IN JULY 1755, Major General Edward Brad-dock, commander in chief of all British forces in North America and a 45-year career soldier, was killed along with 900 of his men by a smaller French and Indian force. On his way to capture Fort Duquesne, Pennsylvania, Braddock had split his force into two divisions. Because of the difficulty of crossing the wilderness, they opened a distance of 60 miles between the “flying column” division of rapidly moving soldiers and a support column hauling “monstrously heavy eight-inch howitzers and twelve-pound cannons” completely unsuited to the terrain.

The lead column stretched a mile in length and was attacked on the far side of the Monongahela River by Indians streaming along either British flank and hiding within the forest they had long used as hunting grounds. The British responded using traditional tactics—continuously trying to form companies and return fire but only concentrating their number further for Indian attack. Braddock ordered forward the main body of his troops, which then collided with retreating elements ahead. In the resulting confusion, 15 of the 18 officers in the advance party were picked off. Still, the remaining forces continued to fight the way they were taught: maintaining platoon formations and firing together even as they drew heavy fire to the line from well-hidden Indians. It was not until Braddock himself was shot in the back that the British broke in retreat, carrying off the body of their commanding officer.

Asymmetric Warfare: Yesterday and Tomorrow

Why do I begin an article addressing tomorrow’s conflicts with an account of a battle fought two and a half centuries ago? As an avid student of history, I believe it is critically important for us to understand that asymmetric warfare is not something new. In fact, it has been a recurring theme of American military history and is familiar to many of today’s military officers. Many of its best historical examples come from the series of conflicts we collectively refer to as the Indian Wars. Braddock’s defeat highlights as many useful insights as contemporary examples of asymmetric action, like Russian battles with the Chechens. Overcoming future challenges will require that we both understand the lessons from the past and develop strategies and tactics appropriate to tomorrow’s battlefield.

While asymmetric warfare is not something new, it is very much in vogue today in the aftermath of the Persian Gulf War. Given America’s resounding success in that conflict, potential adversaries have learned Iraq’s lesson that it is foolish to try to match us conventionally. Instead, they are seeking ways to
Asymmetry Revisited

The physical environment remains the defining variable of close combat. For US military forces, it is almost certain that future conflicts will occur in regions where the enemy has a greater understanding of the physical environment and has better optimized his forces to fight. A common characteristic of many Indian campaigns was the Indians’ superior knowledge of the terrain. A great example of this was the attack on the forces of Colonel Henry Bouquet during his march to relieve Fort Pitt, Pennsylvania, during Pontiac’s War in August 1763. The Indians attacked in an area of old growth forest, offering limited fields of fire, around Bushy Run. They forced Bouquet’s forces back into a defensive position on a hilltop, attacking the position repeatedly but without waiting for a counterattack. Their detailed knowledge of the area allowed them to simply fade into the forest, suffering few casualties. This is but one example of the advantages that accrued to many Indian tribes through the late 1800s.

Opposing forces will also have greater situational awareness. We should expect them to have human networks operating over telephone lines or with cellular phones and using commercial imagery systems. Even with its sophisticated intelligence, surveillance and reconnaissance systems, the United States will have difficulty in complex settings unless it builds a more effective human intelligence.
a more effective human intelligence capability in strategically important regions. Moreover, these new adversaries will learn not only how to adapt technology but also tactics, formations and operations in light of changing battlefield conditions during the course of operations. Such adaptations will help them counter a precision warfare strategy by creating uncertainty while also trying to control the nature and timing of combat engagements.

During the war in Chechnya, the Chechens fought using few prepared positions, preferring instead, as Chechen Vice President Yanderbaijev said, to “let the situation do the organizing.” They would move from city to city to deny Russian maneuver and fire superiority and would use the local population as cover for their activities.

Similarly, the Seminole Indians adapted continuously during the second Seminole War of 1835-1842. One noted historian puts it this way: “The second Seminole War did not follow the precedent set in earlier Indian wars by producing a single dazzling stroke by a spectacularly brilliant leader. No fewer than seven American commanders would try and fail to bring the war to a successful conclusion. When confronted with superior firepower and at a tactical disadvantage, the Seminoles simply dispersed into small bands and continued to fight a guerrilla war . . . best suited to the terrain and their own temperament. Where other eastern Indians could usually be depended upon to follow the rules of the game—to defend a fixed position and be routed—the Seminoles . . . regularly rejected pitched battles and instead relied on ambushes and raids to bleed the Army, sap its strength, and generally discourage its leadership.”

In the future, such an adaptive enemy would put additional pressure on the United States’ ability to respond, as their battlefield successes would be covered instantly by the global media.

Finally, our future adversaries will almost certainly have greater knowledge of US forces than we will of theirs. We are the most studied military in the world. Foreign states have regular military features and, in some cases, entire journals (most notably Russia’s Foreign Military Review) devoted to the assessment of US military force structure, doctrine, operational concepts and capabilities. All major US Army field manuals (FMs) and joint doctrinal publications are freely available on the Internet, and many foreign organizations access them regularly. As an example, in April 2001 alone, the Center for Army Lessons Learned recorded 5,464 sessions on its website from Europe and 2,015 from Asia. This access, combined with their knowledge of battlefield terrain, greater situational awareness and adaptability, will make future adversaries far more menacing.

**How Will They Fight?**

The essence of future asymmetric warfare is that adversaries will seek to offset our air, intelligence, surveillance, reconnaissance and other technological advantages by fighting during periods of reduced visibility and in complex terrain and urban environments where they can gain sanctuary from US strikes. This will also deny these areas and their inherent protective characteristics to US forces, keeping us exposed and on the defensive.

US forces will have to contend with greater uncertainty in the field as adversaries mask the size, location, disposition and intentions of their forces. They will seek to convince US commanders that they are using conventional tactics while making us vulnerable to unconventional, adaptive and asymmetrical actions.
At the same time, adversaries will use both old and new technologies to great effect on the battlefield. They may use older technologies in unique ways as the Chechens did by buying commercial scanners and radios to intercept Russian communications. They will also try to acquire advanced niche technologies like global positioning system jammers and systems for electronic attack to significantly degrade our precision strike capabilities. Moreover, we must be prepared for adversaries to upgrade software capabilities in the middle of an operation, potentially allowing for a more networked opposition.

While some of the technology may be new, the Indian campaigns again provide useful insights. Many Indian campaigns demonstrated the effectiveness of asymmetric tactics in countering larger and better-armed British and American forces. In fact, “Indian skulking tactics—concealment and surprise, moving fire, envelopment and, when the enemy’s ranks were broken, hand-to-hand combat—remained the cardinal features of Native American warfare” over a period of 140 years. The longevity of their effectiveness shows how important it is to develop appropriate responses to asymmetric tactics.

One of the most successful Indian tactics was the ambush. Captain William Fetterman’s massacre in 1866 near the Lodge Trail Ridge in Wyoming left 92 American soldiers dead in a classic ambush some believe was masterminded by Sioux leader Crazy Horse. A lesser-known battle, almost a century before, shows the effectiveness of the ambush, particularly when matched with reckless leadership. At the Battle of Blue Licks in August 1782, a group of 182 Kentucky militiamen, led by Colonel John Todd and including Daniel Boone and members of his family, was in hot pursuit of Indians who had attacked an American fort. Boone noticed the Indians were concealing their numbers by sharing tracks, yet making the trail easy to follow. He smelled an ambush by a force he estimated at 500 and advised
because the Indians were excellent marksmen. Only equipped with matchlocks and pikes, and disadvantage because some of the American militias were flintlock firearms. This proved an important advantage in the first conflict in which the Indians had modern weapons.

Armstrong Starkey emphasizes that the Europeans arrived in North America during a time of military revolution. "European soldiers brought the new weapons and techniques of this revolution with them to North America and by 1675 had provoked a military revolution of a sort among Native Americans, a revolution that for 140 years gave them a tactical advantage over their more primitive adversaries. At that time, the US government rearmed its forces with breechloaders in place of magazine rifles—due to the bias against unaimed shots and excessive use of ammunition—while the Plains Indians acquired such weapons by direct purchase and thus, in some cases, had superior arms in the 1870s. We must be on the lookout for technological matches like these in our own future conflicts.

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recreators, who have studied the battle extensively from the Indian point of view, maintained that the Indians numbered no more than 90 and that the tactics they used in the forest made their numbers seem larger. This disparity is a good example of attempts to confuse conventional forces so that the size of the opposing force is impossible to discern.

Finally, the Indian campaigns provide some excellent examples of the role of technological advances in asymmetric campaigns. Noted historian Armstrong Starkey emphasizes that the Europeans arrived in North America during a time of military revolution in Europe: "European soldiers brought the new weapons and techniques of this revolution with them to North America and by 1675 had provoked a military revolution of a sort among Native Americans, a revolution that for 140 years gave them a tactical advantage over their more numerous and wealthier opponents."

Specifically, King Philip’s War (1675-1676) was the first conflict in which the Indians had modern flintlock firearms. This proved an important advantage because some of the American militias were only equipped with matchlocks and pikes, and because the Indians were excellent marksmen. More than 200 years after the Civil War, the same faulty assumptions were still at work—namely, that the US military retained unmatched technical advantages over its more primitive adversaries. At that time, the US government rearmed its forces with breechloaders in place of magazine rifles—due to the bias against unaimed shots and excessive use of ammunition—while the Plains Indians acquired such weapons by direct purchase and thus, in some cases, had superior arms in the 1870s. We must be on the lookout for technological matches like these in our own future conflicts.

**New Threats**

We have seen the great utility of examining historical conflicts between Europeans and Native Americans to learn lessons about possible future conflict. Yet there are two additional dimensions to asymmetric warfare that must be mentioned—the threat of weapons of mass destruction, potentially used against the American homeland, and of cyberattacks on US military, government and private information systems.

At the heart of asymmetry is the assumption that an adversary will choose to attack the weakest point. In the case of the United States, asymmetric tools may well entail terrorist acts—with or without nuclear, biological or chemical weapons—on the US homeland designed to disrupt deployments, limit access, erode public support and take the fight to the American people. In some respects, this homeland tactic is not new. Beginning with King Philip’s War, the New England Indians abandoned their traditional restraints and “prepared to wage total war on all of the colonists, making no distinction between combatant and non-combatant.” Attacks on Americans using weapons of mass destruction take these homeland tactics to a new level. Because of the devastation of these attacks and the interest of many potential adversaries in acquiring these capabilities, the United States must develop strategies for preventing and responding to such an occurrence.

The cyberthreat now facing the United States is equally compelling and risks both the effectiveness of US forces on the battlefield and the safety of private and government systems throughout the United States. Recent Joint Chiefs of Staff-directed cyberwarfare exercises like ELIGIBLE RECEIVER and ZENITH STAR showed how vulnerable command and control networks are to cyberattacks, a prime asymmetric target given the US military’s continued reliance on information technology. Moreover, there are now approximately 30 nations that have developed “aggressive computer-warfare programs.”

Again, there is a relevant Indian war complement to today’s challenges. Indians of the Southern Plains disrupted American efforts in the West through unconventional means. "The telegraph line, which once had commanded their awe, no longer was mysteri-
ous. By 1882, the Apache had learned its function and its method of operation. When they jumped the reservation, they would cut the lines and remove long sections of wire, or they would remove a short piece of wire and replace it with a thin strip of rawhide, so cleverly splicing the two together that the line would appear intact and the location of the break could take days of careful checking to discover.15 This disruption foreshadows the potentially far greater problems from cyberattacks if we do not design strategy and tactics for dealing with this as part of an asymmetric campaign.

Preparing for Asymmetric Attacks

The first step in preparing to better meet tomorrow’s challenges is to learn from the past. As the examples drawn here indicate, there is a rich history to be tapped in the early American experience. But there are many other examples as well—Yugoslav partisans fighting the occupying Nazis or Afghans against the Russians and Serbs in the recent NATO operation in Kosovo. Military commanders must study history. Modern, technologically sophisticated warfare—with the asymmetric challenges that accompany it—makes that requirement more true, not less.

Our forces must also be adaptive. Just as our adversaries will continuously change tactics and approaches to seek our weaknesses, so must we be able to counter them through continuous adaptation. If we do not, we risk the mistakes of the past. “While European military revolutions provided states with the means to project power into the interior of North America, they did not provide troops with appropriate training and tactics to succeed on the frontier.”16 Therefore, our forces, doctrine, and tactics must continue to embrace agility and adaptability and prepare for a range of missions. The Army continues to do so in its most recent doctrinal publications, FM 1 and FM 3-0.17 Efforts to address asymmetric threats must also retain the unique American strengths—superior training, leadership and technology—that give us an edge against any potential adversary.

Finally, we must guard against arrogance. An account at the time of Braddock’s defeat noted the irony that his preparations for the march to Fort Duquesne were precise. He attended to every minute detail except “the one that mattered most: Indian affairs.”18 He dismissed those Ohio Indian chiefs who might have been allies for his expedition as savages who could not possibly assist disciplined troops. We must not fall into the same trap of understimating a potential adversary because of his different culture or seemingly inferior capability. To do so would be to repeat the errors of the past with potentially devastating future consequences.

NOTES

3. This operational definition of asymmetry is drawn from my conversations with General Montgomery Meigs, Commander of US Army Forces, Europe, who is an excellent source for insights on operational art.
4. I am deeply indebted to General John Abrams and his staff, especially Colonel Maxie MacFarland at TRADOC for many of the ideas presented here. In addition, I would like to thank Professors Graham Turville and William Robertson at Fort Leavenworth, Kansas, for their assistance with the historical examples. Their help was invaluable in constructing this article. I am also grateful to Erin Conaton, professional staff member with the House of Representatives’ Committee on Armed Services, for her assistance with researching and writing this article.
5. See Anderson, 547-63.
11. Starkey, viii.
12. Ibid., 71-72.
13. Ibid., 72.
15. Ibid., 72.
16. Ibid., 72.