country's economy has matched that

of the United States in about a century. In some ways, the magnitude of this challenge, though very different from containing the Soviet Union, is similar to the one faced by Britain and the other European states around the turn of the century, when Germany was a new, rapidly rising power in a period of military transformation. The inability to cope with Germany's rise as a power in Europe led to enormous costs. We should try to avoid a similar situation in the case of China, but it is not clear how, or what role the U.S. military should play.

There is also the issue of Korean unification and what it will mean. What use will American military forces be in Korea after reunification, and what would it mean if they were withdrawn? Some people see Korea as an emerging great power, which also raises issues about nuclear weapons on the Korean peninsula and Japanese-Korean relations. The Taiwan question remains, as well as the future of Japan and its place in the post–Cold War world. Japan's future decisions on the kind of nation it wishes to be will have an impact on the role of the U.S. military in East Asia. Does Japan want to become an Asian Switzerland, limiting its role to humanitarian assistance and peacekeeping, or will it want to plunge into the crass world of power politics? What might an eventual Russian recovery mean, and what might happen to Indonesia's ethnic and religious conflicts in the transition after Suharto?

Thinking of the U.S. military in East Asia in terms of numbers of troops or tactical fighter wings does not help address the questions of why they are there and what the political purpose of their presence is. Another aspect of the problem is that the U.S. military exists not only to support policy objectives, but also to handle problems when they occur. The military must be prepared for conflict and to deter competitors.

We are only a short distance along the way towards thinking about how the future conflict environment might change dramatically from what we have seen, even in the Persian Gulf War. In fact, at the Center for Strategic and Budgetary Assessment (CSBA), we have been looking at the issue of military transformation—the prospect that we may be in the early stages of a "military revolution." Military revolutions are major discontinuities typically brought about by four things. One is a surge in technological progression that allows news kinds of military systems to be fabricated. Once accumulated in sufficient numbers, these new systems provide military leaders with new ways of solving problems—or in some cases, the adversary presents a new and different kind of problem to us. New operational concepts emerge, new ways of meshing these tools are developed, and, typically, new organizations must be created to execute these new processes, called "doctrines" by the military. When that happens in a way that leads within a relatively short time to a large boost in military effectiveness, a military revolution has occurred. This can abruptly change how wars are fought.

This is important when considering \$60 billion in recapitalization for the U.S. military. Often, a military revolution produces precipitous declines in the value of some existing defense capital stocks. Military organizations must be adaptive to become competitive. It is worth noting that, although the United States has an early and commanding lead in this period of transformation, an early lead is no guarantee of success.

Since academics debate what constitutes a military revolution, a few examples may be helpful. There may be ten or more such revolutions in recorded history, and they seem to be increasing in frequency as technological progression accelerates. Recent examples would be the revolution in land warfare in the mid-nineteenth century, which involved both military and civilian advances. The rifling of guns and artillery provided greater accuracy at much longer ranges, but there was also the exploitation of civilian infrastructure, namely railroads

and telegraphs. Certainly this combination radically transformed the way the Civil War was fought, or the way the wars of German unification were fought, compared with the Napoleonic Wars fifty years earlier. Some of the artwork portraying the early Civil War battles is reminiscent of the Napoleonic period, whereas photographs late in the war, around the time of St. Petersburg, look more like World War I trench warfare. People realized after two years and heavy casualties that things had changed, and fighting had to be conducted differently.

Another example is the naval revolution of the late nineteenth century. After centuries of using wooden ships powered by sail and armed with smooth-bore muzzle-loaded cannon, navies transformed themselves within twenty to thirty years to metal-hulled ships powered by turbine engines and firing extended-range artillery. The advent of the submarine and torpedo led to very different military operations in World War I. A submarine blockade like Germany's against Great Britain, for example, was unheard of ten or fifteen years earlier.

As technology progressed during the period between the two world wars, developments took different paths: blitzkrieg tactics on land, strategic aerial bombardment, carrier aviation at sea, and strategic air defenses. Niche competitors began to invest in or shape their own portion of the military revolution according to their own strategic needs. Germany developed the blitzkrieg, for example, but not carrier aviation. Japan developed carrier aviation but not strategic aerial bombardment. Britain developed strategic aerial bombardment but not a really modern amphibious warfare capability. The United States was the one country rich enough to develop everything and also to lead the next revolution at the end of World War II, the nuclear weapons/ballistic missile revolution.

If we are entering another revolutionary period, we would expect to see very new and different kinds of operations, military organizations, and problems confronting the American armed forces. A military revolution is something the United States probably does not want to see; it is difficult to have the kinds of advantages America has right now and expect to do better as a consequence of yet another military revolution. Thus, despite America having the most technologically sophisticated military and being far ahead of the rest of the world, a technology-stimulated revolution arguably would not be beneficial to the U.S. military. This is especially so when considering the political and organizational barriers to transformation within the American military.

Several kinds of new operations might evolve from the emerging new era of technological transformation—for example, long-range precision strikes, space control, and the way navies think about command of the sea. Another example is information warfare, both as an independent form of military operation and an element in other forms.

New challenges will also arise. What might clever competitors do to make things more difficult for the United States and its allies? One potential new capability is called "antiaccess." A country interested in anti-access would invest in missile capability, not aircraft, since no one can afford to compete with the American Air Force. Another example would be procuring submarines, antiship cruise missiles, and smart antiship mines instead of carrier battle groups; or tapping into commercial satellite installations rather than attempting to erect one's own.

Twenty-five years from now, I suspect, these satellite constellations may represent what the railroads or the telegraph network did to the generals of the mid-nineteenth century—namely, civilian infrastructure that can be tapped for enormous military advantage. General Thomas Moorman, vice chief of staff of the Air Force, has said that, in fifteen years, he expects that about 70 percent of Air Force space communications support will come from commercial satellites.

A country might develop an anti-access capability in several ways to inhibit the United States' ability to project power in the future. If, for example, instead of an air force, an adversary developed a missile force, complemented with submarines, advanced mines, and a global positioning system (GPS) or GLONASS [the Russian GPS], it would constitute a rather strong capability for targeting fixed points such as ports and airfields at a considerable distance, and for blockading ports. Unless the United States made great strides in missile defenses, which is unlikely, a country like China could undertake an anti-access blockade—very untraditional, very asymmetrical—against Taiwan.

If this is a problem for Taiwan, it is also a problem for Japan and Korea, since the latter is essentially an island aside from its border with China. This is not to say that China is the enemy or that the situation will deteriorate to this point. However, this scenario presents a problem which the American military cannot afford to ignore. It cannot ignore the challenge of an anti-access counter-capability: It needs to think about solutions to such problems that would support the alliance structure in East Asia. At least, the military has to think of how to develop equipment and test operational concepts to be prepared for the worst-case scenario. This is not a call for an arms build-up, but planning for the contingency that cooperation may slip into competition. The United States will have to walk a fine line between provoking the other side and discouraging it from doing things that would lead to conflict. In East Asia, growing economies, technological sophistication, and the lack of an organization like NATO mean there is great potential for political competition, along with the ability to exploit new technologies.

The American military and its allies must ask what new "businesses" they must embark on, what old ones to divest, and what new division of labor to create. Do we have to start thinking about dealing with the potential anti-access problem? What does air superiority mean against an enemy that essentially buys a missile force? What does sea control mean against land-based defense of the sea? What does forcible entry mean against an anti-access force? What does space control mean in a world where there are satellite constellations of neutral bodies? What happens if other countries are tapping into Globestar or Iridium [commercial space consortia] or into GLONASS for GPS data and then using that information against us in a conflict? What does strategic lift mean—moving things into ports and airfields—when there are effectively no ports and airfields to which there is access? What would have happened during the Gulf War if Dharan wasn't available for cargo ships? If King Khalid Military City had been too vulnerable for big cargo aircraft to land?

In sum, the U.S. military has to rethink traditional operations conducted by itself and with its allies. In periods of transformation, as noted above, new military formations also emerge. There was no panzer division in 1910, 1920, or 1930; but there was in 1935, and by 1940 it dominated land warfare. There were very few carriers until the 1930s, but in World War II they dominated the war in the Pacific.

Other problems must also be considered. One is the so-called "nuclear shadow." In earlier periods, military transformations often displaced what came before them—castles became obsolete with the artillery revolution and battleships disappeared quickly when carriers arrived. However, nuclear weapons are not going away, and it is not clear what kind of shadow they are going to cast over future military competitions. In fact, they may be a key

part of a competitor's strategy to offset U.S. military advantages. For example, if the United States develops a long-range precision strike capability, a competitor country's nuclear weapons may provide it with a formidable sanctuary against such strikes.

Second, we must consider unconventional warfare. Earlier periods of military transformation did little to empower guerrillas or irregulars; however, the coming one arguably will. We are seeing greater destructive power fall into the hands of smaller groups of people and seeing the ability of small organizations to coordinate their activities over a wide area with a high degree of sophistication. One of the best ways of cracking such organizations is to penetrate them, but the greater destructive ability of smaller groups makes the challenge all the more vexing. A well-known example is the deadly gas released into the Tokyo subway system in 1996. In an incident near Boston, police raided a gang's drug laboratory and uncovered a tuna fish can containing a mysterious substance that turned out to be a biotoxin capable of killing thousands of people. Access to this kind of technology and destructive capability may lead to different concepts of homeland attacks, far removed from discussions of national missile defenses.

What are some of the implications of these developments for America's alliances in East Asia? We at CSBA are in the early stages of our research, so what I am going to share with you are some very *preliminary* findings. In the near term, from the end of the Cold War through the next five to ten years, the United States has been and will continue to be in a dominant position militarily. However, to some extent, heterogeneous military organizations are on the increase. There seems to be a growing split between the military organizations of the United States and those of its allies, including those in East Asia. The United States now has some unique systems and capabilities that cannot be matched elsewhere.

In the 1950s and 1960s, other countries had bombers, carriers, and so forth. However, today no other country has anything like a B-2 bomber, a long-range stealth aircraft. No country has a precision attack capability similar to that of the United States. No one, including France, has anything like the Nimitz-class carriers. The French were reportedly as awestruck by U.S. satellites in the Gulf War as they were by nuclear weapons forty years ago.

Not only does the United States have unique systems and capabilities, it also has quantitative superiority in many areas. Other countries have cargo aircraft, for example, but the United States is the only country that can lift huge quantities of material halfway around the world and support half a million people, as we did in Desert Storm. No one can match America's training capability, and so often in military history it is the people, not the equipment, that have made the difference in battle.

The sobering news is that America's current dominance in these areas will likely decline in relative terms. Technological diffusion, asymmetric strategies, and the possibility of tapping into the commercial sector will likely erode some of the major military advantages the United States now enjoys.

This raises questions about how the United States should integrate its allies into America's military architecture. Does the United States have an open architecture where its allies can readily plug in, or a closed architecture? Should we be encouraging our allies to duplicate the capabilities we develop? For instance, if the United States enters into long-range precision strike operations, are there allies who will enter that "business" with us? If not, what kinds of operations can be divested to our allies—in other words, what is the new division of labor?

Over time, there is also going to be a change in the notion of forward presence. Throughout much of recent history, having U.S. forces fully deployed was regarded as a deterrent to aggressors and a reassurance to allies. However, in a situation where all major ports and airfields are vulnerable, is the presence of U.S. forces a source of reassurance or anxiety? Are they then a deterrent, or hostages? Bedford Forrest, a Civil War Confederate commander, once said the most important strategy was to get there "firstest with the mostest." Now perhaps the doctrine is to be able to strike at the longest distances with the best weapons—basically, striking long range with high precision.

Since the Soviet Union is no longer the threat, we may see the regionalization or the localization of security concerns. In this case, it may be less a matter of thinking about alliance relationships and a firm division of labor, but rather increasing consideration of ad hoc coalitions and how to "plug-and-play." In other words, there are many more questions than answers.

In conclusion, there are serious doubts concerning America's ability to sustain today's levels of commitment and presence in East Asia, as currently constituted, over the long term. However, progressively over time that is not really going to be the germane issue. The geopolitical transformation of East Asia, which will lead to new kinds of relationships and new policies, and the military revolution will require a different kind of military. This will lead to new security challenges, requiring a different kind of presence, new forms of cooperation, and a different division of labor—not only within the United States but with our allies as well. It is not clear that America's political or military leadership is prepared to address this challenge, despite ongoing efforts. Indeed, there are currently many disincentives for U.S. political and military leaderships to confront this issue. But we must begin to consider these issues now, and to plan for their consequences. It has been eight years since the end of the Cold War, and it takes a long time to transform any large organization, including the military. It takes time to develop new doctrines, to test forces, and to create new organizations. Looking at the budgetary and other challenges we face, the United States does not have a great deal of time to waste. What we essentially need now is a transformation strategy.

Questions and Answers

Could you say more about how the United States can get where we need to be in light of the political and bureaucratic obstacles and the technological challenges it faces?

The political challenge is to convince a large, successful organization like the U.S. military that to continue to be successful it must change. That has been a problem over the last fifteen years for large corporations, and they have had the advantage of feedback in terms of profit picture, market share, and performance. The U.S. military does not get feedback every day. Desert Storm is the paradigm until a similar situation occurs in the future to change it. So one barrier is U.S. success in the Gulf. Another barrier to change is the fact that people in the Pentagon occupy senior positions for short periods, and the human tendency is to want things not to go wrong during one's own "watch," which curbs the drive to change things.

The huge quantity of defense capital stock may also be an inhibiting factor. An example from history would be Britain, which possessed all of the world's eleven carriers after World War I. They reduced that number to six, but put most of their resources into maintaining

and upgrading their carriers at a time when aviation technology was booming, leading to the need for very different kinds of carriers. Thus, despite their remarkable breakthroughs, their capital stock depreciated rapidly. And it was the Japanese and Americans who learned from the British and went on to develop naval aviation to its full potential.

The United States has spent about \$400 billion putting a satellite constellation into space. A plausible case might be made that because these satellites are large and soft, and yet have long endurance, they are relatively easy targets. Perhaps fifteen years from now, what will be needed are not those kinds of satellites, but small, short-lived ones that can be launched in clusters to replace others that are shot down, and a rapid relaunch capability to cover certain regions quickly. America may be slow to move in that direction because the investment in the existing satellite system presents an enormous exit barrier.

The same is true of tactical aircraft, a dominant part of the culture of U.S. military services. Before spending a lot of money on a phenomenal new aircraft, an answer should be found to the anti-access problem. If the aircraft cannot land at airfields in the region, they will not have the range to be effective.

There is also the problem of the "no-mistakes" approach to defense acquisition. Fear of making a mistake inhibits risk, that is, entrepreneurialism. For program officers in the military services, success is measured by whether the program they are shepherding enters into large-scale production. Yet in a period of rapid transformation like today, where the threat is low and uncertainty of competition and advancing technology is high, it would seem advisable to avoid serial production, unless it were absolutely necessary. Another disincentive to innovation is that if a military organization voluntarily trims its budget in hopes of freeing money for modernization, it may find the funds reallocated to another military organization simply so it can maintain its status quo.

What is the highest level in the military where these kinds of discussions about militarytechnical issues and their implications for alliance relationships and regional security are taking place?

It is happening at the level of OSD policy, with people like Walter Slocombe, Jan Lodel, and Andrew Marshall. The research budget of the secretary of defense, for example, was used last summer to sponsor a study of East Asian issues in terms of the possible paths of the China-Japan relationship over the next twenty years. As another example, Aaron Friedberg of Princeton University prepared a paper for Mr. Marshall on Britain's efforts to cope with Germany's rise at the turn of the century.

For all their difficulties in changing, several of the services—particularly the Air Force and the Marine Corps—are engaged in some very innovative thinking. It is astounding to see the creative talents in these organizations that are so reputed to be tradition-laden and hidebound. When the Air Force chief of staff stated in public that unmanned aerial vehicles would be a big part of his service's future—telling his dominant-culture aircraft pilots their days were numbered—that was a heavy message. He also said that twenty years from now, we will be first a space and then an air force, not just an air force like today. The challenge is to overcome political impediments to such changes; we are doing a fair amount of work on Capitol Hill, and some senators have picked up on this issue. And senators tend to outlast presidents and joint chiefs of staff.

What military politics do you foresee unfolding over the next two or three years?

The Congress has set up a national defense panel to critique the Defense Department's Quadrennial Defense Review [of May 1997] and submit its own report in December 1997. The NDP has been critical in its response to the QDR. As a result, there could be a real debate over military spending.

Currently, there is a gap between the military services and the joint staff, each publishing its own blueprint of the future. The ideas of the chairman of the joint chiefs of staff are contained in *Joint Vision 2010*. The Air Force also has its own published vision of global engagement, and the Army has its own vision of 2010. So, one gets the impression that the world is going to change dramatically and there will be many new problems, but the current defense program takes a very evolutionary approach to dealing with the future.

Looking at the Quadrennial Review, there are basically three schools of thought driving the process. The first sees it principally as an opportunity to update and fine-tune the Bottom-Up Review. Advocates of this position believe that the Bottom-Up Review is serving us well. This school maintains that the 2MRC posture is correct, that we have two major problem areas (Iraq and North Korea), that we need to be more aware of peacekeeping operations, and that we need to exploit the military revolution. But it does not believe we need to make big changes.

The second group thinks the military is on a collision course due to the huge mismatch between the defense program and the budget. There are two factions within this school: liberal groups argue it is the budget that needs to be brought down since the United States spends some three times more on defense than anyone else, and we can get by with much less money. The other faction argues that we must become more efficient to close the gap between program and budget. We need to have a "revolution" in business affairs along with a revolution in military affairs, and we can do this by reducing inventories and acting more effectively in base closures, acquisition reform, and outsourcing.

The third school of thought holds that there is a fundamental transformation under way in warfare. Since these transformations take time, we need to get at it as quickly as possible. This school believes that things are changing dramatically, and the Quadrennial Review is an opportunity to craft a transformation strategy. The challenge is in some ways unprecedented: Never before in our history has the United States military had to undertake a transformation of itself in a fundamental way at the same time it was expected to support America's role as an active, global power maintaining peace and stability.

How much flexibility is there in relocating units such as the Okinawa Marines, when it presumably costs something to move them?

If those units were brought back they would probably be deactivated. Or they could be colocated at a base that is operating at a reduced level because of other downsizing activities. In fact, the force structure of the Marines is written into law: they must have three divisions. However, it would be possible to call something a division but reduce it by three thousand people.

What are the implications of that specifically for the Okinawa Marine division? If the decision is made not to keep it there and it cannot be deactivated, what can be done?

It can be moved to Hawaii. The Army has the 25th Infantry Division, which could be redeployed to the West Coast to accommodate the Marines in Hawaii. But these kinds of changes would be difficult to make overnight. Part of the problem is that the United States is an active global power, and so the Marines cannot be precipitously pulled out of Okinawa without raising concerns over the United States' commitment to its allies in the region. One hundred thousand troops in East Asia is a measure of our commitment, which may turn out to be a poor indication of commitment and of the kind of military capability we ought to have in Asia, but once those numbers are established as the benchmark, it is hard to change it.

I would like you to comment further on how your budget figures for personnel, procurement, and R&D match with what the military has said it has expected and wanted recently. Are the military people saying that they can no longer maintain their force levels or procurements because of budgetary constraints?

When I spoke about budgetary constraints earlier, it was in the context of whether the military has enough of the right kinds of funding to meet its obligations under the Bottom-Up Review. There is an implicit assumption that we have some sort of problem.

With respect to personnel operations and maintenance costs, the Clinton administration ran into trouble in 1993, projecting a pay freeze for the military in the first year and in the second year going from 1 to 1.5 percent below the employment cost index (a commercial sector gauge to keep military wages competitive). Congress would not agree, and that created a real budget problem, resulting in a shift of money out of procurement to cover wages.

There are some significant problems associated with the personnel operations and maintenance part of the budget. One is the fact that medical care costs continue to rise, not only for those on active duty but for retirees who use the military medical facilities. Those costs continue to be greater than expected.

Another problem is that base closure savings are not being realized as quickly as hoped. A related problem is that out of these accounts come the costs of cleaning up the closed bases and nuclear weapons facilities, which can run into hundreds of millions of dollars.

Then there is the issue of unplanned contingencies. With the emphasis in Congress on balancing the budget or reducing the deficit, an operation like Bosnia—which cost over \$2 billion this past year—must be absorbed somewhere in the defense budget. If you spend \$2 billion to \$3 billion a year for such purposes, in ten years you have to ask whether it was better to spend \$20 billion or \$30 billion doing this, or would we have been better off spending it on something else, such as modernization.

Regarding R&D, it is not clear to me where the budget ought to be. The projections are to reduce R&D expenditures from about \$35 billion now to as little as \$20 billion in the first decade of the twenty-first century. R&D spending will partly fuel the buildup in modernization. But how does one measure what is enough? We used to look at how much the Soviet Union was spending and spend at least as much ourselves, but to do that today would mean \$20 billion is far too much since Russia is in such dire straits. We could go even lower in R&D expenditures if the benchmark were to match what Iraq, Iran, or North Korea are spending. On the other hand, one might say we should spend more on R&D because it is an area of comparative advantage for the United States and it is a way to avoid incurring future casualties. Or you might take the approach that, as in many periods of military transformation, most technological progress is occurring in the civilian sector. The United States is

spending a bundle on military R&D to develop systems such as SINCGARS (Single Channel Ground Airborne Radio System) that are outdated before they are fielded, while the Chinese and North Koreans can mimic the same capability by ordering cellular phones from Motorola. The lesson is to take advantage of the commercial sector's heavy investment in R&D.

So, I am not sure what the R&D budget should be. I believe that technology in a relative sense will become less important than it was during the Cold War when nuclear weapons, ballistic missiles, missile guidance, and so on, were highly proprietary. What will become increasingly important is time-based competition—the ability to take available technology and translate it into military capability that solves a problem, and to do it more quickly than your competitors. The situation will be more like the dreadnought revolution or the revolution between the two world wars, when countries had access to radar technologies. Their different military objectives led to differing uses and results, with varying degrees of effectiveness.

With respect to procurement, \$60 billion was a crude calculation, and why we arrived at it is almost ludicrous. Nor is it clear that we need the capability to fight two more Desert Storms, since it would take a very foolish enemy to try that again. It does seem to me that the test and evaluation part of the budget should increase in order to try out a variety of different systems, such as unmanned aerial vehicles.

The military generally focuses a great deal on minimizing redundancy and competition between services and it tends to emphasize serial production of weapon systems as a measure of success. However, it seems to me that in the so-called new "business" areas, competition among the services is desirable since the proper solution is not obvious. An example is the ballistic missile programs after World War II, where each service had its own program. There were some less than sterling accomplishments early on, such as the Air Force's Atlas, Thor, and Titan and the Navy's Vanguard missiles, but the technology was moving quickly. The Air Force ended up with the Minuteman, an important deterrent; the Navy with the Polaris; and the Army produced the Jupiter rocket for our infant space program. Thus, in some cases, competition among the services can result in productive innovations, even though there are false starts and some waste.

If the United States is to maintain such a fixed level of defense expenditures, is there any consideration being given to the level of burdensharing the United States should seek from such allies as Japan and South Korea?

Perhaps a serendipitous outcome of declining American defense budgets will be a greater level of burdensharing by East Asian allies who are far better off economically today than when these alliances were created. It has been argued that the United States has given "free rides," whereby some allies were contributing less than they might be expected to. Increased burdensharing might be part of the solution, if it is important to have 100,000 troops in East Asia.

From a strategic defense planning point of view, the possibility that threats might emanate from China cannot be ignored, assuming that China continues its economic development. However, one has to think through how the Chinese would perceive us, what vulnerabilities we might have, and how we can counter what they would perceive to be our vulnerabilities. That means some defense planning in which China is identified as the potential enemy. At the same time, if that consideration becomes a major factor in U.S. defense planning for the

Pacific and in its alliances with Korea and Japan, there is the danger of creating what we wish to avoid. China will conclude that any adjustments we make in our alliances are targeted against them; therefore, they will have every incentive to disrupt them. This is one of the most fundamental problems we face in Northeast Asia. How do you grapple with this dilemma between the jobs that regional specialists and defense specialists have to perform?

The regional specialist is a key part of accomplishing first-order considerations, such as to identify our security objectives in East Asia given the changing geopolitical environment. How do we see our allies fitting into that? How does the military dimension of our national power support those objectives? As I noted before, there is a fine line between trying, on the one hand, not to provoke competition and seeing defense preparation becoming a self-fulfilling prophecy and, on the other, not being so circumspect and aloof that you encourage the other side to take bold steps which actually create a greater sense of competition.

Given the magnitude of what is at stake, we as a country ought to undertake a major effort, comparable in scale to what we did with respect to the Soviet Union, to understand China. We need to know, for example, if some activities may seem provocative to certain elements of the Chinese leadership and perfectly acceptable to others.

On the positive side, I think a lot of the problems of the military—for example, controlling space, anti-access, the ability to conduct precision attacks, and the like—are relatively generic, and we ought to try to keep them that way. However, at some point in talking with our allies, the generic nature of the problem is inevitably put in a specific context.

But there is another way to discourage military competition while reassuring allies. If, ten years from now, the United States military has "solved" the anti-access challenge, it might invite Chinese, Iranian, and Iraqi military attaches to military exercises on our Gulf coast to demonstrate our capacity on a small scale. The message to them would be: Not only do we dominate the current military regime, but we also already have the capability to dominate a new regime as well, even if we are not going to build it.

About the Author

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Dr. Krepinevich gained extensive executive strategic planning experience in national security and technology policy through his work in the Department of Defense's Office of Net Assessment and in serving on the personal staff of three secretaries of defense. In 1993, following an Army career that spanned twenty-one years, Dr. Krepinevich retired to assume the directorship of what is now CSBA. A graduate of West Point, Dr. Krepinevich holds both an MPA and a Ph.D. from Harvard University.