Since the 11th of September we have been besieged with multiple reports of military successes in Afghanistan. Wherever we turn in the press today, we find a discussion of the Taliban’s demise, of the effectiveness of the American support of the Northern Alliance and the degree to which we have been successful in the use of “special forces troops and precision bombing in a ground war which is a non-traditional military campaign”. There even seems to be general consensus that the United States military has prepared itself for new-world kinds of conflicts and is organized optimally to undertake them. I have nothing but the greatest respect for the wonderful men and women who make up the American military, and having served with them for over 30 years, I can verify that it is one of the great blessings of the American Society that we have these splendid young men and women willing to give their lives in defense of their country. But the thesis of this paper is to urge that we look at the “real structure of our militaries and the cultures which drive them”, and ask ourselves whether the militaries we have built are indeed the militaries we need as we address the many global national-security challenges which certainly face us as nations in the future. It is particularly important that we do this in a transparent way with our allies in Europe and Japan. It is my hope that this paper will identify some of the issues involved in optimal military structures for modern warfare and which might be key factors in reconstructing our Atlantic and Pacific Alliances. With regard to the military operation in Afghanistan, for example, we must ask; first, were we adequately prepared to enter Afghanistan as soon as we should have been and with the right kind of forces?, second, were we able to bring a true joint forces capability to the battlefield in Afghanistan?, and third, did we deploy the “right kinds of forces” in the right order or did we think about “force deployment” in terms of carrier battle groups and battalions of Marines with a few special forces? Should force deployment have been much more about a very large “information umbrella” made up of satellite systems, unmanned aerial vehicles with special sensors coordinated with tactical sensors
all tied together and disseminated through a wide band communications system to mobile and flexible JOINT forces in the field? Were we oriented to deploy our forces for the last war rather than for the present one? Is the future of warfare about large massed forces such as carrier battle groups, amphibious ready groups, and battalions of soldiers, or is it about deploying information umbrellas with large bandwidth pipes to every warrior and joint special forces augmented with joint precision bombing capability in support of New World Alliances? So as we celebrate our success in Afghanistan, early though it may be, we must ask these very hard questions and ask whether the process of transformation and the implementation of the Revolution in Military Affairs is other than just words, but is a part of our planning for future military conflict and modern war.

It has been nearly a decade since we began a less-than-concerted search for a new framework within which to organize and coordinate our national security interests. Having devoted a half-century to building the alliance framework that had served so well to contain Soviet aggression, we were loath to give it up quickly. So, we spoke of NATO expansion and partnerships for peace, all the time seeking to fill the new rhetoric with new substance. And, for the most part, failing, for none of our rationalizations about the utility of continuity and adaptation to the new era has yet replaced the logic and utility of our Cold War alliance framework.

NATO and the bilateral security treaties we maintained during the Cold War had a sublime logic and mutual utility. Because they were founded to offset an identified military threat, our alliances made sense, not just to those officials who honed our theory and practice of deterrence, but to our publics as well. Our alliances were mutually beneficial. They reconciled our desires to gain both tangible and political support from our allies, with our allies’ desires to influence and control the views, and, more importantly, the actions of the United States, the superpower with which they were allied. NATO and our alliance with Japan offset the Soviet military threat. But it also provided an internal balance in the face of the profound military-technical disparity represented by our nuclear weapons. Germany and Japan, and for a while France, agreed to forego developing nuclear weapons in exchange for an American nuclear umbrella. We promised, in turn, to deter Soviet military action by the threat of nuclear escalation and backed our promise by forward stationing American forces on the
territory of our allies. Our allies, in exchange, acquiesced to American alliance leadership. We, in exchange, agreed to procedural and institutional constraints on our freedom to act unilaterally. NATO and our alliance with Japan deterred a common threat, but equally important, they assured a mutually beneficial balance among the members.

We have not yet found a replacement for our old alliance structure. We have pointed to the ambiguity that emerged when the Soviet Union, an identifiable threat, collapsed. We have suggested it will take time for Russia and its former republics and allies to sort out how they will fit into the new era. We have argued that with the international security system in flux, efforts by us, the only remaining military superpower, to impose a different alliance structure could do more harm than good. And we have stressed the need for continuity in the structures, if not the assumptions, of the alliance system that served us so well for nearly half a century.

The Price of Delay

But this is temporizing. And we pay two prices for what is essentially foreign policy drift. One is that without a strategic framework to guide our own force development, we allow the fundamental conservatism of our military professionals to dominate the force planning process. This has kept us from moving expeditiously to convert our lead in the cutting edge of non-nuclear military technology into the kind of military force that can use these technologies effectively. We maintain a force structure designed to deal with the Cold War threat and to operate in the context of Cold War planning. We have the world’s most potent military, led and manned by, arguably, the best personnel to wear the uniform for half a century. Our soldiers, sailors, airmen, and Marines are highly trained, motivated, skilled, and able to cope with the kind of military crises our planning forecasts. The trouble is that all this is true in the context of an era that has passed.

The other price is a decline in the authority of our leadership among our allies. The US remains the leader, of course, because no other nation or coalition of nations can yet assert a claim to leadership. But a decline in our authority to exercise leadership – essentially, the belief on the part of our allies that our
leadership is legitimate, fits the new era, and meets the desires of all alliance members – stirs centrifugal forces and will stimulate alternative claims to lead.

European views are bifurcated. On the one hand, they worry that we will lurch from crisis to crisis, asserting and using our military might without their counsel, without regard to their views. They see the stakes of American unilateral action lower now, for independent military actions by the United States no longer carry the threat of dragging Europe into a nuclear confrontation. But they fear that American unilateralism can still work against the policies and developments the Europeans might wish to take, and certainly against their ability to control events in and on the periphery of Europe. We saw flashes of this sentiment in the operations over Kosovo. There, we had to balance French, British, Dutch, Italian, and German operational approvals against military effectiveness.

On the other hand, European statesmen privately question the capacity of the United States to respond to crises decisively and to stick to a course of action with the necessary tenacity to see it through to a successful conclusion. Their concern is not that the United States will drag its European allies into a situation precipitously, ignoring their advice and cautions. It is that the United States may delay necessary alliance action, and that once finally committed to an agreed course, the United States will leave its allies holding the bag, as politics and a lack of a foreign policy consensus in the United States push American administrations back and forth.

And they worry about our military lead, noting in their journals and debate the disparity in US military spending, and, more importantly, the growing edge the United States has in military information technology. The discussion in European security forums and publications is particularly interesting. Following the Gulf War in the early 1990s, there was considerable speculation, largely in the United States, that America was assembling the technical ability to achieve something called “dominant battlespace awareness” and to prosecute it militarily with much greater effectiveness, precision, and speed. By the mid-1990s some American military professionals, including myself, argued that the United States was indeed in the midst of a revolution in military affairs. And documents like Joint Vision 2010 sketched dramatic improvements in the ability to observe and understand a large, complex battlespace, communicate that understanding
quickly and accurately to US military forces that would be able to respond with precisely targeted and effective military force with much less risk to themselves.

European and Japanese professional military assessments were initially skeptical. But by the end of the last decade their skepticism had faded and their focus had shifted to concern with two implications. The first was that the United States was leaving its allies behind in non-nuclear military capability. This, they opined, would make it more difficult to conduct coalition operations together and, therefore, reduce the US commitment to consult and coordinate with them in using military force. The second was that where the United States and its allies had agreed to military operations together, the non-US participants would be assigned either irrelevant roles, or, worse, the risky, close combat ground force operations while the United States fought from stand-off ranges, in the air, or from space.

Both implications point to what appears to be an emerging consensus among our allies in Europe, and, to a lesser extent, in Japan: that they must develop their own independent military force. This is different from the long-standing European and Japanese desire to increase their voice inside the alliance structures that they share with the United States. It is a hedge against the possibility that the U.S. will continue our too slow and delayed efforts to come up with a viable concept to fill the shell of the existing alliance superstructure. But it is also a nascent alternative to the existing alliance structures and to the US leadership role in them.

**Meeting the Challenge**

We should take two steps. We should accelerate transforming our military forces into the structure and character we have been talking about for over a decade. And we should use this new military force and its technological base to help devise and support a revised and invigorated alliance concept.

**Accelerating the American Revolution in Military Affairs**

Despite conscious caution by the last two administrations, America is embarked upon a revolutionary course in military affairs. The revolution stems from our
lead in information technologies and in our capacity to integrate these technologies into a system-of-systems that provides much greater military effectiveness and leverage. It is, however, important to note what the revolution is not, because confusion over what it can and cannot do has contributed to our delay in getting on with it. The technology that drives it is not a substitute for military judgment and courage. It does not replace the fundamental military requirement for highly trained and disciplined armed forces. It does not alter the essence of armed conflict – its violence, risk, and high stakes.

The American Military Knowledge Edge

What it does do is offer dominant battlespace knowledge: the ability to know more about what is occurring in a conflict than an opponent, and to gain that knowledge faster. It’s important to note the term “knowledge”, a bit of military argot meant to differentiate a capability beyond “awareness”, but a distinction that is more than hair-splitting. Briefly, “battlespace awareness” connotes an ability to locate, classify (determine, for example, that an object probably is a military rather than a civilian vehicle), identify (“that military vehicle is probably a Serbian T-72 tank”), and track (“that tank is probably the one previously located up the road”) objects of military importance in time to react to them. “Battlespace knowledge” takes this to the next step in capability. It connotes the ability to discern militarily important relationships between the objects. That is, it marks the ability to identify their relative importance in terms of military dependencies (where they fit into the command and control structure, what other units depend on them for their sustenance or their roles in an operation, etc.) or political value, again, in time to react to the knowledge. Both “awareness” and “knowledge” are relative concepts; we will never be fully aware or knowledgeable of everything of military importance in something as complex and interactive as armed conflict, “peacekeeping”, or any of the other operations involving military operations and human hostility. But it is the relative relationships that count in using military forces, and the promise of the American revolution in military affairs is to provide “dominant” knowledge – enough of an edge to improve the effectiveness of American operations and reduce the risk to
our forces *significantly* – so much so as to alter traditional assumptions and calculations about conflict outcomes, costs, and risks.

Dominant battlespace knowledge offers particularly high leverage because it allows the most effective use of precision weapons, not only to avoid collateral damage and the deaths of non-combatants, but also to degrade an opponent’s capabilities systemically. It also makes it possible to operate within an opponent’s decision-reaction cycle, that is, to respond faster and more effectively to the flow of events in a conflict than an opponent.

This capability rests on both technology – in which space-and-terrestrial-based observation and remote sensing, automated target recognition, automated data correlation, and broadband, secure communications play important roles – and organization (human-machine interfaces and coordination). It requires a robust ability to collect, correlate, and process different data from different sources and to communicate the resulting knowledge quickly and accurately to forces able to respond rapidly to what the knowledge reveals. The United States currently leads all other nations in this capability, BUT we are far from our potential capability, not because of technology, but because of management and legacy culture.

It is a capability that applies across all uses of military forces, from high intensity conflict to peace keeping. It is revolutionary because it changes the risk of military operations disproportionately between opponents, reduces the need for attrition strategies, and undercuts the military rationale for mass. It is controversial within the Department of Defense because it suggests strongly that we must alter the structure and character of the US armed forces significantly in order to fulfill these promises.

This is a short-hand description of the central planning issue within the US Department of Defense. The debate there does not really revolve around the validity of the statements in the preceding paragraphs. There is formal agreement on each, an agreement manifest in documents such as the *Annual Report of the Secretary of Defense to the President and Congress* since 1998 and the Joint Chiefs of Staffs Chairman’s *Joint Vision 2010*, published in 1997. The real debate inside the Pentagon is on two issues. How fast the military ought to change and how best to experiment to define the changes needed. I might add a third debate, “Do we really believe what we’ve said?”.
These are important issues. Broad, extensive experimentation with organizing and doing things differently reduces the readiness of the military to do things as they have been done previously. Increasing the agility of forces (so that they can, in fact, operate within the decision cycle of an opponent) implies different weapons mixes, different command structures, and different procedures. Tapping into the leading edge of information technology suggests a different acquisition system, for information technology is largely a product of the commercial world, not the defense-contractor world that gives us the best tanks, ships, and airplanes money can buy. Combining the contributions of each of the military services into more synergistic outputs necessarily means reducing the independence of each of the military services in defining its requirements. Once you start peeling back the issue of how fast we should transform the US military, it’s easier to understand why the transformation seems to lag. The American revolution in military affairs challenges convention, culture, and the power structure in one of the most conservative of American institutions: our military establishment.

Overcoming Service Parochialism

The delay and caution is lodged largely in the military services and abetted by a growing unwillingness of civilian officials to challenge what the military services claim as their prerogatives. I do not wish to perjure what exists today. The Army, Navy, Air Force and Marine Corps are noble institutions through which dedicated men and women work to provide security to our nation. Our military men and women face the most challenging of human endeavors with courage, loyalty, integrity, and self-sacrifice, and they do so through and as members of the military services. Anyone who has served in the military, as have I, will always recognize and appreciate – deeply – how truly wonderful the military service in which they served is. And how fundamentally parochial it is; how, driven by a profound sense of dedication, it will naturally seek to increase its control of resources and independence of decision. That is why it is so important that the military services’ natural parochialism be balanced by the national perspectives our governmental system lodges with elected officials and those they appoint. For the good of America!
There are means by which we can do this. First, we should break the near monopoly each of the military services currently has in defining what its future requirements should be. Second, we should take long overdue actions to integrate the four great enablers of military operations currently maintained separately by the military services. That is, we should combine the various offices in each of the four services that perform four functions: intelligence, communications, medical, and logistics. Third, we should expand joint experimentation dramatically.

A New Approach on Military Requirements

Today, each of the military services defines what it will require in the future. Since the 1960s the civilian side of the Defense Department has episodically stepped into the process of defining future military requirements, adding review various review procedures. Yet, despite the growing complexity and time required to complete the process, the dominance of each of the military services in setting its future requirements remains, and, indeed, has expanded.

Certainly, military professionals ought to play important roles in setting military requirements for the future. But their perception of what the nation needs in its military comes with considerable caution regarding change and a profound degree of service parochialism regarding national military requirements. We need to leaven that perspective with one that is less the sum of service views, more focused on seeking higher military output through synergy across the military services, and more willing to make cross-service trade-offs. The way to achieve this is through a Joint Defense Requirements Council, chaired by perhaps the Deputy Secretary with the Chairman or Vice Chairman of the Joint Chiefs of Staff as the Deputy Chairman and with both high level military and civilian members. This council would report to the Secretary of Defense (frequently and substantively…and the Secretary should take it very seriously). The military services would be represented on this council by their chiefs or vice chiefs, but the recommendations of the council would be made by its chairman and would not require agreement or consensus by the council members. The Council would be supported by a very strong and well-funded analysis
Consolidating Military Intelligence, Communications, Medical, and Logistics

Today, there is a plethora of offices and defense agencies that provide intelligence, communications, medical, and logistics functions. It is a redundant, expensive arrangement that owes more to interservice rivalry and failures by Secretaries of Defense to improve cost effectiveness, than to logic. Consolidating the offices that claim responsibility for each function into a single service agent would not only save over $10 billion a year. More importantly, it would make providing these functions more efficient, accelerate the integration demanded by the information revolution, and assist dramatically the transition of US forces to the greater effectiveness promised by the American revolution in military affairs.

Expanding Joint Experimentation

Much of the technology needed to consummate the American revolution in military affairs is in hand. But the organizational adjustments, structural changes, and new operational concepts needed to take full advantage of the technology lag. Recognizing the delay, the Congress, led by Senators Coates and Lieberman, charged what is now the Joint Forces Command to begin joint experimentation to catch up with the technology. It was an important step, but a very small one compared to what should be done. The funding for the first year of the effort was less than that allocated to distribute Viagra to military personnel. Experimentation remains almost exclusively the purview of the individual military services whose bias favors honing their independent specialties, not improving joint operational effectiveness or accelerating the transformation of their current organizations and structures.

At a minimum, we ought to increase the funding and authority of the Joint Forces Command for joint experimentation. But we should do much more. We should establish standing joint task forces at the three star level throughout
the operational command structure and rotate the commands among the different services. The three star level is the war fighting level, and establishing standing joint task forces at this level would provide a broad operating base for the forces to work out the myriad details that will close the gap between the new technology and the organizations, structures, operations, and joint cultures that will make it work. Note that this process would disestablish the organizations and the need for over a dozen existing four star commands and all of the bureaucracy that goes with them.

**Building a New Alliance Foundation**

Because the character and capabilities of our military forces affect and condition our foreign policy, we need to think about how more rapid transition through the American revolution in military affairs and early emergence of the resulting US military force could affect our relations with other nations. Deterrence is one dimension in which military forces step into the realm of international relations. But it is not the only thing that counts, and, in the years ahead, deterrence -- how to keep potential enemies from doing things we oppose -- is likely to be overshadowed by the issue of assurance -- how to maintain mutually beneficial relationships with our friends. Our military superiority can be unsettling, for the world does not feel comfortable with superpowers, particularly superpowers that are not balanced by some form of countervailing influence. So the capability that will give the US relative military impunity will also generate suspicion, jealousy, and an interest in balancing that power – by both our friends as well as our potential enemies. The greatest challenge to American diplomacy will be to keep such sentiments in check, particularly on the part of our friends. We will have to walk that narrow line between convincing others they cannot match or counter our military prowess without making them fear it so much as to feel compelled to try.

The American revolution in military affairs could make this path more difficult because it can weaken some of the traditional halters on our ability to use our forces unilaterally. Today, for example, it is quite clear that overseas base access is essential to any significant use of force by the United States. Should we actually face the “major theater wars” for which we design, size, and
structure US military forces, we would be hard pressed to respond effectively to them without ready access to overseas basing both in the area of the contingency and elsewhere in the world. The present character of our forces and way of fighting simply makes this a fact. Our allies recognize this and provide base access in part because it maintains their say over how we use our military forces.

To the extent that battlespace knowledge is a substitute for force mass, however, the requirement for base access and the foreign policy and diplomacy we must dedicate to maintaining or gaining it will decline. To the extent that knowledge affords us earlier and more accurate predictions of where we may need military force, we can substitute force surges for continual forward presence. None of this means we must alter our basing and force presence policies or the diplomacy that maintains them. But it does mean that our dependence on basing will be less of a constraint. And that may increase our allies’ anxiety regarding the influence they have with us and push them toward greater suspicion or to accelerate their efforts to build their own independent military capabilities.

On the other hand, we could use our growing ability to understand what is taking place in a large geographical area -- having “battlespace knowledge” – to bolster friendships. That capability will offer a pre-crisis transparency far beyond what has been available before, and, if we are willing to share access to this transparency, we will be better able to head off aggression and other crises. But the effect could be more general, for all nations now operate in an ambiguous world. The US nuclear umbrella once provided the basis for a cooperative structure, because it was a logical response to the threat of Soviet aggression. Now, the central international issue is ambiguity, and the basis for a cooperative structure is the capacity to clarify and cut through that ambiguity. Coalition leadership for the foreseeable future will proceed less from the military capacity to crush any opponent, and more from the ability to quickly reduce the ambiguity of violent situations, to respond flexibly, and to use force, where necessary, with precision and accuracy.

With regard to NATO, for example, our contribution of intelligence to our allies in Bosnia and Kosovo, enabling them to use their own forces more effectively and with less risk, turned out to be an effective means of coalescing alliance action. By providing them with near real-time images of the terrain and
movements in the areas surrounding their forces in Bosnia, we enhanced both their safety and effectiveness. Doing so bolstered our ability to lead the coalition -- not because we had the most formidable component of the peacekeeping force, but because we could provide information that made all the coalition forces more potent and less endangered. We have well over a decade of experience with providing other nations with the benefit of our advanced capabilities to collect information of military value and significance. We have found that doing so has usually had the intended effects: it builds confidence and cooperation, increases the combined effectiveness of diplomacy and military action, and enhances the awareness of our technical potency.

The key, then, may be to share the US information edge. Like the nuclear umbrella, a US “information” umbrella could become a foundation for a mutually beneficial relationship between the United States and other nations. The United States could provide deeper situation knowledge to a broader audience. This would mean opening access to our national technical capabilities wider than we have been willing to do in the past and sharing the fruit of those and our other capabilities more broadly than we have done before. In exchange, we would expect those with whom we shared it to work with us, and to forego efforts to match our capabilities. As the US capacity to provide this bargain increased, we would increasingly be viewed as the natural coalition leader because we could provide the most important input to good decisions and effective action by other coalition members. If we tend not to share our capacity, however, we may add to the incentive for others to try to match us. Sharing -- selectively, of course -- is therefore not only a route to coalition leadership; it is also a key to maintaining US military superiority.

Could we advance those effects by broadening the recipients beyond other governments? Broadening the audience for this kind of information will, of course, become increasingly easy in the years ahead. The World Wide Web, the global fiber optic network, direct broadcasting, global cellular phone systems, and global wireless broadband communications -- all spreading rapidly and irreversibly throughout the world -- are harbingers of profound challenges to national information sovereignty. It is, as the Soviets discovered a decade or more ago and as the Chinese began to realize at Tienanmen, no longer possible for any nation to exclude the flow of ideas and information to and from their
territory and populations. This means, among other things, that the United States can make emerging crises, potential conflicts, and military maneuverings transparent not only to the officials of other governments, but, increasingly, to any populations, anywhere, anytime.

The United States can do this not because we have a monopoly on any of the technologies that make it possible to appeal directly to foreign audiences. The Internet, direct broadcasting, the global fiber optic network, space-based communications -- these are global systems that are increasingly available to all nations. Yet, for the foreseeable future few nations will be as adept as the United States in using them, or as capable of providing the content and knowledge that makes military preparations and operations as transparent. To use them for crisis management, for example, it will be necessary to collect and fuse the information heralding the crisis before it becomes obvious to others. It will be necessary to make it intelligible and to portray those aspects in ways that are effective. It is, in short, something that demands the kind of integrated system that only the United States has a chance of developing over the next many years.

Suppose we thought seriously about this. Could providing a greater global transparency to military affairs offer a new kernel of substance to the national policy of “engagement”? Could this become the substitute for the traditional “presence” provided by US overseas deployments? Clearly, US overseas deployments can perform useful roles, not only in protecting and expanding US national interests, but in advancing the kind of benign dynamism from which the world benefits generally. Yet, we should not lose sight of the fact that times and needs change, and that raw military power has ambiguous effects. We need something that cements the alliance relationships we honed when there was a common threat if we are to maintain those ties and our superpower status. Because alliances thrive when there is mutual benefit to their members -- and erode very quickly when there is not -- we must balance our military power with something of benefit to our alliance partners in this era when there is no serious military threat. Without doing so, our power will be less cause for solace and more a stimulant to suspicion.

This way of looking at it could be important as a way of tying the broad themes of US foreign policy to a more explicit blueprint for how the general goals of “engagement” and “democratic enlargement” are to be sought, and how
military power fits into them. As the world’s only military superpower, we have to devise and articulate a new doctrine, that is, a logical and reasonable body of thought that links a description of international relations to the role of military power. Our superpower status carries this imperative. Without a reasonable, systematic explanation of its foreign policy goals, methods and actions, the nation claiming such status must base its claim on sheer power. To do so is to stimulate challenges.