The U.S. military today is engaged globally in the most demanding set of combat and stability tasks seen in over a generation—a host of challenges that have been called complex operations. The military faces these challenges side by side with its partners in the diplomatic and development communities—the Department of State and U.S. Agency for International Development.
Report Documentation Page

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE DEC 2009
2. REPORT TYPE
3. DATES COVERED 00-00-2009 to 00-00-2009

4. TITLE AND SUBTITLE
Military Adaptation in Complex Operations

5a. CONTRACT NUMBER
5b. GRANT NUMBER
5c. PROGRAM ELEMENT NUMBER
5d. PROJECT NUMBER
5e. TASK NUMBER
5f. WORK UNIT NUMBER

6. AUTHOR(S)

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
National Defense University, Center for Complex Operations, 260 Fifth Avenue, Washington, DC, 20319

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR’S ACRONYM(S)

11. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:
   a. REPORT unclassified
   b. ABSTRACT unclassified
   c. THIS PAGE unclassified

17. LIMITATION OF ABSTRACT Same as Report (SAR)

18. NUMBER OF PAGES 10

19a. NAME OF RESPONSIBLE PERSON

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18
Development (USAID)—as well as a myriad of other interagency and international partners.

Such operations demand integrated whole-of-government approaches to address the vexing problems of instability, insurgency, terrorism, and irregular warfare. Unfortunately, these requirements bear scant resemblance to the worldview of military and security experts just 10 years ago. This new set of requirements has challenged the fundamentals of how the U.S. military operates in the world—from an outlook where some in the past argued, “We don’t do windows” to an approach where others today may contend, “We own it all.” Inherent in this tension is the overarching question of the purpose of military forces in a world much different from the 20th century.

Do militaries now exist simply to deter conflict and fight nations’ wars when deterrence fails? Or in an age of transnational terrorism, nonstate actors, and irregular warfare, do larger purposes obtain? Is our present era truly a generational spell of “persistent conflict”? And if so, how does the military leverage its substantial capacity to contribute effectively to what has become unalterably a whole-of-government fight? Finally, can the military move beyond the core of its conventional warfare culture to grasp the deeper security needs of this era and truly deliver on the massive security investment that it represents in ways relevant to this century?

These challenges are worthy of deep debate, and the consequences of error will be severe. At root, our challenge is to understand the evolving face of conflict and adapt our highly structured military as an institution to complex operations that may be largely at odds with our innate military culture.

**How We Got Where We Are**

From soon after World War II until the end of the Cold War—a period of nearly half a century—the U.S. military was animated by the specter of global war with the Soviet Union. For land forces, the primary battlefield was seen as Western Europe, where the threat was clear and present: Warsaw Pact armored formations lined up along the borders that defined the “Iron Curtain” separating the occupied post-war satellites of the Soviet Union from the free states to the west. The danger was obvious: tens of thousands of Warsaw Pact tanks and armored vehicles in readiness, thousands of combat aircraft at the ready on airfields, and further to the east, intercontinental ballistic missile fields, strategic bombers, and the Russian deep sea fleet with nuclear-armed ships and submarines. This threat not only included a visible adversary of known intentions to energize what would become the North Atlantic Treaty Organization (NATO) and its defense planning, but also was utterly convincing to the taxpayers of the West who would have to foot the bill for some of the largest peacetime expenditures on defense in modern memory.

For the U.S. military during this 50-year period, war was not hypothetical; the potential for a real war to be fought against a known adversary on clearly defined terrain was ever present. Moreover, not only did the enemy have a name (the Warsaw Pact); it also had observable military formations, advanced weaponry, and highly developed doctrines of battle—all of which became the subject of intense study among the militaries of the United States and
its allies. Predictability and an unusual degree of certainty—in enemy, location, equipment, tactics—became an expected norm for military planning. Uncertainty was reduced to nuances of when, where, and how to apply the “knowns” of doctrine, tactics, and equipment that the Warsaw Pact employed. Complex operations were no more than how to best employ combined arms—infantry, tanks, and artillery together with airpower—to defeat the Soviets on the European battlefield.²

None of this should suggest that the U.S. military in particular saw its NATO mission as the only potential zone of conflict. During the decades of the Cold War, the United States intervened with small forces in a number of countries ranging from Lebanon in 1958 to Panama in 1989. Major conflicts were also fought out on the periphery of the Cold War in Korea (1950–1953) and Vietnam (1960–1973), resulting in tens of thousands of casualties. Yet each intervention was in fact viewed by the U.S. military as an excursion from the most dangerous fight—an all-out war in central Europe.

In the painful aftermath of failure in Vietnam, irregular warfare and counterinsurgency were simply tasks the Army no longer performed—or even thought about. Small-scale contingencies were the purview of airborne troops and a growing force of special operators, but “real Soldiers” rode to battle in armored vehicles—again, a massive reorientation toward the central European battlefield. Complex operations involving host-nation forces (beyond NATO), police, USAID, or diplomatic personnel were beyond the ken of the military establishment—certainly at the tactical level.

The wars of 2009 and beyond exhibit few characteristics in common with the conflicts hardwired into the U.S. military’s DNA over the last 50 years. The extended period of Cold War predictability attached to the Soviet threat dovetailed well with the Army’s search for its cultural footing following its failure in Vietnam’s irregular war. Refocusing on a major war in Europe offered to heal the painful scars of failed counterinsurgency. A new doctrine called AirLand Battle (ALB) became the conceptual driver of the Army during the 1980s, a doctrine explicitly developed to conventionally defeat a massive Soviet armored invasion of Western Europe by attacking all echelons of the invading force in the close and deep fight simultaneously.³

With the advent of ALB doctrine, the Army had found its concept of war. It also pioneered a system of integrating and embedding the ALB doctrine into every aspect of the force, driving everything from procurement of new equipment to training and leadership development. This system remains deeply ingrained in the Army’s institutional culture today. Typically, it is known by the particularly unwieldy acronym of DOTLMP–F, which stands for doctrine, organization, training, leadership, materiel, personnel, and facilities. This was in many ways a revolutionary approach and went far in rationalizing all efforts within the Army toward this common target.

The rigorous, across-the-force application of the DOTLMP–F systems approach deeply institutionalized a capacity for large-scale conventional war in Europe into every corner of Army culture. It not only ensured that the best weapons systems for conventional war against the Soviets got top priority, but it also matched them with organizational changes to optimize their performance in battle (a new infantry and armor battalion organization), a rigorous self-critical training methodology (including massive free-play armored force-on-force laser battles), advanced ranges and training simulators for mechanized warfare, and perhaps most importantly, the recruitment and leadership
of extraordinarily high quality personnel who were bright, motivated, and superbly trained to make best use of the emerging new concepts and high-tech equipment being fielded. These innovations that grew out of the massive infusion of resources in the 1980s remain the cornerstone of the Army as an institution today. Their long-term influence on Army culture and institutional preferences cannot be overstated.

**Today’s Conflicts**

Yet conflict today has evolved dramatically from the conventional “big war” environment of the ALB world of the 1980s. Rather than a nation-state adversary armed with conventional military capabilities that very much mirrored our own, today we are dealing with a world of asymmetrical threats—fighting shadowy adversaries often operating at the murky nexus of terrorism, transnational crime, and illicit global money flows. Effective national security responses have become necessarily whole-of-government, involving departments from Treasury to Justice to Commerce to the Intelligence Community. These responses are rightfully called complex operations, and only through integrated and coherent responses across all elements of national power can we hope to overcome adversaries operating in this new battlespace.

In the aftermath of the relative certainty of doctrine, training, tactics, adversary, and known terrain of the Cold War, our military today is in a sense operating without a concept of war and is searching desperately for the new “unified field theory” of conflict that will serve to organize and drive military doctrine and tactics, acquisition and research, training and organization, leader development and education, materiel and weaponry, and personnel and promotion policies in ways that could replace the legacy impact that Cold War structures still exert on all facets of the military. Today, no agreed-upon theory of conflict drives all of these critical vectors toward a commonly understood paradigm; the result is a profusion of disparate outlooks leading toward the risk of professional incoherence. The confidence of civilian leaders and the population they serve that our military will continue to prevail in conflicts regardless of their complex nature may be in jeopardy.

Some characterize the nature of the nontraditional threat today as irregular warfare. This view sees a global security picture upended by 9/11 and inspired by al Qaeda acting through affiliates around the world, extending its reach by effective use of all forms of modern information age technology. Others demur and continue to view nation-state threats as the primary danger—a nuclear-equipped Iran, a rogue North Korea, or even a resurgent Russia. Still others expect future wars will reflect a blending of both—so-called hybrid wars where irregular forces will operate with selected high-tech capabilities and seamlessly move in and out of civil populations. Regardless, it is becoming increasingly apparent that adversaries of all origins will choose unconventional means to assert their interests. Few see good ends in confronting American conventional military power frontally, a situation unlikely to change.

Given this shift, one of the significant difficulties facing our military in dealing with this
threat is our lack of a coherent concept of war to animate and focus our military efforts. We should examine closely the degree to which military forces, deployed globally and often the anchor point for regional security around the world, have adapted to this new threat environment, and why this adaptation is so difficult.

Why is this important? Are militaries really an instrument suited to this threat? Should we not be talking first and foremost about law enforcement, border control, tracking financial transactions, and intelligence-gathering? Is it not common practice to accept that even in counterinsurgency campaigns, the efforts are 80 percent nonmilitary and only 20 percent military? And on the scale of a global insurgency, is this not even more the case?

**Military Force in the 21st Century**

The above are sound questions, but two factors dictate the centrality and practical reality of military involvement in this challenge, especially as related to the U.S. military.

*Militaries are charged with the core business of national defense.* Military forces and their leaders are societies’ instruments tasked with thinking about warfare: how to fight and win when the nation commits to a war, and how to leverage military power to best achieve objectives short of war. Military professionals spend 30- or 40-year careers thinking about warfare—unlike politicians—and should reasonably be expected to have sound ideas about conflict and its changing nature.

Moreover, militaries exist to provide the ultimate measure of security to societies—and arguably the different global terrorist of today presents an existential threat to the continued security and functionality of our societies. Thus, militaries will be involved, and societies have major equities in military involvement with this challenge. (In another era, this threat emanated from large enemy armed formations invading countries and seizing territories, perhaps even their capitals. Today’s unconventional threat is no less dangerous, only less obvious.)

*Militaries are immensely capable organizations.* Militaries represent capacity to get practical things done in remote and difficult environments in concrete ways that cause other government entities to pale by comparison. Witness the military responses, both U.S. and international, to the Asian tsunami and the Pakistan earthquake of 2005.

The Defense Department budget for next year is expected to exceed $663 billion, which only partly includes the wars in Iraq and Afghanistan. This level of resourcing is an order of magnitude above virtually all other government agencies, and remains so even in peacetime. The U.S. military has 1.5 million men and women on Active duty serving under arms together with another 800,000 civilians. *That is capacity.* By comparison, the Department of State has fewer than 8,000 Foreign Service Officers to cover the globe, and a budget that under the most generous definitions is less than 5 percent of the Pentagon’s. USAID fares similarly, with a $32 billion budget and about 7,000 members. The “three Ds” of diplomacy, defense, and development are not animals in the American zoo that have remotely equal strength or reach. So in any conflict environment where societies are threatened, the
military is going to have a substantial role simply through resource allocations.

Where do our militaries—and most particularly the U.S. military—come down on the ability to leverage this large capacity to positively influence the security challenge presented by a world of asymmetrical threats and irregular warfare?

**Changing Character of Conflict**

Warfare is changing, and Western militaries to date are having serious difficulties keeping up—intellectually, materially, and psychologically. This failure has had the ripple effect of undermining broader security thinking in many nations, for the military’s role in providing sage counsel to civil leaders on security has often formed the cornerstone of many countries’ national security analysis.

Militaries at their core have struggled to adjust their doctrines, training, weapons systems, and cultures from a wholesale focus on conventional state-on-state military conflicts to a much more nebulous collection of uncertain threats. A survey of ongoing and recent conflicts of this decade reinforces the notion that the well-understood (if immensely bloody) 20th-century model of warfare is fast disappearing. Irregular warfare—“war amongst the people,” in General Sir Rupert Smith’s turn of phrase—has begun to challenge deep-seated assumptions about war among major military powers around the globe.7

In each of these cases above, rather than nation-states battling other nation-states, we have seen nations (or groups of nations in coalitions) battling amorphous nonstate actors. In place of traditional wars where well-defined armies, navies, and air forces battled for cities or key terrain, we now see conventional militaries fighting shadowy insurgents blended in with the population. Instead of tanks, artillery, and airplanes fighting their opposite numbers, the primary means of battle have become ambushes, roadside explosives, kidnappings, assassinations, and suicide attacks, all carried out intentionally “on camera” for maximum informational effect. Battlefields no longer are mountaintops or key road junctions or river lines; they are the minds of the adversary’s political leadership, his populations, and his armed forces.

Where the conventional forces in these conflicts have exercised “command and control” through the use of expensive purpose-built, high-tech communications systems, secure radios, and satellite navigation, the insurgent enemies have leveraged cell phones, the Internet, laptops, handheld video cameras, and DVDs with unprecedented speed to share information, motivate followers, and influence the global audience—all while frightening those who are uncommitted. Insurgent groups have formed de facto temporary “minigovernments” with the provision of social services in affected areas, such as financial relief from battle damage, charity support for families, medical support, and refugee relief. Sometimes, they even supplant both local governments and international organizations. Hizballah’s social outreach efforts in southern Lebanon during and immediately following combat actions are now the archetype.

Where populations in previous wars were an encumbrance and distracter to battlefield action, as I noted to my troops in Afghanistan, civilians today are the battlefield. Unlike the ideologies of the 20th century—fasism and communism—the enemy in many of these recent and ongoing conflicts has leveraged cultural ties to Islam, and works relentlessly to intermingle politics, religion, ideology, and military tactics into a persuasive whole.
Modern Hierarchy of Conflict

Our strategic approach has likewise been slow to adapt to this new environment. Militaries are drilled in setting a hierarchy of tasks to help impose order upon the chaos of war. One model of this hierarchy is that of a pyramid depicting from the bottom the tactical, operational, strategic, and political levels of war in ascending order (see figure 1).

Unfortunately, this “Western” triangle—wide at the base where tactics lie, small at the top where politics and strategy are found—in some ways also graphically represents the weighting militaries assign to their role and priority in the holistic picture that constitutes war today. Tactics predominate in attention, focus, and resources—while strategy and politics get the least attention and are often viewed as the purview of others. In the words of Sun Tzu, “Strategy without tactics is the longest road to victory. Tactics without strategy is simply the noise before defeat.” Many nation-states fighting irregular adversaries have experienced a “strategy deficit” in confronting an asymmetric enemy. (Who could dispute that the Taliban’s strategy to “run out the clock” is anything but sound?!) Our adversaries have a different take on this construct; they too have a triangle representing their effort, but it is inverted with the apex at the bottom and broad base at the top (see figure 2). Tactics at the bottom represent the smallest portion of their effort and their lowest priority. Politics and strategy are the dominant portions of their inverted triangle and where they place their priority effort. Tactical events—suicide attacks, ambushes, assassinations, blame for civilian casualties—are carefully chosen to create the most significant political and strategic effect and are highly publicized to multiply their impact. Powerful examples in Iraq include the bombing of the Samara mosque in March 2006. This attack was carefully planned to deliver a massive political blow and created effects stunningly out of proportion to their expense and complexity. In part as a result, Iraqi and coalition forces found themselves at risk of “winning all the battles, but losing the war.” In Afghanistan, the immense publicity of civilian casualties (a fraction of those seen in Iraq) has become such a cause célèbre that it threatens to remove NATO airpower from the battlefield.

Western militaries are struggling to understand and adapt to the characteristics of the wars they are engaged in today. At the same time, powerful internal forces continue to rally support toward preserving strong capabilities to conduct state-on-state conventional military warfare.
support toward preserving strong capabilities to conduct state-on-state conventional military warfare. Nostalgia for a simpler though no less deadly time remains. But as General Sir Rupert Smith states in *The Utility of Force*, “industrial war no longer exists.” His phrase “war amongst the people” reflects not that wars between nation-states are over, but simply that their form will be far more complex than the military-versus-military battles that characterized such conflicts in the 20th century.8

Other thoughtful theorists such as retired Marine colonel T.X. Hammes characterize the emerging form of war as *fourth-generation warfare,* defined as using “all available networks—political, economic, social, military—to convince the enemy’s political decision-makers that their strategic goals are either unachievable or too costly for the perceived benefit. It is an evolved form of insurgency.” Regardless of labeling, the character of war has changed. Complex operations have become the norm.

**Possible Prescriptions**

So what to do? From a military standpoint, serious intellectual energy must be devoted to developing a concept of war to describe the nature of the conflict today, for if we do not know where we are going, any road will take us there. Government policies must inform this concept, but a concept of war need not be somehow held hostage to today’s policies.

First, from a concept of war, thoughtful doctrine can be developed that encompasses the levels of war—from tactical through grand strategic. (Much of the basics of a tactical-level doctrine now exists in the new U.S. Army and Marine Counterinsurgency Field Manual 3–24.10) From this comprehensive doctrine can emerge “requirements” that drive acquisition of new capabilities, as well as new education and training, personnel policies, and ultimately new organizations better suited to effectiveness in this environment, and not only combat organizations. DOTLMP–F must be thoroughly updated for today’s irregular wars as relentlessly as it was once hewn to mechanized warfare. To illustrate the need for change, consider the billions of dollars the United States has programmed today in defense acquisitions reaching years into the future—expensive major programs of weapons systems and capabilities that, when acquired, may in truth have only peripheral impact on the nonstate conflicts of today.

Second, a cultural change is needed. The reason I continue to use the term *concept of war* is that military Services *culturally* view themselves as “warriors”—and subconsciously, but strongly, discount those whose remit lies outside this focus as somehow peripheral. Warfare today implies complex operations and requires a concerted integrated defense, diplomatic, and development effort. This new reality demands from our military leaders much more than a simple warrior ethos.
and those related skills adequate for a large-scale clash of conventional militaries. Success in modern conflict requires adaptive thinkers who share a strategic view of warfare, a holistic approach, and a strong valuation of all the contributing players. This holistic outlook recognizing the key importance of elements beyond conventional force of arms is growing, but the military culture has yet to fully embrace it, operationalize it, and afford it institutional and cultural permanence.

Third, unity of effort and fusion of all elements of power is a sine qua non of success in warfare today. Comments often made by senior U.S. commanders that “we cannot be defeated militarily” and “this war cannot be won by military means” should send shudders down the spines of all serious students of war. War is nothing if not a political act; it always serves political ends. The phrase “War is the extension of politics with the admixture of other means” remains as true today as when written 200 years ago by Carl von Clausewitz, a brilliant soldier and strategist who remains among the foremost writers and thinkers on the nature of war. Clausewitz also noted that “war is the act of compelling the enemy to bend to your will.”

Defeat in war does not discriminate between whether the defeat is military, political, or economic; defeat remains defeat. Societies fight wars to prevail and must marshal all available resources to win against violent and adaptive adversaries. Nothing less will suffice. The military cannot insulate itself from the other elements of application of power required to prevail in modern war. It must act even more strongly as a catalyst and enabler of other entities of government to fuse their efforts into a unified approach for success in modern conflicts.

Finally, we must accept the prolonged nature of current conflicts and the utter tenacity of the enemy. During the Cold War, Western societies could look through the barbed wire into Eastern Europe and the Soviet Union and see Warsaw Pact tank divisions, aircraft armed with nuclear weapons sitting on dozens of runways, fields with hundreds of nuclear-tipped missiles, and a menacing Soviet blue water fleet with a nuclear first-strike capability. This threat quite simply scared the dickens out of Europe and North America and animated 40 years of deep and powerful defense thinking and spending. Moreover, it was of sufficient gravity and immediacy to sustain 40 years of overwhelming popular support for the effort.

An Uncertain Future

Today, the threat is far more obscure, far less tangible, and in some ways, for those very reasons, more insidious and dangerous. Because we face an indistinct enemy with no heavily equipped armies, air forces, navies, space satellites, or—to date at least—apparent nuclear weapons, perceptions of threat emanating from terrorism (or a global insurgency) in the West, indeed around the globe, are uncertain at best. Moreover, our militaries in some ways have been lulled into a false sense of security and supremacy by the lack of a mirror image enemy against whom to aim our dominant conventional military power.

Prior to the end of 2003, it was commonplace to hear the terms shock and awe and rapid decisive operations used to describe how the U.S. military would fight its wars—short, sharp, and overwhelmingly effective actions that would quickly shatter the enemy’s will to
resist. We hear little of this overconfident jargon today as the realities of a different type of war have set in. The shape of a new and as yet poorly defined conflict of indeterminate length has begun to emerge. For militaries, the fundamental dilemma of this era is whether to seize upon this emerging new reality of conflict—fourth-generation warfare, global insurgency, and war amongst the peoples—as the evolving wave of the future, or reject it. Will this development be seen only as a passing anomaly, marginalized to preserve full capabilities for the inevitable return to conventional conflicts? Or will an understanding fully sink in that irregular warfare is our adversary’s answer to how the weak will fight the strong?

The challenge for all security professionals today—diplomats, soldiers, development practitioners—is to explore, analyze, reflect, and think creatively about the character of this new conflict and the enemy we collectively face. We confront a different environment with a more complex threat than that of most of the conflicts of our recent past—and indeed than anything our educational systems have prepared us for. But this is also an opportunity to be seized, rather than a reason to shirk from the challenge. Anything less than our full intellectual and institutional commitment to thinking our way through the vexing challenge of complex operations will ultimately cause our nations to fail, and our societies and our peoples to suffer defeat in this shadowy new confrontation. We have a profound responsibility to get this right.

Notes

1 The term persistent conflict was first attributed to Chief of Staff of the Army General George Casey in Jim Garamone, “Casey Says Army Must Be Prepared for Persistent Conflict,” American Forces Information Service, May 11, 2007. See also Gregory Fontenot and Kevin Benson, “Persistent Conflict or Containment: Alternate Visions of Contemporary Conflict,” Army, September 2009.


3 Romjue.


8 Ibid.

9 Hammes.
