

**THE FUTURE OF AMERICAN LANDPOWER:
STRATEGIC CHALLENGES FOR THE 21st CENTURY ARMY**

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FOREWORD

Armies historically have been criticized for preparing for the last war. Since the early 1980s, however, the U.S. Army has broken this pattern and created a force capable of winning the next war. But, in an era characterized by a volatile international security environment, accelerating technological advances (particularly in acquiring, processing, and disseminating information), the emergence of what some are calling a "revolution in military affairs," and forecasts of increasingly constrained fiscal resources, it seems ill-advised to plan only for the "next Army."

The purpose of this monograph, therefore, is to begin the debate on the "Army After Next." Initiating such a discussion requires positing the outlines of future security conditions and the Army's role in that environment. This also means challenging convictions that provide much of the basis for the "current Army," as well as some of the assumptions that undergird planning for the "next Army."

The authors recognize that not all will agree with their assumptions, analysis, or conclusions. Their efforts, however, are not intended to antagonize. Rather, they seek to explore the premises which will shape thinking about the "Army After Next." The ensuing exchange of ideas, they hope, will help create a force that can continue to be called upon to serve the interests of the Nation in an as yet uncertain future.

The Strategic Studies Institute strongly encourages readers to participate in a continuing discussion on the future of American landpower and the challenges it holds for the U.S. Army.

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SUMMARY

The global security system of the early 21st century will be configured into three tiers, each defined by economic form and degree of governability. The first tier will include the technologically advanced states of Western Europe, North America, and the Pacific Rim. Intense economic competition may occasionally lead to political conflict and even spark full-blown information warfare, but there will be no traditional warfare within the first tier. Second tier regions will retain most features of Cold War era nation-states. Periods of rapid internal political transition will occur cyclically and often will be violent. Second tier states may occasionally resort to conventional, inter-state war, and will retain large land armies equipped with some sophisticated weapons systems. Many of them will develop weapons of mass destruction. The third tier will experience un-governability, occasional anarchy, endemic violence, severe ecological degradation, the politicization of primal loyalties, and political fragmentation. Third tier states may engage in short, spasmodic wars with each other.

Interdependence will be the defining characteristic of the future global security system. Because of interdependence, the global security system will continue to experience cycles with periods dominated by violence followed by widespread resolution of conflicts. The goal of the United States, the only power involved everywhere, will be to take maximum advantage of periods of peaceful conflict resolution and shorten periods of violence. American landpower can play a key role in these efforts.

While the internal dimension of American security will probably change less over coming decades than the external one, several trends are important. Political leaders and the public are likely to remain intolerant of protracted or costly military ventures except when crucial national interests are clearly threatened. Pressure for near total disengagement from the third tier will be particularly strong. If the future security environment takes the form just described, five strategic challenges will be most important for the Army:

Reconcile long-term and short-term imperatives. Strategists must maximize the chances of long-term success while minimizing short-term risk. If the future global security system is relatively benign, the Army can minimize the resources it devotes to long-term modernization and force development. But if conflict dominates the future global security system, the United States must accept greater short-term risk and focus on force development and modernization. Current American strategy may be slightly skewed in favor of the short term.

Maximize efficiency. American military forces will remain small in comparison to the number and scope of tasks they will be given. This creates an overriding need for efficiency. One way to augment efficiency is through coalitions. Technology probably holds greater promise of bringing dramatic improvements in efficiency, but it requires

extensive investment. Reliance on technology also can generate unintended adverse effects. New technology can make current (and expensive) technology obsolescent. Or, challengers might seek low-tech, asymmetric responses to counterbalance the American advantage.

Maximize the political utility of landpower. A military force has political utility when political leaders and the public deem the expected costs acceptable. It is impossible to predict precisely what the American public and its leaders will define as acceptable costs in coming decades, but Army leaders must be aware that this fluid equation can change rapidly, and the type of force they create, train, and equip must, in part, be determined by the need to maximize political utility.

Undertake a controlled institutional revolution. The historical boundaries of landpower may be stretched as the basic concept of national security expands to include, e.g., protection against violent threats to national information and information systems, the environment, and public health. The Army must decide whether to expand and accept the new roles of landpower or specialize in one or two functions and allow some other institution to assume the new roles. Phrased differently, the Army will have to decide whether warfighting is *the* function for which it exists or simply one function (albeit an important one) among several.

While the *need* for a controlled institutional revolution in the U.S. Army is becoming clear, its precise direction is not so obvious. If the functions of landpower continue to diverge in terms of the skills, concepts, and organizations they require, it will become increasingly difficult to craft a military organization that can perform all of its required tasks. If tasks other than warfighting become more strategically important, the relationship between the Army's warfighting component and its peace operations/ conflict resolution/grey area threat component may need radical change.

Preserve public support for effective landpower. To retain the public support necessary for continued investment in landpower and for recruiting from a shrinking pool of candidates, senior Army leaders must persistently and convincingly explain the roles that landpower plays in deterring violence, defending against aggression that does occur, reassuring allies and friends, and helping resolve conflicts.

As senior Army leaders explain the enduring significance of landpower to political leaders, the media, and the public, they must counter several popular myths concerning American strategy and the role of landpower plays in it.

- The United States can disengage from the conflict prone parts of the world, thereby obviating the need for direct involvement.
- The world will see no more conventional wars.

- Allies or international organizations can compensate for a decline in U.S. ground forces.

- Landpower can be allowed to atrophy during the current period of fragmented threat, and be reconstituted if necessary.

The current Army leadership recognizes the need for fundamental change. But this is only the first (and easiest) step. The next one is to reach consensus on exactly what the most pressing strategic challenges are. This essay suggests five. The development of coherent programs to deal with these challenges is the greatest legacy that the 20th century Army can leave the nation.

THE FUTURE OF AMERICAN LANDPOWER: STRATEGIC CHALLENGES FOR THE 21st CENTURY ARMY

Introduction.

Strategists around the world are slowly transcending the "post-Cold War" mindset. Immediately after the collapse of the Soviet Union, confusion reigned as national security professionals agreed on little other than that the world was entering a period of fundamental change. Today, there is a loose consensus among strategists and futurists concerning some of the key trends shaping the future security system. Army thinkers must now explore the implications these trends have for their organization. This essay is designed to fuel such a process. The goal is to draw a plausible sketch of the future security system, suggest the strategic challenges this will pose for the Army, and lay a conceptual foundation for exploring the 21st century Army.¹

The Strategic Environment: External Dimensions.

Any assessment of the Army's future must grow from assumptions or conclusions about the emerging strategic environment. While these judgements are necessarily tentative, they do provide guidelines for long-term strategic thinking. The global security system that replaced the Cold War one is still coalescing. Eventually it may evolve in unforeseen directions and force American strategists to alter radically the concepts and techniques they use to understand national security. For now, though, it is possible to draw working conclusions on what are likely to be the most salient characteristics of the future global security system and, from these, derive implications for the U.S. Army.

For instance, the structure of the future global security system will probably replicate the late Cold War system in that sub-state, state, and supra-state actors will all remain strategically significant. The relationship of the three elements, however, will change. Proliferation of weapons of mass destruction and other forms of technology will augment the power of sub-state actors. Through terrorism, sub-state actors may be able to stymie or deter militarily superior opponents such as nations. Electronic communications will allow networks of sub-state actors--some of them violent--to form more easily and coordinate their actions more effectively.

At the other end of the spectrum, supra-state actors will probably become more effective in both the political and economic realms as governments accept the transnational nature of many of the problems they face and cede some power to other organizations. As Brian Nichiporuk and Carl H. Builder note, "Since so many of the institutions of the nation-state are hierarchical and so many of the transnational organizations are networked, the net flow of power today tends to be out of the nation-state and into nonstate actors . . . Many of the world's environmental and social problems have passed beyond the scope of the nation-state."² But in the mid-term, nation-states will

remain best able to mobilize, apply, and sustain armed force. Managing the tension arising from the fact that traditional nation-states remain militarily important while less able to deal with the broad gamut of political, economic, and social problems faced by their populations will play a major role in shaping the future global system. In developed areas, the result may be the gradual obsolescence of traditional states as power moves to supranational organizations. In less developed areas, the internal cohesion of states will erode with political power and responsibility for security devolving to local satraps, warlords, and militias.

Many analysts believe the future global security system will be configured into three tiers, each defined by economic form and degree of governability.³ The first tier will include the technologically advanced states of Western Europe, North America, and the Pacific Rim. It will be characterized by extensive political, economic, and cultural integration of elites; reliance on information-based sources of wealth; effective government; and relative stability. Elites (defined by possession of information skills and access to wealth-generating forms of information) will increasingly share values and perspectives across national borders, and thus experience a form of cultural convergence. The first tier will not, however, be perfectly peaceful or cooperative. Intense economic competition may occasionally lead to political conflict and even spark full-blown information warfare between technologically advanced states, but there will be no traditional warfare within the first tier. First tier states may, however, use proxy violence against each other.

Internally, many first tier states will undergo cultural differentiation as communities form that differ in values and perspectives from the centers of economic and political power. Of course, nearly every state throughout history has experienced regional variegation and diverse sub-communities. What will be different in the future system will be the prevalence of sub-communities based on shared values--modern-day Mayflower Pilgrims and Utah Mormons--and "generational" ones based on age. Other sub-communities will be based on more traditional factors such as economic ties, language, religion, or ethnicity. In states composed of such politically coherent sub-communities, national leaders will have a more difficult time manipulating public opinion and building the consensus needed for radical programs or risky ventures, including the overseas deployment of military force. This condition will make it even more imperative to minimize the risk involved with the use of military force abroad.

Second tier regions will retain most features of Cold War era nation-states. Economically, they will rely on industry and suffer from uneven internal development, with relatively prosperous, large metropoli surrounded by backward areas. Ecological decay will be a serious problem and sometimes breed political conflict within and between second tier states. Internally, the second tier will be characterized by cycles of political instability and stability as relapses into authoritarianism or sham democracy follow waves of democratization and political reform. The periods of rapid political

transition will often be violent.

In contrast to the first tier, second tier states may occasionally resort to conventional, inter-state war. They will retain large land armies equipped with some sophisticated weapons systems. In fact, traditional sustained war in the future security system will almost always involve a second tier state in conflict with another second tier state or with a first tier state. Many of them will develop weapons of mass destruction. When second tier enemies both have weapons of mass destruction and effective delivery systems, their relationship may reflect the Cold War in miniature with direct conflict unacceptably risky but proxy violence common. Conflict will also occur when second tier states intervene in bordering third tier regions or use proxy violence against each other.

The third tier of the global system will consist of nations with economies largely dependent on subsistence production, foreign aid, and the export of primary products. Small pockets of industry will be surrounded by regions of dire poverty. Most of the third tier will experience ungovernability, occasional anarchy, endemic violence, severe ecological degradation, the politicization of primal loyalties, and political fragmentation.⁴ Third tier states may engage in short, spasmodic wars with each other, but will not have the resources for prolonged conventional combat. Within third tier states, predatory governments will be as common as those sincerely promoting the public welfare. Public health disasters, many spread by refugee flows, will be common. Democratic experiments will be short-lived. Military power will devolve to the private security forces of the rich and poorly-led, lightly-armed but dangerous militias associated with political parties, regions, ethnic groups, races, or religions.

Initially, divisions within the global system will not be rigid. Multiple links will exist between the tiers and occasionally a state will shift from one to the other by altering its economic and political systems. Like contemporary Iraq or the former Soviet Union, some states may be second tier in economic form but retain enough military power to challenge first tier states at least temporarily. Over time, though, the distinction between the tiers is likely to solidify. U.S. security strategy in such a system will seek to assist the controlled integration of the first tier, encourage second tier states to take on first tier characteristics and prevent conventional war between them, ease human suffering and the spread of violence and public health problems from the third tier, and discourage the use of proxy violence by all the actors in the system.

In the system as a whole, a number of formal mechanisms will provide order and encourage conflict resolution. Regional organizations and alliance systems will be important nearly everywhere but, in the mid-term, only the United States and the United Nations will be involved everywhere. However, the United Nations will continue to be hampered by an aggregate shortage of economic and military resources. Unless formal methods of sustaining order and resolving conflict mature, interest-driven, ad hoc coalitions will continue to form and dissolve. Usually, only first tier states will have the

broad range of resources and the political stability to orchestrate successfully effective coalitions. Therefore, harmony of foreign policy among first tier states will become increasingly important.

Interdependence--not information or regional instability--will be the defining and dominant characteristic of the future global security system. This feature will strongly influence security policy and military strategy. Driven by rapid communications and the cross-border movement of people and goods, interdependence will affect all three tiers of the global system (albeit in different ways). Within the first tier, interdependence will be strong, almost pervasive. The interdependence that connects states within the second and third tiers or that links the various tiers will be weaker, but still significant.

The most prevalent form of interdependence will remain economic. This factor will intensify in the future as international trade becomes more important to almost every state. National economies will be superseded by regional economic blocs and, eventually, by a seamless (but not necessarily egalitarian or equitable) global economy. Prosperity will be almost impossible outside the global economy. Although integration into the global economy will not assure prosperity, states which reject integration will invariably remain impoverished. Political interdependence will also increase as successful policies, procedures, and organizations are rapidly emulated. The outcome of democratization in one country will shape its prospects elsewhere. World public opinion will play a larger role in the domestic politics of all states by influencing elites attuned to the global culture.

Because of interdependence, the global security system will continue to experience cycles with periods dominated by violence followed by widespread resolution of conflicts. Every violent conflict around the world will affect some other state. Many violent conflicts will affect other regions. Some violent conflicts will touch all regions and have global repercussions. Propelled by electronic communications, the successful use of aggression or proxy violence in one part of the world may spawn emulators in other parts, thus establishing a pattern of violence. Similarly, the deterrence of violence or the resolution of conflict will also establish a temporary pattern. The goal of the United States will be to take maximum advantage of periods of peaceful conflict resolution and shorten periods of violence. American landpower, if it remains effective and efficient, can play a key role in these efforts.

Cultural interdependence will also intensify. In most states, tension and outright conflict between the (American dominated) world culture and local culture will be a major problem. In the first tier of the global system, elites will generally embrace the world culture but tolerate local cultural differentiation and diversity. In the second tier, elites favoring acceptance of the world culture will compete with those opposing it. Acceptance of the global culture will ebb and flow in the second tier according to the perceived benefits. In the third tier, many elites will reject the world culture and force those who accept it to emigrate. Moreover, the movement of people between states will

be even easier than today as the technology of transportation improves and economic interdependence leads to the erosion of legal constraints on cross-border movement. As one result, nearly every state will have important emigre or foreign resident enclaves economically, culturally, politically, and electronically linked to similar communities elsewhere, thus forming pseudo-states that overlap traditional national boundaries.

Interdependence in the future global security system will be tempered and sometimes thwarted by multiple sources of competition, instability, conflict, and violence. While competition among first tier states will rarely, if ever, lead to war between them, it may have severe repercussions throughout the second and third tiers. Information warfare or trade wars between first tier states could result in economic dislocations that exacerbate conflict in the second and third tiers. The conflicts that arise will then affect stability in the first tier, completing the circle of inter-dependence.

Most instability will originate in the third and second tiers of the future system. Its effects, though, will be global. Some instability will actually be beneficial, since reform and democratization in authoritarian systems is inherently destabilizing. Violence, not instability, will be the primary security problem. Conflict will arise in two major ways. In the first case, traditional competition between states will spark conflicts: rulers will continue to covet their neighbors' resources, irredentism will persist, and clashing ideologies will still be resolved through force of arms. In the second case, internal divisions will result in conflict based on: (1) primal identity (ethnic, tribal, religious, racial); (2) class tension (with class defined by the possession or lack of wealth-generating information skills); (3) generational disputes over the share of national wealth devoted to caring for the old rather than providing opportunities for the young (health care versus education and job creation); and (4) cultural differences pitting integrationists who favor inclusion in the world culture and economic system against radical particularists who oppose it. Often a single conflict will intermix elements of more than one of these sources.

Not all conflicts will be violent; most will remain political (particularly in the first and second tiers). But political conflicts may turn violent when populations become frustrated by their governments' inability or unwillingness to meet their perceived needs by nonviolent means. In many cases, governments corrupted by criminals will fail to provide basic public safety, thus encouraging the formation of private armies or militaries. Conflicts will also arise when governments are unable to control conflict between armed sub-national groups, whether political, criminal or a combination of the two, or when regimes become externally aggressive to distract attention from internal shortcomings. As in the past, when weak regimes based political mobilization on traditional grievances such as territorial disputes, they will often find it difficult to control the passions they unleash. Parties to a conflict will sometimes use violence to increase their leverage over their opponents or deliberately provoke outside intervention. Often violence within a state will provoke outside intervention.

Even given the multiple forms of conflict that will characterize the future security system, it is not condemned to constant violence. The potential exists for an effective global concert of democracies that can at least control inter-state violence and create the conditions for the amelioration of intra-state violence. Consolidation of such a concert, though, will be extremely difficult. To succeed, the world's democracies must act now while there are no superpowers hostile to free market economics and democracy. The window of opportunity is narrow. If consolidated, a global concert could promote security by excluding aggressors and states with closed political systems.

The Strategic Environment: Internal Dimensions.

National security strategy always reflects internal tensions, compromises, and conflicts as much as the external environment. While the internal dimension of American security will probably change less over coming decades than the external one, several trends are important. For instance, political leaders, the media, and the public are likely to remain fairly intolerant of protracted or costly military ventures except when crucial national interests are clearly threatened. American military operations must thus continue to be conducted as quickly as possible and result in as few casualties as feasible. Indeed, even in the face of increasing interdependence among first tier states, isolationist tendencies will persist in the United States. Pressure for near total disengagement from the third tier will be particularly strong and, in many parts of the United States, a majority will resist rapid integration into the world culture and economy. Support for the U.S. military, then, may be stronger on the coasts than in the nation's interior. And, as the "baby boomer" generation ages and places greater strains on the American health care system, all non-health oriented government spending, including that for national defense, will face increasing opposition.⁵

Demographics will complicate the U.S. military's attempts to obtain an adequate supply of high-quality recruits.⁶ Only a small portion of the public will have first-hand experience with the military. This trend will be exacerbated by the escalating physical concentration of the military as bases close. Stationing most or all of the U.S. military on the east and west coasts makes sense from the perspective of power projection, but it will alter civil-military relations since the vast majority of American communities will not have an active-component military presence. Such conditions will also make public outreach an increasingly important function for the military services.

Challenge I: Reconcile Long-Term and Short-Term Imperatives.

If the future security environment takes the form just described, five strategic challenges will be most important for the Army. The first is reconciliation of long-term and short-term imperatives. In the broadest sense, strategy always entails balancing the

present and the future. Strategists must maximize the chances of success in the future while simultaneously minimizing short-term risk or danger. For the U.S. Army, the tension between the long-term and the short-term has never been more intense as force development and modernization are postponed to preserve current operational readiness. If leaders transfer human and financial resources to force development and modernization, it raises the chances that the Army might face dangerous challenges in the short-term. To postpone modernization, though, could increase future danger. And further complicating things, the relationship between short-term and long-term risk shifts continuously.

How much short-term risk, then, should the nation accept in order to augment its long-term security? Unfortunately, this question can only be answered using assumptions and speculation. The driving factor is the extent of the security threats the United States will face in the 21st century. If the future global security system is relatively benign or cooperative and no other hostile superpower emerges, the Army can minimize the resources it devotes to long-term modernization and force development. But if conflict dominates the future global security system, second tier powers pose challenges where U.S. national interests are limited, or a hostile peer (or more than one) emerges, the United States must accept greater short-term risk and focus on force development and modernization. Either approach is a gamble.

One can argue that focusing resources on current operational readiness and force quality will help prevent the emergence of hostile peers. Potential enemies, according to this logic, will recognize the futility of trying to match the military power of the United States and "abandon the field." Two factors undercut this argument. First, it is expensive to dissuade the emergence of hostile peers by retaining existing superiority. Such a concept requires the American public to support fairly high levels of military spending in what appears to be a nonthreatening security environment. Just as it is difficult to convince those who are young and in good health that they should devote a large amount of their limited financial resources to life insurance, sustaining public support for a level of military spending adequate to dissuade hostile peers may be impossible. In addition, history does not bode well for such an approach. Very rarely did competitors abandon the strategic field even in unipolar security systems. They might have avoided direct military confrontation with the dominant power, but worked diligently to augment their capability, rectify the power balance, and exploit weaknesses in an opposing power or superpower.

While it is never easy to reconcile short-term and long-term security imperatives, current American strategy may be slightly skewed in favor of the short term. The level of current risk to vital U.S. interests is limited, but the resources devoted to long-term modernization are inadequate. Such a focus on the short term at the expense of the long term is an enduring element of the American national culture. We are a nation of spenders rather than savers. In the realm of national security, then, one of the prime challenges for Army leaders is to adjust the focus as far toward the future as is possible without

generating an unacceptable level of short-term risk.

**Challenge II:
Maximize Efficiency.**

In the future security system, American military forces will remain small in comparison to the number and scope of tasks they will be given. This creates an overriding need for efficiency. Of course, this is not new. Ever since the United States decided in the late 1940s to assume global responsibilities without becoming a nation in arms, efficiency has been important. One way to augment efficiency is through cooperation and burden-sharing with other military forces. Coalitions, especially with other first tier militaries, hold somewhat greater promise of bringing dramatic improvements in efficiency. This is especially true if the United States pursues what might be called "qualitative" coalitions based on a synergistic division of labor among the participants rather than "quantitative" coalitions where all the forces involved have similar capabilities. Of course, qualitative coalitions create mutual dependencies among their participants, so only nations that trust each other deeply would allow them to develop. And, in the case of a global power, it would be difficult to structure several regional coalitions each with a division of labor similar enough to achieve such efficiencies.

Technology probably holds the greatest promise of bringing dramatic improvements in military efficiency. In fact, a number of analysts are predicting that a combination of new technology, concepts, and organizations is generating a "revolution in military affairs" dominated by precise stand-off strike platforms, near-perfect communications and intelligence, information dominance, computer-enhanced training, and nonlethality.⁷ Eventually robotics, "brilliant" nanosensors, and psychotechnology will bring further change. The result may be a dramatic improvement in efficiency. Unfortunately, the revolution in military affairs carries its own set of problems. Probably the most pressing obstacle is the expense. To bring emerging technology to fruition will require extensive investment and, as noted earlier, it is difficult to convince the American public and their political leaders that money invested in military modernization today will bring great future returns in terms of augmented security. People invest for retirement because they expect it to come; the closer the event, the more they invest. So long as the American public is not convinced that the nation will face threats and dangers in the 21st century, there will be resistance to investment in military modernization. This means that military leaders must develop ways to pursue the revolution in military affairs as cheaply as possible, whether through creative relationships with business and industry or through new forms of cooperation with other states. Finding methods of frugal modernization is one of the great challenges that current and future Army leaders will face.

Furthermore, reliance on technology can generate unintended adverse effects. New technology can relegate current (and expensive) technology to obsolescence. Even

more ominously, challengers facing a technology-reliant U.S. military might seek low-tech, asymmetric responses to counterbalance the American advantage. These may be "dirty," perhaps relying on nuclear, biological, or chemical terrorism, and aimed at "soft" targets such as population centers. And reliance on technology can lead to a "band-width" problem where the U.S. military is configured exclusively for one type of enemy. Thus, future Army leaders must encourage the development of technology that addresses, and thereby deters, asymmetrical, dirty responses.

Challenge III:

Maximize the Political Utility of Landpower.

A military force has political utility when the expected costs of using it--whether political, economic, or human--are deemed acceptable by political leaders and the public. What makes the job of military strategists so difficult is the tension or even outright contradiction between the various costs associated with the use of armed force. For instance, one way to limit the human cost of military operations, whether in terms of friendly or civilian casualties, is to spend massive amounts of money to develop a high-technology force. Human costs are limited, but economic costs escalate. Conversely, one way to limit the economic costs of a military force is to give it the minimum of training and provide it with low-technology, relatively cheap equipment. But, as the Russians are discovering in Chechnya, such a force will take extensive casualties wherever it is used. Eventually, its political utility will decline because policymakers will recognize the opposition generated by casualties.

The challenge for future Army leaders is to monitor and understand the changing relationship among the various dimensions of political utility. During and immediately after the Cold War, the United States was willing to spend much money to minimize military casualties. And, in the years following the collapse of the Soviet Union, the nature of the global security system, particularly the absence of a hostile peer to mobilize world opinion against the use of American military power, made the political costs of armed force relatively low once the American public was convinced of its necessity. But these factors may change in the 21st century. It is impossible to predict precisely what the American public and its leaders will define as acceptable costs in coming decades, but Army leaders must be aware that this is a fluid equation that can change rapidly, and the type of force they create, train, and equip must, in part, be determined by the need to maximize political utility.

Challenge IV:

Undertake a Controlled Institutional Revolution.

The overwhelming characteristic of life at the end of the 20th century is rapid and profound change. This certainly holds for all aspects of military affairs. Today, American landpower is undergoing fundamental change. To deal with this, the Army must

undertake a controlled revolution.

Historically, American landpower was used to defend against external enemies and to maintain order in regions or under conditions where the police could not. During the Cold War, Soviet and Soviet-ally military power provided the clear and preeminent threat to U.S. interests. From a landpower perspective, a ground invasion of Western Europe or South Korea by mechanized communist forces posed the greatest danger. This forced the U.S. Army to focus its efforts on mobile warfighting by armor-heavy divisions. From the Kennedy administration on, policymakers began to use the Army for nontraditional missions such as humanitarian relief, nation assistance, foreign internal defense, counter-narcotrafficking, and peacekeeping. Strategic exigencies forced landpower to become two-dimensional, with one focused on warfighting and the other on low-intensity conflict or military operations other than war. While warfighting remained the dominant focus by far, the Army became a more flexible institution in terms of doctrine, training, and mindset.

In the future, the boundaries of landpower may be stretched even further as the basic concept of national security expands. By the second decade of the 21st century, national security is likely to include not only traditional meanings such as protection of national territory, way of life, and citizens, but also protection against violent threats to national information and information systems ("cyberdefense"), the environment ("ecodefense"), and public health. Landpower will thus become three-dimensional as ground forces are configured for traditional warfighting, military activities other than war such as peace operations and defense against "grey area" threats such as organized crime, and new functions such as cyber- and ecodefense.

Some of these new functions may not be *Army* roles, but they will be *landpower* roles. The traditional providers of American landpower--the Army and the Marine Corps--may be inadequate, thus forcing national policymakers to consider creation of new institutions to provide new forms of landpower. Within this context, the Army must decide whether to expand and accept the new roles of landpower--to become three-dimensional--or specialize in one or two of the functions and allow some other institution to assume the new roles. Phrased differently, the Army will have to decide whether warfighting is *the* function for which it exists or simply one function (albeit an important one) among several.

To meet the demands of the future, the Army must alter its current focus. A security system dominated by interdependence, multiplicity of threats, and stress on conflict resolution will require a different mix of Army capabilities. Even if warfighting with armor-heavy divisions remains significant, it will probably become no more than the co-equal of other tasks, and may eventually become a secondary mission if enemies like Iraq and North Korea reform or collapse. While the Army's mastery of mobile armored warfare demonstrated in *Desert Storm* may, in the short term, deter aggressors from

challenging the United States, it may not in the long term. Strategy, as Edward Luttwak points out, pits two scheming, adapting opponents.⁸ What works today probably won't tomorrow as enemies find ways to circumvent U.S. strengths and exploit weaknesses. That is the challenge the U.S. Army faces in coming decades: its unquestioned superiority at mobile armored warfare will decline in strategic significance as aggressors develop techniques that cannot be easily countered by armored and mechanized divisions. *Desert Storm* is not a prototype for all future wars.

No one can predict precisely which of the Army's functions will be most significant in the future security system. Initially, the most likely candidates are peace operations to support conflict resolution and defense against grey area threats. Eventually, totally new functions may require more and more attention. It is clear at this point, though, that the Army's focus must broaden: the emphasis on warfighting required by the Cold War security environment must be adapted to the future security system. As Brian Nichiporuk and Carl H. Builder contend, "If the Army fixes itself too firmly on fighting and winning the nation's conventional wars as a way to husband its scarce resources, it may find that its market--like that of the mainframe computer makers--is narrowing."⁹

While the *need* for a controlled institutional revolution in the U.S. Army is becoming clear, its precise direction is not so obvious. During most of the 20th century, modernization of land forces was defined by mechanization. The more armor-heavy and mechanized an army, the more advanced. In the future, modernization will be multi-dimensional, driven by the phenomena associated with the current revolution in military affairs. Although it is too early to predict the precise impact that advancing technology and changes in the strategic environment will have on ground forces, it is possible to at least conceive of "post- mechanization" forms of landpower.

In some important ways, the evolution of landpower has always mirrored the development of human production. For 500 years, the trend in economics was toward centralization, vertical and horizontal integration, and increasing scale. From autonomous estates, farms, and plantations, the bulk of production moved to large industries, corporations, and cartels. Landpower underwent similar changes as the autonomous warrior carrying his logistics or living off the land gave way to specialized units operating in combined-arms, joint, and coalition structures dependent on a massive support and logistics network.

Today, what Alvin and Heidi Toffler call "de-massification" forms the dominant trend in production. Even while technology is leading to greater managerial concentration in some industries, the same technology is allowing small organizations to compete with large ones in certain niches. This trend also affects military organizations.¹⁰ Future landpower will probably be based on ground units that are small and highly autonomous, yet extremely versatile, flexible, and lethal. Technology may allow such units to provide much of their own logistics, mobility, and intelligence support or to acquire this support

electronically, with the providing units located far away, perhaps even at bases in the United States. The 21st century Army may also be a "post division" force built on some sort of smaller, more versatile basic units that can combine and disaggregate with relative ease. Technology may also obviate the need for multiple layers of intervening headquarters. The battalion/brigade/division/corps structure that proved so effective for conventional armored warfare may be less relevant in the future global security system.

Eventually, the requirements of warfighting and other functions of landpower might so diverge that the flexibility of existing Army units becomes inadequate. If the current revolution in military affairs continues, for instance, robotics and the technology of smart (soon brilliant) weapons may advance to the point where much of warfighting by first tier military forces will be based on fighting machines, whether remotely controlled or robotic. In the early phases of conflict and only after one side's machines have significantly weakened or defeated the other side's, may an enemy be attacked at short range. In the mid-term, proliferation of nuclear weapons and smart or brilliant conventional munitions will force land commanders to place even greater stress on the dispersion of units and support bases and other force protection measures. According to Martin C. Libicki, "Systems composed of millions of sensors, emitters, microbots, and miniprojectiles, will, in concert, be able to detect, track, target, and land a weapon on any military objective large enough to carry a human."¹¹ The norm in combat will be extensive dispersion of forces and concentration of fires. While individual soldiers are likely to remain highly effective as sensors and target spotters, warfighting units will rely almost wholly on long-range weapons for fires.¹² Operations will unfold without clear fronts and with few, if any, close tactical engagements.

Landpower functions other than warfighting, whether peace operations to support conflict resolution or defense against grey area threats, will be radically different. Machines will not, in the immediate future, be capable of complex and subtle interface with humans. Only highly trained officers and soldiers can cultivate the psychological sophistication to succeed fully in peace operations. Only specialized units can develop adequate skills at what Nichiporuk and Builder call "script adaptability" which allows a military force in an operation other than war to rapidly change its methods in order to project the right image to attain designated political objectives.¹³ Ground units will not need the sort of long-range weapons systems required for warfighting, but will need effective mechanisms for integrating their efforts with political, economic, and relief organizations. Jointness will be less important than inter-agency and international cooperation. While the warfighting component of the Army will continue to rely on Clausewitzian concepts like centers of gravity, the peace operations components will look more to Sun Tzu's stress on the psychological impact of military force.

For the U.S. Army, the implications of this dichotomy are stark. If the functions of landpower continue to diverge in terms of the skills, concepts, and organizations they require, it will become increasingly difficult to craft a military organization that can

perform all the tasks required of them. Nichiporuk and Builder contend that technology will increasingly allow "an Army of armies" based on differently organized, trained, and equipped units.¹⁴ This may mean that the U.S. Army's warfighting component, built on armored and mechanized divisions, will evolve in an entirely different direction than its peace operations/conflict resolution/grey area threat component based on Special Forces and light divisions. Overarching doctrine and common training and equipment may become impossible. And, in fact, the careers of officers and soldiers might be limited to one component or the other. To some extent, this separation already exists, but reflects the clear priority of the warfighting function. If tasks other than warfighting become more strategically important, the relationship between the Army's warfighting component and its peace operations/conflict resolution/grey area threat component may need radical change, perhaps to the point of separating the two into distinct organizations.

Challenge V:
Preserve Public Support for Effective Landpower.

During most of the Cold War, the need for a strong U.S. Army was self-evident.¹⁵ Senior Army leaders did not have to concern themselves with making this point to political leaders, the media, and the public. In the future security environment, American landpower will continue to play a vital role in promoting national interests, but in more subtle ways. To retain the public support necessary for continued investment in landpower and for recruiting from a shrinking pool of candidates, senior Army leaders must persistently and convincingly explain the roles that landpower plays in deterring violence, defending against aggression that does occur, and helping resolve conflicts through peace operations.

For instance, the Army plays a central part in deterrence. By the last half of the Cold War, most American strategists had jettisoned the notion that nuclear forces alone could deter aggression and recognized the value of conventional deterrence.¹⁶ If anything, the deterrent value of the U.S. Army will increase in the future. As nuclear weapons and sophisticated delivery systems for them become widespread, deterrence will hinge on the United States having a wide range of coercive resources. Landpower will remain one of the most effective. It connotes political resolve and can be adapted to the widest range of conditions. However, as American defense planners recognized during the Cold War, deterrence hinges on threatening what an adversary values most. Most future aggressors will remain landpower- or "expanded landpower" (land plus cyberspace)-based. Additionally, in authoritarian states, land forces will remain the ultimate guarantor of the regime's survival. Deterring them or reassuring friends whose major threat is a landpower-based enemy will require effective and flexible U.S. landpower.

It is generally cheaper and safer to deter an aggressor than defeat him, and to reassure a friend rather than rescue him. But if deterrence fails, American landpower will also play an important part in thwarting aggression. A determined aggressor can be

decisively countered only in the primary medium in which he operates, whether aerospace, land, cyberspace, or the seas. Asymmetric actions such as responding to a land invasion with air or naval power alone can be operationally or tactically successful, but have never proven strategically decisive. Furthermore, there are often severe political limitations to asymmetric applications of force, particularly where U.S. interests involved are "significant" but not "vital," where the aggression is "limited" rather than "outrageous," or where the opposing "will" lacks a center of gravity that can be struck either at all or within the bounds of proportionality. Because most future aggressors will operate in the landpower or expanded landpower medium, they must be confronted there.

Finally, landpower is absolutely crucial in resolving violent conflict. Political, psychological, and economic factors can bring a violent conflict to the point where settlement is possible or push an authoritarian state toward democracy. Once peaceful resolution or reform is underway, though, military power is often necessary to safeguard the process. Military force can ease the transformation of an aggressor's political system by protecting advocates of democracy. It can also support conflict resolution by constraining those who seek to upset an ongoing peace process. While all forms of military power can play a role in such actions, only land forces have the flexibility and capacity for the direct, personal interaction that sustained peace operations demand. Peace operations--which are the applications of military power most directly related to conflict resolution--thus require effective landpower.

As senior Army leaders explain the enduring significance of landpower to political leaders, the media, and the public, they must counter several popular myths concerning American strategy and the role landpower plays in it. For instance, some neo-isolationists feel the United States can disengage from the conflict prone parts of the world, thereby obviating the need for direct involvement. But the multidimensional interdependence of the future global system will make this impossible. Over the long term, disengagement will endanger U.S. national interests. This does not imply a "global policeman" role. The United States can choose the form and extent of its engagement in individual conflicts. Most often, the American role will be to lead or support an alliance or coalition effort. The greater the range of options available to policymakers, though, the greater the chances of an outcome favorable to U.S. interests.

Other opponents of continued investment in American landpower contend that the world will see no more conventional wars. But while the nature of armed conflict is changing, the incentives to use military power remain and, in some ways, have been amplified. If one nation succeeds at aggression, others will emulate it. Eventually, an effective global concert may, in fact, abolish traditional war. In the mid-term, construction of such a concert will rely on American military power. And, even in regions without conventional war, American landpower will retain its salience for other functions such as humanitarian relief under hostile conditions.

Other opponents of investment in American landpower argue that allies or international organizations can compensate for a decline in U.S. ground forces. But allies and international organizations do not appear capable of or intent on orchestrating adequate forces for deterrence and defense beyond their immediate borders. Most American allies have reduced their militaries even more rapidly than the United States. While allies and friends might, under some conditions, be able to counter local aggression without U.S. assistance, the conflict would be longer and more costly with increased danger of spillover. A serious decline in U.S. landpower would erode the confidence of friends and allies, and the very stability on which U.S. interests abroad prosper.

Effective landpower will remain the price of admission for a role in conflict resolution that will serve U.S. interests. Some opponents of investment in U.S. landpower feel that it can be allowed to atrophy during the current period of fragmented threat, and reconstituted if necessary. This idea has a long history. Throughout most of the U.S. experience, landpower was mustered when needed to meet direct threats. From the village militias who rallied against Indian raids to the divisions of draftees and volunteers who defeated the Germans and Japanese in World War II, Americans considered the need for landpower temporary, determined only by imminent danger. As the danger passed, landpower could be demobilized and then rebuilt when new threats emerged. But in the modern era, landpower, if it is to be effective and efficient, cannot undergo cycles of decay and reconstitution. It requires constant cultivation. Improvement must be continuous rather than episodic. Military modernization is a long-term process that must be sustained even in times of low direct threat. The general consensus is that it takes about 2 years to build an army division from scratch, and about 10 years to inculcate new doctrine through the force.

Conclusion.

Assuring the future effectiveness of American landpower is a shared responsibility. The public and policymakers must recognize the enduring significance of landpower and take steps to assure its continued viability. At the same time, Army leaders must embrace the need for fundamental reform in the roles, focus, and structure of their organization. If the public is to make the investment necessary to retain effective landpower, Army leaders must assure that this investment is spent as wisely as possible, with future needs rather than past successes serving as the guide. The current Army leadership recognizes the need for fundamental change. But this is only the first (and easiest) step. The next one is to reach consensus on exactly what the most pressing strategic challenges are. This essay has suggested five. The development of coherent programs to deal with them is the greatest legacy that the 20th century Army can leave the nation.

Notes:

1. The U.S. Army War College Strategic Studies Institute is developing a pilot program to explore the strategic issues and problems that may be faced by the U.S. Army in 2010 and after.
2. Brian Nichiporuk and Carl H. Builder, *Information Technologies and the Future of Land Warfare*, Santa Monica, CA: RAND Corporation, Arroyo Center, 1995, pp. 35, 37.
3. For instance, Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, Boston: Little, Brown, 1993; and Donald Snow, comments in Steven Metz, *The Future of the United Nations: Implications for Peace Operations*, Report of a Roundtable Sponsored by the Strategic Studies Institute, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1993.
4. This grim portrait of the third tier was introduced in Robert Kaplan, "The Coming Anarchy," *Atlantic Monthly*, February 1994, pp. 44-76. Its effect on U.S. national security is explored in Steven Metz, *America in the Third World: Strategic Alternatives and Military Implications*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1994.
5. Mark J. Eitelberg and Stephen L. Mehay, "Demographics and the American Military at the End of the Twentieth Century," in Sam C. Sarkesian and John Mead Flanagan, eds., *U.S. Domestic and National Security Agendas: Into the Twenty-First Century*, Westport, CT: Greenwood, 1994, pp. 89-91.
6. See Mark J. Eitelberg and Stephen L. Mehay, eds., *Marching Toward the 21st Century: Military Manpower and Recruiting*, Westport, CT: Greenwood, 1994.
7. See Steven Metz and James Kievit, *Strategy and the Revolution in Military Affairs: From Theory to Policy*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1995, pp. 7-8.
8. Edward N. Luttwak, *Strategy: The Logic of War and Peace*, Cambridge, MA: Belknap, 1987, pp. 7-10.
9. Nichiporuk and Builder, *Information Technologies and the Future of Land Warfare*, p. 83.
10. See Alvin and Heidi Toffler, *War and Anti-War*, pp. 64-80.
11. Martin C. Libicki, *The Mesh and the Net: Speculations on Armed Conflict in a Time of Free Silicon*, McNair Paper 28, Washington, DC: National Defense University, Institute for National Strategic Studies, 1994, p. 19.

12. Nichiporuk and Builder, *Information Technologies and the Future of Land Warfare*, pp-64-67.

13. *Ibid.*, pp. 58-61.

14. *Ibid.*, pp. 77-79.

15. The only exception was the first few years of the first Eisenhower administration when some policymakers concluded that strategic airpower alone could protect American interests and the Army could be allowed to atrophy. By the end of the administration, even President Eisenhower had abandoned this sort of thinking. See Steven Metz, "Eisenhower and the Planning of American Grand Strategy," *Journal of Strategic Studies*, Vol. 14, No. 1, March 1991, pp. 49-71.

16. See Samuel P. Huntington, "Conventional Deterrence and Conventional Retaliation in Europe," in Keith A. Dunn and William O. Staudenmaier, eds., *Military Strategy in Transition: Defense and Deterrence in the 1980s*, Boulder, CO: Westview, 1984; John J. Mearsheimer, "The Theory and Practice of Conventional Deterrence," Ph.D. dissertation, Cornell University, 1981; Thomas Boyd-Carpenter, ed., *Conventional Deterrence Into the 1990s*, New York: St. Martin's, 1989; and Gary L. Guertner, *Deterrence and Conventional Military Forces*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1992.

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