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## Rediscovering the Infantry in a Time of Transformation

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## Rediscovering the Infantry in a Time of Transformation

by Bing West

### Overview

In the summer of 2001, the Bush administration expressed impatience with the military services, suggesting that unspecified legacy capabilities had to give way to a “transformation” that would be based upon “stealth, precision weaponry, and information technologies.” Operations in Afghanistan, however, have shown the wisdom of today’s balanced force structure. In the current campaign, all-source intelligence has been used to vector teams on the ground, which in turn have identified targets for aircraft that have shattered the opposing forces. The result has been devastating air power controlled by Americans on the ground, with a psychological effect rippling far beyond Afghanistan. All governments inclined to harbor anti-American terrorists now understand that the consequences may be their removal from power, not just a few cruise missiles hitting empty buildings.

U.S. ground forces, however, are still vulnerable; they lag far behind the resources devoted to air and high-level command, control, and communications (C<sup>3</sup>). Now is the time to recognize the multifaceted roles of the rifleman and to recapitalize the infantry. A transformation based upon facts rather than theory would shift resources from C<sup>3</sup> niceties for high-level staffs to force protection essentials for the people doing the fighting.

### Transformation before September 11

Prior to the terrorist attacks, Secretary of Defense Donald Rumsfeld and his staff were trying to persuade the military to undertake transformation to reorganize and equip to fight in a markedly different way. The military was urged to rebuild so that it “relies more heavily on stealth, precision weaponry, and information technologies.”<sup>1</sup> These characteristics suggested that resources would flow to air forces and missile defense. The Secretary referred to *network-centric warfare*, a tongue-twisting name for the proposition that the instantaneous transfer of information among computer nodes yields a decided advantage in the application of force. The more the military outcome depends on stochastic principles and the laws of physics—for instance, the trajectory of a missile—the more strongly network-centric principles apply.

Conversely, the force element least affected by network-centric computer linking is infantry warfare, where outcomes depend upon human grit, unit cohesiveness, and discipline under stress. The infantry probably was not a leading force element—if it was thought of at all—when transformation was advocated last summer. Since then, pictures of American soldiers on horseback in Afghanistan have appeared in the media, and both the President and the Secretary of Defense visited with infantry units at Thanksgiving. It is reasonable to expect that over the next year, transformation theory will be expanded to include the infantry.

### Center for Technology and National Security Policy

The National Defense University (NDU) established the Center for Technology and National Security Policy in June 2001 to study the implications of technological innovation for U.S. national security policy and military planning. The center combines scientific and technical assessments with analyses of current strategic and defense policy issues. Its major initial areas of focus include: (1) technologies and concepts that encourage and/or enable the transformation of the Armed Forces, (2) developments by defense laboratories, (3) investments in research, development, and acquisition and improvements to their processes, (4) relationships among the Department of Defense, the industrial sector, and academe, and (5) social science techniques that enhance the detection and prevention of conflict. The staff is led by two senior analysts who hold the Roosevelt Chair of National Security Policy and the Edison Chair of Science and Technology and who can call on the expertise of the NDU community and colleagues at institutions nationwide. The papers published in the *Defense Horizons* series present key research and analysis conducted by the center and its associate members.

## Devastating Air Power

In a bilious effort to deprecate a remarkable military achievement, a reporter for *The New York Times* recently wrote that “the Powell Doctrine insisted on clear objectives and a clear exit strategy... such a strategy could have been employed by massing forces within a coalition... But the administration... exploited enemy weaknesses with ruthless bombardment from the air in which the use of force is unrestrained by borders or allies.”<sup>2</sup> In past wars, borders and allies restrained the American use of force. Allowing the North Vietnamese a sanctuary free from bombing was critical to their success in 1975, and concerns about coalition disapproval prevented the removal of Saddam Hussein in 1991. Whether such restraints are beneficial to U.S. policy depends on what one thinks about the policy.

Even ideological critics should be impressed with the soundness and the daring of this campaign. At the outset, the press stories were about the fierce Afghan fighters who drove out the British and the Russians, the harsh terrain, the obdurate fanaticism of the Taliban. The administration, obviously hearing something else, dared to send in small teams on the ground. As those teams began to designate targets in terrain wide open to aerial photography and laser marking, the Taliban collapsed.

By historical standards, the “ruthless” air attacks have been light, with scant reports of civilian casualties. In World War I, mathematicians planned bombardments to pulverize every square yard of earth along the front. In World War II, cities were systematically leveled. In Operation *Desert Storm* in 1990, there were 1,500 sorties a day; in Kosovo in 1999, there were 500; in Afghanistan in 2001, there were only 63.<sup>3</sup>

The preeminent military historian John Keegan has defined *battle* as “a sustained act of will by contending parties leading to the moral and then physical disintegration of one of them.”<sup>4</sup> In war, the moral is to the physical as three is to one. The Taliban soldiers did not have the stomach for this fight, and once the bombing began, they gave up most territory without resistance. Their moral disintegration, occurring before they sustained substantial casualties, appeared to be caused by three factors. The first was internal stress and lack of cohesion. The second was the fear of American power. (Imagine how demoralizing it has been for Al Qaeda or Taliban followers—who are not trained soldiers—to peer out from their entrenchments, knowing that a thousand meters away a small group of Americans is methodically planning their destruction.) The third was the accuracy and shock of the bombing, which confirmed the image of American prowess.

Repeatedly in the last decade, air power has demoralized adversaries, leading to their collapse. Admittedly, the physical destruction from the air of military equipment should not be overstated. In *Desert Storm*, ground forces accounted for 75 percent of

the Iraqi combat forces destroyed, including armor.<sup>5</sup> But the Iraqi forces were demoralized by the constant air pounding and put up little opposition when ground forces went in. In Kosovo, poor weather aborted over 50 percent of the scheduled air sorties, and less than 5 percent of the Serb armor was destroyed in 78 days of bombing.<sup>6</sup> However, when the aircraft started striking targets in Belgrade, the Serbs withdrew from Kosovo.

Critics have charged that the North Atlantic Treaty Organization achieved the withdrawal of Serbs “by inflicting maximum distress on civilian populations, which are inherently more vulnerable to the destructive power of modern technology than are military capabilities.”<sup>7</sup> Distress—loss of electric power, running water, and fresh food—is part of the price paid when a nation chooses aggression. Like the Taliban, the Serbs did not have a strong ethical case to present when they were bombed.

In each of the three successes, air power was used differently. In *Desert Storm*, command and control and troop formations were struck. In Kosovo/Serbia, it was pressure on the urban infrastructure

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that provided the leverage for Serb withdrawal. In Afghanistan, it has been attacks against front-line fortifications and troops. The latter is most interesting for the manner in which the bombing has been carried out. Some strikes have been due to airborne sensors (for example, those in Kuwait and Iraq; Afghanistan offers scant concealment) and external intelligence, while others

have been directed by American teams on the ground. In October and November, no aircraft were lost, and no teams suffered fatalities.

As the war progresses, there will be American casualties. Compared to Vietnam or Korea, though, the number will be small. This will be due partially to the openness of the terrain and defensiveness of the Taliban, who have not closed against the teams, and partially to improvements in American techniques and equipment. In Vietnam, a 4-year operation called *Stingray* employed small reconnaissance teams to call fire missions. They operated in the jungles behind enemy lines, and while their casualties were fewer, due to stealth, than in the infantry battalions, they were not insubstantial. One in every ten patrols resulted in serious, close-in combat. The Vietnam teams employed artillery much more than air because the equipment for marking targets and communicating with air was scant and bulky, and accuracy was imprecise.

Range tests today indicate that the average F-18 strike is within 50 meters of the target and within 15 seconds of the time agreed with the ground controller.<sup>8</sup> We are witnessing how demoralizing it is for an opponent to know that Americans are on the ground watching him, that there is nothing he can do about it, and that sooner or later a bomb is going to find him. By showing how to reduce risk and increase effectiveness by leveraging the immense power of air, the Special Operations Command has added a new dimension to American military doctrine.

Presumably, the geopolitical implication is not lost on other governments harboring terrorists. American air power is the lever that can enable an outnumbered opposition group, such as the Northern Alliance, to pry apart a much larger military force. The

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ground teams are the fulcrum for applying the leverage. The Iraqi government must be considering the disintegration of the Taliban and wondering when its turn will come.

## Infantry

Special operations forces or commandos, for the most part, are highly trained infantry. They are older, more mature, and better equipped than the typical infantryman, but they are still infantry. Their standoff attack tactic, the backbone of the first 2 months of the Afghanistan campaign, can be made part of the standing operating procedure of all infantry divisions. The capacity to direct supporting fire would decrease friendly casualties, increase battlefield effectiveness, and widen the operational options for employing the infantry.

Current procedure in infantry divisions is to attach a forward air control party to each rifle company, or at least to the companies shouldering the main effort in an attack. The problem is that when a firefight erupts, the lead squad and platoon bear the brunt of the casualties, while it takes the air (or artillery) coordinator 15 to 45 minutes to work his way forward to a position where he can bring in fires to suppress the enemy. This time delay, which results in continued exposure to direct fire and an increase in friendly casualties, has been the case for 50 years, from the Korean War to today.

In the past, the immediate application of fire support to the riflemen most in need was impeded by a lack of technology. Communications equipment was too heavy, and the skills to call in fire required extensive specialization. The chief impediments now are bureaucratic inertia, the high turnover rate of small unit leaders, and a lack of funding.

The lag in linking the squad to air support is emblematic of the overall state of infantry technology and doctrine. Squad leaders who fought in Korea could join a squad today and feel comfortable with the techniques and equipment, with the exception of the night vision goggles (which would delight them). In contrast, no Korean War pilot could understand a tenth of the instruments in a cockpit today. The infantry has benefited least from the Information Age. Ask any rifleman what items would improve his performance, and he will give you a two-page list, most of which could be purchased commercially.

In World War II, pilots of combat aircraft were in as much peril as riflemen; a member of neither group could expect to pass through a year in combat without being killed or wounded. Today, if an aircraft is lost in combat, it is front-page news. There are more combat aircraft than there are infantry squads and more pilots than squad leaders. There is a vast gulf in the resources allocated to squads and to aircraft. Infantry squads are the most vulnerable of U.S. force components, yet they have less capital equipment than is expended in a single air strike.

How did the gap between the exposure risk of the squad leader and the pilot become so large? As aircraft and pilot training became more expensive, efforts to safeguard both became more exigent. At the same time, distress over infantry casualties in Vietnam and its lingering aftermath drove an opposite trend—an effort to lessen the risk of future casualties by reducing the infantry force structure and restricting the conditions for its employment. Underlying this response was a cultural bias: an instinct shared by politicians and policymakers that significant casualties were inherent to the work of the rifleman but

not the pilot. After September 11, with national interests at stake, the public was willing to accept such casualties. Yet in the first 10 weeks of strikes on Afghanistan, there were no ground casualties because the administration undertook a bold strategy that combined ground control with devastating air attacks.

In today's force, there is more than one way of employing the soldier on the ground. In some cases, he still has to close with the enemy to kill him. In other cases, he can achieve the objective of the moral disintegration without intense, close-in firefights.

## Message for Transformation

Through technology and innovation, the United States has opened an enormous lead over potential adversaries in air, naval, and mounted warfare. The opportunity now exists to do the same with the Army and Marine infantries—but only if two conditions are met. First, the Department of Defense must allocate sufficient resources to the infantry. And, second, the infantry must be willing to change if properly funded.

As to resources allocated, a first step lies in providing the equipment that assures massive fire support, especially air, all the way down to the rifle squad (which is the same size as the commando teams in Afghanistan). As did the machine gun in World War I, the internal combustion engine in World War II, and the helicopter in Vietnam, the instantaneous passage of information among all-source targeting cells, front-line infantry, and hovering aircraft has dramatically altered today's battlefield. Yet such information devices do not exist on a large scale outside the Special Forces. Some Army squads in vehicles do have digital transmission and display equipment, which is bulky, heavy, and reliant upon large batteries or power from the vehicle's engine. But the infantry (from the Italian noun *fanteria*, or foot soldiers) cannot ride everywhere. Once dismounted, infantry outside the Special Forces community basically rely on 1980s-vintage FM radios, paper maps, and compasses—two decades out of date.

With the proper communications and training, every American unit on the ground, regardless of size, could have the on-call firepower of a battalion. A “netcentric” infantry requires thousands of light, shockproof, voice-over-data devices communicating simultaneously. DOD resources have not been allocated to develop them, but not because it is an impossible task. The Pentagon and the services have developed command, control, and communications (C<sup>3</sup>) from the top down. Military doctrine stresses an increase, due to information technologies, in decentralized decisionmaking. While that is true of commandos in Afghanistan, it is not true in infantry divisions. The commanders in chief (CINCs) have excellent digital gear, division headquarters have acceptable equipment, battalions struggle, and platoons and squads dream.

The “R2D2s” of the Afghanistan campaign—unmanned aerial vehicles (UAVs) and sensors—will soon be credited with brilliant performance, deserving of added funding. It was good weather and terrain for the UAVs. Senior CINC and Pentagon staffs could rely upon them for information. Army and Marine infantry officers are at a disadvantage in arguing for more resources for the low levels, unseen by the increasingly powerful joint staffs.

The fact that ground teams—Special Forces, reconnaissance, or infantry squads—are a tiny fraction of the costs of other force

elements is perversely the reason why they are underfunded. They lack both well-connected lobbyists and the homogeneity of a single weapon system. One either procures another aircraft or UAV or one does not. An underfunded UAV will not fly, but an underfunded squad *will* patrol. The cost may be casualties or decreased effectiveness, but it is hard to link either to a missing piece of equipment.

The Pentagon procurement remains underfunded. Before September 11, former Secretaries of Defense Schlesinger and Brown estimated the 10-year shortfall at \$30 to 50 billion. Even with increases for the war on terrorism, the shortfall remains large. There is not enough to go around, so the budget will remain the arbiter of competing claims. Decades ago, the Pentagon employed systematic analysis to compare performance and costs. Now, the Pentagon has entered a conceptual maze in which diverse elements, such as ground teams, strike aircraft, and UAVs, are “netcentrically” connected. To lump strike aircraft, UAVs, and ground teams together as a joint triumvirate is fine for team-building. However, it also assures a budget of strikingly uneven proportions, with the ground forces receiving a tiny fraction. At budget time, the Army and Marines need to cut through the fog of a netcentric transformation and analyze who contributed what on an equal-cost basis. The ground forces must show the cost and performance trade-offs among airborne platforms, C<sup>3</sup>, and equipment for those who are fighting on the ground.

The second requisite is change within the infantry. Neither the Army nor the Marines have decided whether to leave fixed-wing air support as a mission that requires specialists on the ground or to provide the requisite equipment and training to every squad and platoon leader. The hesitation over the innovative application of air power is emblematic of the larger issue for the infantry, which is how technology should affect its composition and doctrine, and whether the infantry should develop the operational option of smaller units fighting a war in which ground maneuver supports standoff firepower, rather than firepower supporting maneuver.

More broadly, the infantry is organized on and suffused by Napoleonic principles laid down 2 centuries ago. The division remains the prime organizational structure. Officers and enlisted hold the same billets and in the same proportions that they did during World War II, despite the marked shift in education that has occurred over the past half century. Hierarchical command relationships remain untouched at the same time as the Pentagon extols horizontal information exchange as the key to transformation. Moreover, outside the Special Operations Command, tactics and doctrine emphasize traditional warfare, with the battalion and its accoutrements as the pivotal maneuver element. Senior commanders theorize about decentralized decisionmaking in accord with the commander’s intent. Yet as communications have improved, so has control from the top.

Increasing resources for the infantry is not enough. Senior infantry commanders must be willing to change to take advantage of the Information Age. Change means more trust in subordinate leaders, on leave and in the field, and making available more supporting assets, especially air power.

## senior infantry commanders must be willing to change to take advantage of the Information Age

## Conclusion

The modern U.S. military calls all of its members warriors. Yet most jobs in the military do not relate to killing people directly. In contrast, that is the focus of the rifleman. While others may learn skills that they can employ outside the military, the rifleman is a killing specialist. Our infantry deserves to be better equipped. They are the ones in this fight. If the destruction of Al Qaeda in Afghanistan is just the first phase in this war, there is the time and the reason to recapitalize our infantry.

What to do? Four years ago, the Marine Corps conducted a field experiment called *Hunter Warrior* that showed that the small unit leaders had the intelligence, fortitude, and adaptability to perform like the special operations teams in Afghanistan, employing supporting arms as adeptly as their rifles. What they lacked was the equipment and the modification in doctrine and approved procedures. Secretary Rumsfeld should ask for a review of the 1996 Defense Science Board study that recommended fresh doctrine, equipment, and information technologies for small infantry units, thus decreasing casualties and increasing lethality.

Flesh must be put on the bones of transformation for the fiscal year 2003 budget. Aside from ballistic missile defense, the transformation theories of August 2001 lacked specifics. In this war, Secretary Rumsfeld has found his stride: He issues the policy and approves the strategy, and the military conducts the operations and tactics. A clear example of a transforming change would be if the Secretary said to the Army and Marine leadership: “I will go to bat for more resources for the soldier. You tell me how you will use those resources in an innovative way.”

## Notes

<sup>1</sup> Thomas L. Friedman, “The Rumsfeld Defense,” *The New York Times*, July 13, 2001, A21.

<sup>2</sup> Patrick E. Tyler, “After Afghanistan,” *The New York Times*, November 22, 2001, A1.

<sup>3</sup> Ibid., A21.

<sup>4</sup> John Keegan, *The Face of Battle* (New York: Penguin Publishers, 1978), 302.

<sup>5</sup> Gulf Air War Power Study, 1993.

<sup>6</sup> Allied Force Munitions Assessment Team, *Kosovo Strike Assessment Final Report*, October 14, 1999.

<sup>7</sup> Conrad C. Crane, “Sky High: Illusions of Air Power,” *The National Interest* 65 (Fall 2001).

<sup>8</sup> T.J. MacKinzie, “Naval Close Air Support,” *U.S. Naval Institute Proceedings*, August 2001, 34.

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