Keeping Pace with the Revolution in Military Affairs

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“A ‘revolution in intelligence affairs’ . . . must take place within a comprehensive renewal of US national security capabilities.”

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In Operation Iraqi Freedom, the world witnessed a progress report on the revolution in military affairs (RMA). The performance of US forces in the major combat phase of the operation in Iraq demonstrated the ability of institutions functioning within standard bureaucratic, hierarchical structures to operate beyond those structures. To put it bluntly, US forces in Iraq leapt past jointness into networked operating models. *They became hierarchies emulating networks.* The challenge to the Intelligence Community is to keep pace with the significant flow of change emanating from the Department of Defense.

This article was written and submitted to *Studies in Intelligence* in late summer 2003. Subsequent events support the argument, explicit in the following pages, that a “revolution in intelligence affairs (RIA)”—and even the revolution in military affairs—must take place within a comprehensive renewal of US national security capabilities. Nothing in the events between May 2003 and the end of the year fundamentally alters, in the author’s view, the lessons intelligence professionals can derive from the early phases of Operation Iraqi Freedom.

The Breadth of Change

From many perspectives, the dramatic advance in military operations in Iraq is an exciting, even inspiring, event. First of all, the previous major event in US military history—the Gulf War (or Gulf War I)—was a US military victory that validated new modes of warfare. Yet the services (and DOD civilian leadership, to be sure) abandoned much of the successful Desert Storm model for something even more revolutionary. *That alone—a hierarchical bureaucracy transforming after success—is a rare achievement.* As a possible result, some of the most vocal critics of the plan for Iraqi Freedom were not “old soldiers” from Korea or Vietnam, but more recently retired officers who had served with success in Desert Storm or the Balkans, in itself a reflection of the pace in which reform has invalidated expertise. Innovation has produced its own “Doppler effect.” Such invalidation or at least disruption of conventional judgment (and expertise) will continue to be a product of the RMA and its extension into other areas of national security affairs.

Secondly, the American military accomplished this feat not after a period of budgetary largesse, but immediately following an extended and relatively deep period of budget cuts. The

victory in Iraq was won with relatively few new weapons systems. Rather, the characteristic "development" model of Iraqi Freedom was the enhancement of many of the systems that had proven successful in the Gulf War. Platforms as venerable as the B-52, as well as a host of significantly "middle-aged" systems (the Abrams tank, the F-16), were stretched by new or enhanced applications and systems to the point where, one suspects, participants in the Joint Strike Fighter and F-22 program offices may be entitled to some mixed reactions to the success of Iraqi Freedom. The point remains: while resource restriction can clearly reach a tipping point that destroys capability, public institutions—including security instruments—can sometimes benefit from austerity that promotes innovation and even competition, simulating some of the characteristics that the market provides private sector institutions.

Finally, it should be clear that the victory was only partly a technical or technologic victory. Peter Drucker has long argued that historians of the industrial revolution have placed too much attention on railroads, steam engines, and the like. Drucker, among others, emphasizes that the dominance of the West in and through the industrial revolution was more critically the dominance of administrative, organizational, and (in governmental terms) operational skills, which in turn permitted the intelligent and advantage-

> **"A hierarchical bureaucracy transforming after *success* is a rare achievement."**

gaining deployment of technology. At every step, Operation Iraqi Freedom demonstrated a similar organizational and operational success, enabled by technology. But technology was merely the tool of a broader commitment to such considerations as the centrality of information as a dominant weapon rather than merely a supporting agent of war; jointness exercised up and down the command structure; and arrangements that emphasized, permitted, and even demanded flexibility and agility.

By any number of measures, the impact of the RMA has been, for want of a better word, revolutionary. The US Department of Defense and the military services, the embodiments of hierarchical organization for most of the 20th century—renowned (fairly or not) for "Catch 22," Standard Operating Procedure, "do it in triplicate," and overpriced toilet seats and hammers—demonstrated an extraordinary ability to function in ways that should lead to a significant rethinking of many stereotypes. A dramatic increase in the use of precision munitions, exponential increases in information volume and variety, and a corresponding decrease in sensor-to-shooter decision cycles are among the technical symptoms of the state of the revolution in military affairs. Even more impressively, at important moments (and perhaps in routine moments as well), an enormously complex public policy instrument behaved in ways that maximized the technical advantages available to it. History suggests that this is not automatically the case. In the end, innovative behavior and a willingness to encourage such behavior may have proven a more important factor in the success of Operation Iraqi Freedom than any technical achievement or set of such achievements.

Next Steps in RMA

Every indicator suggests that Operation Iraqi Freedom occurred *in the midst of* the RMA. Closer to the beginning than to the end? That is hard to say. But many of the technical manifestations of the RMA seem at least roughly supportive of the proposition (Moore's Law) that the computing power available at a given cost doubles every 12-15 months. The conventional wisdom in information technology suggests that Moore's Law may not be exhausted for another decade or so. If this supposition is even roughly accurate, and if this continues to provide a pace and duration roughly indicative of the pace and duration of the RMA, the compounded results of decades of transforming technical change will continue to produce striking, even disorienting outcomes.

If, as presumed above, the current revolution in military affairs continues for another decade or so, the challenge to other components of American national security, including intelligence, is evident. Either they must develop apace with the RMA. Or they suffer the risk that intelligence (and diplomacy, to mention another critical component of national security) will be unable to contribute to—or even compete with—defense organizations in the making of national security decisions.

Jim Hoagland of *The Washington Post* spoke to this prospect when he wrote that the cliché long used to describe Washington in the midst of an international crisis—"The lights are burning late tonight in the State Department"—was in danger of becoming an anachronism. "Foggy Bottom [has become] a somnolent, darkened nighttime quarter, while working weekends and cots for sleeping in the office" attest to Pentagon dominance of national security affairs.[1] Even if this is hyperbole or journalistic impressionism, impressions count. And the impression is that the war-making capacity of the United States is proceeding at a revolutionary pace to embrace technical and other change, while the other instruments of security policy, even if they see themselves adapting to a changed environment, do so at a pace slower than

[1] Jim Hoagland, "Fusing Force with Diplomacy," *The Washington Post*, 19 June 2003.

"If the non-Defense components of US national security embrace change more slowly [than the Pentagon], they risk failure or irrelevance."

that of the RMA. If this impression becomes reality, the non-Defense components of US national security risk failure or irrelevance, with implications reaching far beyond institutional marginalization. They raise the risk that the United States could squander its military advantage by failing to use that advantage more to dissuade potential adversaries than to engage them in combat. Ultimately, they raise the risk of failure of American security policy.

Intelligence, non-defense intelligence that is, might survive such an outcome—bureaucracies being extraordinarily difficult to kill—but only as increasingly irrelevant appendages of the national security instrument. The desire to avoid becoming process-driven mandarins rather than outcome-driven participants in national security affairs should in itself be the stimulation of a revolution in intelligence affairs.

It is important to note here that such a revolution is not only inevitable, but also, in many cases, already underway. A discussion of such a revolution, or the need to step up its pace, should not become an excuse for self-flagellation. Parts of the "progress report" on the RMA must address the important and successful contribution of intelligence to the success of Operation Iraqi Freedom. All the precision-guided munitions used, to such great effect, during the campaign needed accurate, timely, and precise information. And the evidence suggests that they received it.

The issue for the Intelligence Community is whether it chooses to embrace that revolution, retaining control of much of the agenda of intelligence reform, or to cede control of the agenda to the Congress, a commission or two, or some other body that would effectively place American intelligence in receivership. The issue is also one of a focus on changing structures—*i.e.*, reorganization—or changing habits and behavior.

RMA Payoffs

Operation Iraqi Freedom suggests that changing culture and behavior, while neither quick nor foolproof, can have dramatic returns. The RMA has not banned bureaucracy from the Pentagon. It is at least likely that while the 3rd Infantry Division was racing toward Baghdad, supported by precision munitions launched from an awesome (if not shocking) range of air, sea, and land platforms, some poor soul needing flashlight batteries from a supply depot in Crane, Indiana, was being told he or she had not properly completed the

appropriate standard form. In triplicate. Nor does the RMA guarantee the retirement of traditional expressions of frustration with military bureaucracy (FUBAR or SNAFU).

The RMA does mean that, at the point of attack, one of the world's largest bureaucracies functioned as an emulated network, harnessing information in volumes and at speeds unprecedented in the history of warfare and encouraging behaviors that took advantage of that information. It means that the American defense establishment, even after a decade of budget cuts, achieved significant transformation, largely employing the platforms of Desert Storm (resulting from development efforts begun in the 1970s and 1980s, if not earlier) integrated with the systems of the cyber revolution of the 1990s. Most of all, it means that a bureaucratic structure that had entered the 1990s with the success of Desert Storm—and its participation in the historic success of the Cold War—*continued to reform after victory.* This is a remarkable testament to the degree to which behaviors supportive of the RMA (a predilection for jointness, an acceptance if not embrace of innovation bordering on heresy) were tolerated, even rewarded, within the military culture.

The revolution in military affairs may not be *about* technology, but it will ride on technology—to a great degree on technical developments in information transmission, storage, and management. This is largely, and not

> **"Technology will be the basis, but the real revolution [in military and intelligence affairs] will be in behavior."**

coincidentally, the same technology on which any prospective revolution in intelligence affairs will depend. Technology, in scholastic terms, has been and will be the necessary basis for the RMA. But the real revolution will be in judgment, decisionmaking, and other forms of behavior. The RMA, like the larger information revolution of which it is but one manifestation, is about institutions and organizations. It is a social event, as was the industrial revolution. Like the industrial revolution, moreover, its implications are too important to be entrusted fully to engineers.

Manifestations of the RMA in Operation Iraqi Freedom will be important considerations in lessons-learned studies. Max Boot has noted that American forces in Iraq used 30 times the bandwidth available only a decade earlier in the first Gulf War.[2] (This is almost an exact extrapolation, in bandwidth, of Moore's Law.) Similar illustrations of the RMA are certain to emerge in the months to come. How many—or how few—sorties were required in the 2003 campaign to place on target the munitions that would have required many more missions in Desert Storm, let alone in earlier conflicts? To what degree did the increasing precision of American weaponry—tank rounds as well as bombs—reduce the supply of munitions needed and therefore change the nature of logistics support? And so on.

Innovation as Developed Technique

How has the RMA affected behavior? It is a truism that no plan survives first contact with the enemy. The ability to adapt to what is encountered rather than what was planned for has been noted in every major military legend from Caesar to Patton. But, at some point, the ability to adapt makes a qualitative shift and becomes the capacity for intended improvisation.

The evidence suggests that the air campaign in Operation Iraqi Freedom benefited from such a shift. On 27 April 2003, *The Washington Post* published an extraordinary report on the air campaign. The news analysis described how early information available to the air commander suggested two potentially intersecting observations: first, that attack aircraft were finding themselves in the proverbial target rich environment but were inhibited by limits on their loiter time; and, second, that Iraqi resistance, in the form of aircraft

[2] Max Boot, "The New American Way of War," *Foreign Affairs* (82,4), July/August 2003.

or ground-based anti-aircraft weapons, was relatively light, except at low altitudes. The air commander, Lt. Gen. T. Michael Moseley, integrated these bits of information and altered the pre-campaign rules governing how far forward to place tanker aircraft. The attack pilots would benefit from their presence, and the risk to the slower, unarmed tankers seemed acceptably low.

This appears to have been an exceptionally sound command decision. What is more interesting is the command process implied in the *Post*'s account. The air commander appears to have made the decision while linked to multiple levels of command authority, which could have used those links to impede the decision process; however, through what appears to be the good judgment and discretion of the participants, they did not do so. On the contrary. Gen. Moseley connected the data he was receiving with the pre-war guidance of US Central Command's Gen. Tommy R. Franks ("make it fast and final"), which Moseley described as "the mark on the wall for his commanders."

So what? The implications of this decision are minimal if they reflect only one bold commander's reaction to one set of circumstances. But what if this is indicative of a pattern of behavior that we may see being institutionalized in the defense establishment? Is this any more than a laudable but isolated (and therefore potentially not repeatable) example of behavior cited

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and honored throughout military history? The answer to this question has significant consequences: Is this a case of individual achievement or of an organizationally encouraged tendency toward the behavior described above as intended improvisation.

Music provides a useful analogy. Musicians, even in a classical setting with its emphasis on noting every tonal marking to the most calibrated point, may be able to adjust to a loss of beat on the part of the conductor. A baritone may realize that his tenor is experiencing vocal difficulties and increase his volume in a key duet, or even cover for the tenor in a climactic high note. But such adaptability is not the same as the jazz musician's bone-deep understanding that the marks on the sheet music (if he's even looking at sheet music) are not intended to limit improvisation. His or her permission to improvise is not contingent on making the best of a situation in which something has gone wrong. His "permission" is much broader, much more inherent in the intent of his performance. Improvisation in this context is neither intuitive nor fortuitous; *it is developed technique*.

On the same day that *The Washington Post* published its article on the air campaign, it ran a story on the disintegration of the Iraqi army. Whether or not Operation Iraqi Freedom achieved "shock and awe," as touted, remains an open question. It is very clear, nevertheless, that at many levels it produced confusion and a misperception of American goals and capabilities. Saddam Hussein and his associates may have learned some lessons from the first Gulf War.

In another manifestation of the RMA's Doppler effect—for this purpose, a misperception of American capability based on a misjudgment of the pace of change and innovation within the US military—it is less certain that any of those lessons provided usefully applicable information. The Iraqi leadership may have been comforted, in the war's first weekend, by concerns expressed by US observers about any number of issues: whether the American-led coalition had deployed sufficient troops; whether it had available the right kinds of troops, especially heavy armor; and whether the race to Baghdad had left coalition supply lines vulnerable to interruption. In the end, however, speed and precision, more than mass, rendered these concerns irrelevant to the outcome of the war. Knowing where the 3rd Infantry Division had been 12 or 15 hours in the past proved of little use to the Iraqis as the coalition forces sped toward both the capture of Iraq's capital and

the deconstruction of effective resistance.[3]

One Iraqi officer, obviously schooled in denial and deception as taught in the Iraqi armed forces, reported his dismay to an American reporter. Called to a meeting, he had left his unit hidden under trees to avoid detection by US reconnaissance. Using the best information available to him on US capabilities, he attempted to deny those capabilities the opportunity to "see" his troops. When he returned, his unit's vehicles were burning wrecks and many of its personnel were dead or wounded. The officer's explanation? "The Americans must have had spies." Maybe not. In some respects, what this officer knew about US reconnaissance systems may have been as fatal as what he did not know.

One goal of any revolution in warfare should be to confound an adversary in just this way. Saddam may even have attempted to demonstrate his sagacity by encouraging his officers to watch *Black Hawk Down*. Take notes,

"Change at this pace will put . . . a continued premium on innovation, improvisation, and information."

there'll be a quiz after the movie! Ernest May has conclusively demonstrated that the admonition that we should learn from history works only if we learn the right lessons from the right history.[4] It's easy to get this wrong. Saddam may have believed that *Black Hawk Down* pointed to critical inabilities of the American empire, especially its aversion to casualties.

This may in fact be *a* lesson to be learned from America's experience in Somalia. But history is rarely so didactic. An alternative lesson that might have proven more useful for the Iraqis was that the American troops in Somalia displayed enormous skill, professionalism, and killing power, stripped of all those material advantages that some critics (those of the "Germany-had-better-tanks-but-the-Americans-had-more-factories" school of military history) use to discredit American military achievement. A second lesson Iraq could have taken from Somalia (and Desert Storm) was that the United States was not likely to deploy major forces in the Gulf without air power, while leaving armored support to one or more foreign partners operating under international command.

Looking Ahead

What are the potential implications of another decade of RMA? At its most basic level, we should assume that US personnel deployed in a major effort in 2010 should expect to have 20 times the bandwidth available during Iraqi Freedom (or 800-1000 times the bandwidth available in Desert Storm). We should further assume that other metrics—the definition of "precision;" the speed at which information is collected and processed; even our ability to distinguish collection, processing, and analysis as distinct phases of an information cycle; and the speed of decisions—will continue to change at blinding speed.

Change at this pace will put enormous pressure on planning and perception, resulting in a continued premium on innovation, improvisation, and information. In describing Operation Iraqi Freedom, President George W. Bush observed that we had entered a new phase in industrial warfare. In earlier phases (beginning, he might have noted, with Sherman and Grant), it was necessary to destroy large parts of an enemy's society and economy in order to defeat its warfighting capability. Even in Desert Storm, breaking Iraq's

[3] Though not the subject of this article, speed becomes an increasingly important factor in rethinking, in intelligence and the other instruments of national security, the whole issue of "security." Denying an adversary the knowledge of a friendly unit's location at a given moment becomes largely immaterial if the unit is moving faster than the adversary can gain, process, or act on information locating it at that location. Information delay, always a part of security planning, may need to become more important, relatively speaking, than information denial.

[4] Ernest R. May, *Lessons from the Past: The Use and Misuse of History in American Foreign Policy* (Oxford, UK: Oxford University Press, 1985).

infrastructure was a key strategy. In Iraqi Freedom, the President continued, the United States was able to surgically destroy a regime while leaving social and economic infrastructure intact.

The "New American Way of War," to use Max Boot's phrase, is not without risks. The United States may have underestimated, for example, the degree to which Iraqis, either regime hardliners or simple criminals, would destroy their own infrastructure. We may not have been prepared for the truly revolutionary event in which an invading (and conquering) army needs to be succeeded by an occupation force of equal or even larger size. That alone turns centuries of experience on its head, a point that fairness suggests should be noted in assessments of the US performance in Iraq. It is hard to plan for the unprecedented.

One advantage, though, of American leadership, in both hard and soft forms of national power, should be that of being able to absorb the unprecedented better than many adversaries. To an even greater degree, moreover, we should be able to force both the direction and extent of new precedents. Much has been written over the last decade about the threat to the United States from asymmetric warfare, most of the literature implying, at least, that asymmetry is a condition inflicted upon the United States. How many examples does it take to convince us that: *We are the asymmetric power.*

"How many examples does it take to convince us that *we are the asymmetric power?*"

This should not lull us into complacency about the risk of asymmetric attacks against the United States, its allies, or its interests. But the fact remains that our capacity to go asymmetric on our adversaries is part of America's strategic advantage of the 21st century. Ask the "elite" Republican Guards.

Toward a Revolution in Intelligence Affairs

What are the lessons of the revolution in military affairs for intelligence? First of all, it is essential that the RMA take place within a balanced national security strategy, in which all the components of security—the military, diplomacy, intelligence, and the additional components engaged in the homeland security environment created after 11 September 2001—proceed apace. The National Security Act of 1947 implied, if not directed, a balance among security components. The late historian Carroll Quigley once argued for the concept of historical morphology, meaning the balance between the elements of an institution or society. Developments in one element unmatched by at least roughly parallel developments in others could, in the end, prove detrimental to an institution's ability to function effectively.[5]

This is not to suggest that the revolution in military affairs should slow to allow other institutions of security to catch up. That would be a mistake of potentially tragic proportions. US leadership in the world of the early 21st century is significantly tied to American technical leadership, and one clear way to ensure American security is to maximize, in extent and in duration, our technical advantages, including military technology. At some point, of course, these advantages create other organic imbalances, as, for example, may be occurring in the gap between the capabilities of the American military and those of its allies, even in the other industrial democracies. At some point, gaps of this sort render meaningful coalition operations inefficient or even dangerous.

But the more pertinent issue is the need to ensure a balanced morphology in American national security, with security elements outside DOD matching pace with events in DOD. For intelligence, we should assume that the very presence of the majority of US intelligence assets within the Defense community will ensure their participation in the revolution in military affairs. This will only occur, however, if the Defense components see

[5] Carroll Quigley, *The Evolution of Civilization: An Introduction to Historical Analysis* (New York, NY: Macmillan, 1961).

themselves as subject to the demands of the RMA. The recent establishment of the position of Undersecretary of Defense for Intelligence (USDI) presumes this to be the case. Although the creation of the DOD intelligence position guarantees a degree of bureaucratic tension, it is at least possible, in the short- to mid-term, that the USDI and the DCI will perform supportive, complementary roles. Which of the "two parents" of US intelligence takes effective control of the national agencies and their programs is probably less important than that one of them must, in the context of strategic agreement between both.

Implementing an RIA

For all the criticisms one might make about the hardships faced over time by prophets of military reform, and for all the obstacles placed in the path of reform, it is clear that in the current revolution in military affairs, the defense establishment has remained open and receptive—at some level—to its critics. John Boyd's reputation, for example, surely represents both the strengths and pitfalls of becoming a reform cult figure.[6] But it can scarcely be doubted that studies on Operation Iraqi Freedom will find his name in the index. How many Marine commanders, in describing the

[6] See Robert Coram, *Boyd: The Fighter Pilot Who Changed the Art of War* (Boston, MA: Little, Brown, 2003) for a thorough, if worshipful, account of Boyd's impact.

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formation of their professional perspectives and skills, will note Boyd's influence? Probably many of them. Admirals William Owens and Arthur Cebrowski will almost certainly draw attention. It is worth noting in that vein that the defense establishment showed confidence and maturity in how it dealt with people like Adm. Cebrowski, many of whose views were at the very least controversial. He was not assigned to some departmental backwater, but to head—and rejuvenate—the Naval War College, now clearly the center of service-school work on information and its applications, including, but not limited to, information warfare. He now plays a significant role in the "Rumsfeld Revolution," a particular iteration of the RMA under the current Secretary of Defense.

The point here is not to suggest a roadmap for how we generate an intelligence reform movement or a revolution in intelligence affairs. The point is to suggest that we undertake a confident study of how the counterpart revolution in defense took shape, an assessment of our strengths and weaknesses in internalizing operational transformation, and a plan to implement the revolution. We need to look at institutions like the National Training Center and the various "after next" studies done by DOD and the services.

We need to be prepared to look at "concept cars" with the courage and stamina shown by the services. The Navy's DD21 program, for example, will never produce a fleet of ships that meet all the specifications of its original design. But what did the Navy learn from this project about how to reduce crew size? Would it not be at least interesting to commission a concept car asking whether an NSA or CIA "after next" could operate more flexibly with a core staff half its current size? Like the first conception of the DD21, we would probably never see those goals achieved. But what could we learn—about the inverse relationship between size and agility, for example—before we simply go off and assume that the future of the intelligence agencies must be a future of personnel growth?

How do we get our schools to become seedbeds for irritating, unconventional, annoying people? How do we link more effectively with service schools and labs (and with organizations such as the Defense Advanced Research Projects Agency and the Office of Net Assessments) with a history of innovative, even counterinstitutional, thinking. How do we link our research and writing on the future of intelligence with analogous efforts in the Departments of State,

Justice, and Homeland Security, among others?[7]

As one lesson learned from the RMA, we need to focus less on structure and more on behavior. This is not to suggest that some organizational changes—the creation of a single national technical intelligence agency, for example—may lack merit. Or should not be discussed. But what cost are we prepared to expend, in money and time, on changing structure? If changes in behavior can produce most if not all of the gain to be achieved by reorganization, with less turmoil, then why put primary emphasis on wiring diagrams? It is not altogether certain, it must be conceded, that changes in behavior can be achieved faster than changes in organization. Goldwater-Nichols made "jointness" a buzzword from the late 1980s.[8] It did not, however, become an operating habit overnight. Many in the Defense establishment, including those at the center of Operation Iraqi Freedom, can no doubt, from an insider's perspective, point to the areas in which jointness, in thinking and doing, is still not "second nature" in the American military. From the outside, however, the results look very impressive.

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For better or worse, it is such external metrics that count greatly. To say our individual agencies are performing more effectively or more efficiently than they did a decade or so ago is largely irrelevant. In an environment marked by the rapid appearance and disappearance of issues or targets; by a relatively finite range of target states but virtually infinite set of real or potential target groups; and by extraordinary volatility in our technical environment; the only measure that counts is how well US intelligence aligns itself with the world beyond its walls. One agency head has described his initial experience in that organization in terms of piloting an airplane: "The nose was pointed down and when I looked out the window the houses were getting bigger." Even if we can say that our agencies now have their noses pointed up, with gains in airspeed and altitude, this is not a guarantee that we will clear the peaks outside the windows. And clearing the peaks, the external metric, is all that counts.

Information is the key to our ability to plan, institutionalize, weaponize, and apply American potential as an asymmetric power. And the ability to move and store information needs to be at the center of intelligence reform. "How do we transform NSA?" (or CIA? or NGA?) is not a bad question. "How do we do intelligence for the United States?" in the midst of volatile operational and technical environments is a better question, even if the answer leaves no room for any of the existing agencies to plan their 75th anniversaries.

Ask most Americans to recount the timeline of the national security experience of the United States from 1945 to the present, and the likely answer will be that we moved from the Second World War to the Cold War, which we

[7] One of the goals we need to establish in linking with service schools and other institutions is a greater willingness to accept the military principle of "train for the way you fight," or operate, in the case of intelligence. We need to take a hard look at the continued value of simulation in military training and education, for example. And we need to confront some significant differences in operational tempo and practices, especially as they involve training groups or units versus individuals. When the 101st Airborne returns from Iraq, after suitable rest, individuals may go off to advanced schooling. But a significant portion of military training is the training of whole units, taking advantage of a deploy/refit operational schedule. It is hard to imagine that the CIA's Directorate of Intelligence could "stand down" its Middle Eastern elements for a month of training, but somehow the Intelligence Community needs to find opportunities to train not just as units within agencies, but across agencies. The first step is to accept as a goal greater emphasis on "training for the way we operate."

[8] The Goldwater-Nichols Act of 1986 is widely credited with adding coherence to the Joint Chiefs of Staff structure (a creation of the National Security Act of 1947), which had long been viewed as fragmented and less effective than it should have been in advising the commander-in-chief. See Ronald H. Cole *et al.*, *The Chairmanship of the Joint Chiefs of Staff* (Washington, DC: Office of the Chairman of the Joint Chiefs of Staff [Joint History Office], 1995), pp. 25-38.

then proceeded to win. While roughly accurate, this view omits one of the most important periods in American national security, the interval between 1945 and 1947.

President Truman, at the moment of his ascendancy, held a view of the need for "economy and efficiency" in government not unlike the desire for "normalcy" expressed after the First World War by President Harding. Truman's demobilization efforts matched those of previous postwar periods. Remarkably, however, Truman and the men around him shortly recognized that normalcy, in the sense of the prewar world, was not in America's future. Over the course of the next several years, and especially in the National Security Act of 1947 and the Marshall Plan, they set the United States on an unprecedented path as a permanent world power. The structure implied or built in the National Security Act supported American strategy for half a century, balancing military and nonmilitary expressions of American power and providing for a permanent, peacetime intelligence establishment with a focus independent of any individual department.

"Achieving alignment with the diffuse, complex, and still-emerging security environment must be the central issue in any revolution in intelligence affairs."

The national security structure of the 21st century cannot be a replication of that of 1947. The threat of terrorism means we must now defend Kansas not just at the Fulda Gap in Germany or in the Pacific, but at America's points of entry. And in Kansas itself. We will not be able to function with the relatively neat division between foreign and domestic threats, or between intelligence (by which we implicitly mean foreign intelligence) and law enforcement. We must forge a new understanding of national security, and part of that understanding must be a role for intelligence aligned with the diffuse and complex security environment facing the United States and its allies. Identifying that still emerging environment and achieving alignment with it must be the central issues in any revolution in intelligence affairs.