
FORCE XXI OPERATIONS AND ITS IMPLICATIONS FOR JUNIOR ARMY LEADERS

FIRST LIEUTENANT MARCO J. LYONS

The United States Army is committed to a comprehensive program of change that it calls Transformation. The challenges associated with force downsizing since the 1991 Gulf War, a new age of joint and combined operations, and multiple ongoing deployments around the globe and across the full spectrum of conflict, have accelerated an era of intense reform. Transformation refers to the sweeping changes in organizations, weapons, equipment, vehicles, and manning systems, meant to move the Army from an industrial age, mass-based force to an information age, capabilities-based, power projection force. Despite the fact that the future course of Transformation continues to be debated, the Army is already beyond the threshold of integrating new technologies, weapon systems, tactical and operational organizations, and developing a new but still emerging joint doctrine, according to the Army's latest capstone doctrinal manual, FM 3-0, *Operations*. New geopolitical threats including non-nation forces, an ever changing contemporary operating environment that includes asymmetric, terrorist tactics, new battlespace technologies, and new means of sustaining Army forces all guarantee that change will be a fixture in the lives of Soldiers for some time.

Army redesign is nothing new. The so-called Pentomic divisions of the early nuclear period, the ROAD (Reorganization Objective, Army Divisions) initiatives of the early 1960s, the Army of Excellence of the 1980s, and numerous other reform programs have been a regular occurrence in the Army since 1945. According to U.S. Army Training and Doctrine Command historians, Army Transformation is different in two significant ways. First, computer based, constructive and virtual simulation methods and equipment were joined to live field simulation to test and analyze new organizational structures. Second, a linked, instantaneous, and common picture and awareness was developed for the units taking part in the live simulation — this new emerging capability was given the name “digitization.” Transformation is different in another way. Where the Army has “reinvented” itself before it has tended to follow the lead of society; now it appears to be pushing society into the information age. The most significant difference of all is that Transformation is being undertaken at the same time that the Army is deployed in two difficult, and at times frustrating, campaigns against insurgencies in Afghanistan and Iraq. The world's premier land fighting force is transforming itself

while at war. The Army has not undertaken anything like the current process of redesigning itself since the Second World War.

There is no shortage of professional attention being given to Transformation and related issues as indicated by the number of journal articles, monographs, and professional studies and reports, beginning in the mid-1990s and picking up significantly after 1998. Every major Army publication including *Military Review* and *Parameters* has printed articles, and in some cases dedicated entire issues, to Force XXI Operations and beginning after 1999, Army Transformation. The Army has also produced numerous white papers, official “roadmaps,” and other monographs and articles explaining its transformation from Cold War ground force to 21st century joint force land component, knowledge-based warfighting organization. Although numerous official Army and professional publications mention that people, not weapons or technology, are at the center of the future force, the fact remains that there is no comprehensive portrayal of leadership in the future operating environment. This can only lead one to assume that the Army believes its current leadership doctrine is sufficient. Very little direct attention has been given to leadership under Force XXI Operations, despite the fact that Army Transformation has not been ignored by observers and professionals both inside and outside the Army.

The literature explaining Army Transformation mentions a new form of leadership development, but lacks details. In particular, and perhaps most telling, FM 3-0, which has been called the “Transformation field manual,” gives very little attention to leadership at all and advances nothing new on the subject over earlier Cold War era doctrine. The Army's own White Paper on the Objective Force — the name used earlier for the Transformation Army of the future, now referred to as the Future Force — manages nothing more substantial than a vague and passing reference to future leaders being empowered by situational dominance “in a vibrant information network.” In a detailed study of the ways in which the institutional Army must change in light of the rise of information age warfare, DA Pamphlet 100-1, under the chapter “Army XXI Implications,” includes such simplistic statements as “Leader development processes will focus on bridging the gap between industrial and information age capabilities and needs,” and “There will be a need for greater versatility, initiative, risk taking and exploitation of opportunity.” More recently, in an

Association of the United States Army report — entitled “How ‘Transformational’ is Army Transformation?” — leadership development is mentioned as critical to successful Transformation and yet no details are provided. Those publications that do discuss the leadership model required for the 21st century Army do not attempt a complete treatment of the subject matter and do not attempt to replace existing Army leadership doctrine.

The earliest conceptual foundation for Army Transformation can be found in a small publication that appeared in 1994. Published by the U.S. Army’s Training and Doctrine Command, Pamphlet 525-5, Force XXI Operations, presented a revolutionary vision of future warfare in a dramatically altered, multipolar geo-strategic environment. The concept of Force XXI Operations was subsumed by the Army Transformation campaign by the end of the 1990s and the term dropped out of professional usage thereafter. The Army,

according to the authors of TRADOC Pamphlet 525-5, in a remark that would become the heart of Transformation five years later, “must design organizations and develop capabilities that will allow it to be rapidly tailorable, rapidly expandable, strategically deployable, and effectively employable as part of a joint and multinational team to achieve decisive results in future War and [operations other than war] in all operational environments.” Transformation officially began with a speech given by Army Chief of Staff General Shinseki in late 1999, where he first declared the need for the Army to transform itself into a more “responsive, deployable, agile, versatile, lethal, survivable, and sustainable” force. TRADOC Pamphlet 525-5 represents the original, comprehensive statement on what later became known as Army Transformation — the Army’s attempt to understand and adjust to the advent of

information age warfare.

Force XXI Operations, if fully implemented as envisioned in TRADOC Pamphlet 525-5, makes significant and revolutionary demands on leaders at all levels, including the junior level. “The Army will develop young tactical leaders that are schooled in operational art, science, and doctrine, and are masters at troop leading in dynamic operational environments.” For such a Force XXI inspired and Transformation focused statement to become reality, the Army must recognize that Force XXI leadership represents a significant break with past doctrine, the 1980s doctrine of AirLand Battle. The Army must face the revolutionary implications of Force XXI Operations and information age warfare, and begin fleshing out a new leadership doctrine immediately. This is an examination of Force XXI Operations as presented and defined in TRADOC Pamphlet 525-5, as opposed to the current



force or current doctrine as outlined in the new joint force series of field manuals. This paper will compare the leadership models of AirLand Battle and Force XXI Operations, and isolate the most significant implications for today's junior Army leaders. Force XXI Operations includes radical implications for junior Army leaders — noncommissioned and commissioned officers operating at the battalion task force level and below.

TRADOC Pamphlet 525-5 describes the conceptual foundations for Army operations across the entire spectrum of conflict from major theater war to operations other than war, involving Force XXI — the Army that doctrine writers in the early 1990s envisioned for the early part of the 21st century. TRADOC Pamphlet 525-5 was a foundation document, including an expansive vision of future warfare and sweeping pronouncements as to the nature of future Army organizations and operations; it was both a revolutionary assessment of the near-term future and a declarative statement of the direction of Army developments into the 21st century. An indication of its foundation quality is the fact that it appears in both arguments and bibliographies all the way up to the present, despite the fact that the Transformation debate has gone through a number of different distinct phases, and is very different today than it was in 1994. Considering its speculative nature and the monumental future developments it attempted to chart, TRADOC Pamphlet 525-5 was surprisingly successful in mapping out the future course of Army developments in both operations and materiel. It recognized the nature of future operations as complex, rapidly changing, possibly protracted and asymmetric, requiring radically new skills sets, and a wider array of experiences and capabilities at the lowest tactical levels. It also presaged the introduction of a medium-weight, highly deployable infantry fighting vehicle (the Stryker) and the successful development and fielding of the Force XXI Battle Command Brigade and Below system. FBCB2 is the tactical hardware and software that allows friendly units in the battlespace to see and communicate with each other automatically, identify and communicate quickly enemy positions, status reports, and other key communications.

Before Force XXI Operations there was AirLand Battle. The initial concept of AirLand Battle first appeared in 1980. It was published officially in the 1982 edition of FM 100-5, *Operations*, and revised again in the 1986 edition — this last form was the doctrine in effect through the end of the 1991 Gulf War. AirLand Battle was a doctrine developed for a specific purpose and was grounded in a sober assessment of weapons capabilities and force ratios. It was developed by the U.S. Army to defeat a numerically superior Soviet enemy on an armor-dominated battlefield in Central Europe relying on technological parity — with the procurement of new weapon systems, most notably the M1 Abrams tank, M2 Bradley infantry fighting vehicle, and AH64 Apache attack helicopter — and superior doctrine — superior for devolving power to the lowest possible level and developing leaders who aggressively seize the initiative and are able to operate independently within the higher commander's intent. AirLand Battle attempted to control the tempo of operations using a detailed battlefield framework based on the echeloned style of attack favored by the Soviets. AirLand Battle relied on a prescriptive, fixed

framework to focus combat power. Even the very name AirLand Battle, which was chosen to highlight the close cooperation between ground armor and attack aviation that was developed to defeat a Soviet-based enemy, suggested a “single-prescription” doctrine.

The 1993 edition of FM 100-5, outlined the Army's post-Cold War doctrine, and included significant changes over its predecessor. Most importantly, it presented a body of principles which could be effectively applied in various situations, both combat and noncombat. AirLand Battle, with its emphasis on ground and air attack forces, gave way to full-dimensional operations based on a much wider concept of joint and combined operations. As a capabilities- and principles-based doctrine, full-dimensional operations outlined how to think about operations with a variety of possible battlespace frameworks, including simultaneous operations as opposed to the set, sequential operations of AirLand Battle. Despite its advancements over the narrow focus of AirLand Battle, full-dimensional operations was found inadequate soon after publication. It was judged to not be offensive enough and too beholden to operations other than war. Commanders complained that it did not permit them enough initiative and fettered them too much with noncombat responsibilities and considerations, such as peace enforcement and refugee management.

Force XXI Operations grew out of the end of the Cold War and the search for a doctrine to replace AirLand Battle. The Army initially planned to update AirLand Battle for the 1990s (tentatively called AirLand Battle 2000) but with the end of the Cold War, and a final revision of that doctrine, though not under the AirLand Battle name (the so-called Full Dimension Operations of FM 100-5/1993), the next year the decision was made to launch a campaign to take the Army into the early years of the next decade. Called Force XXI, continuing changes through the 1990s led to Force XXI becoming subsumed by Army Chief of Staff Shinseki's Transformation campaign beginning in late 1999. Force XXI Operations replaced AirLand Battle which was abandoned primarily because the end of the Cold War suggested that it was no longer entirely applicable, under the assumption that the world and nature of warfare would be dramatically altered by a transition to a non-bipolar world order.

Junior Army leaders are facing situations never seen before in the history of the service. There is nothing new about refugees, insurgents, and humanitarian crises intermingled with conventional (including counterinsurgency) combat operations, but what is new are the demands placed on junior leaders to act appropriately and successfully in those situations — often with very little time to react or guidance from higher headquarters. Iraq is turning out examples of this on a daily basis, in Baghdad, Fallujah, and Samarra, for example, where tactical assessments and actions made at the battalion level and below, almost always multinational and interagency, have operational and at times strategic implications. Junior leaders are regularly required to analyze and synthesize more since the actions of a platoon leader or company commander in theater can have almost immediate and unforeseen operational or even strategic consequences. The complex situations facing leaders today involve both combat and

noncombat factors. Asymmetric threats are appearing more and more even at the junior leader level, such as the prevalence of improvised explosive devices being used in Iraq today. Embedded friendly media, the presence of an indifferent or even hostile international media, and civilians in the battlespace, which can significantly influence tactical operations and the decisions made at the junior leader level, as well as paramilitary and terrorist forces all compound the challenges facing current force leaders. Today junior Army leaders are faced with situations that have operational and sometimes strategic implications, and they are expected to read these situations quickly, understand all the relevant military and political nuances, and act appropriately, at times in the absence of unambiguous orders. They face far more uncertainty and rapidly changing, complex tactical situations than previous generations, and the significance of their actions has risen dramatically.

Current Army leadership doctrine, based on FM 22-100, *Military Leadership*, is a holdover from AirLand Battle. Although the leadership model for AirLand Battle was well refined and developed by 1986, it was essentially the same model in use at the end of World War II. FM 22-100 outlines a detailed and fully developed leadership model that identifies desirable skills, knowledge, attributes, and behaviors (the so-called SKAB model) which is held up as a universal framework from the private to the general. Leaders of the past faced a clearer more straightforward mission and explicit expectations and this is reflected both in the SKAB model and in the unusually explicit task based training and operations model developed hand in hand with AirLand Battle. That model is now out of step with what is suggested by Force XXI Operations. Christopher R. Paparone, in his article “Deconstructing Army Leadership,” argues that the Army’s traditional leadership model disregards newer emerging concepts of networked organizations and distributed operations. In other words, the inter-netted organizations and distributed operations of Force XXI Operations are not well suited to the hierarchical and rigid leadership model of the AirLand Battle focused Army. It is becoming clearer that the old Army

Information age warfare, as a result of more information being pushed to lower levels (Transformation envisions interconnectivity reaching down to the individual Soldier), will devolve power to the lowest leaders, making more important decisions, quicker, with greater tactical and even strategic consequences.

leadership model outlined on FM 22-100 is outdated and not able to encompass the entire spectrum of tactical experiences, as well as all that is expected of junior leaders under Force XXI Operations.

The backdrop of Army Transformation is the information revolution. TRADOC Pamphlet 525-5 argues that the emerging information revolution will drive the emergence of information age warfare. The implication is that the information revolution will transform the nature of warfare and signal major changes in military art.

Where AirLand Battle was threat-based and the doctrine of the early 1990s, full-dimensional operations, was capabilities-based, Force XXI Operations introduced the concept of knowledge-based operations. Although the term knowledge-based operations sounds expansive, it really refers simply to the idea that combat power is best concentrated and controlled through the transmission and management of information. Information is revolutionizing situational awareness in battlespace — indeed it will lead to situational dominance — making leaders far more self-aware than ever before. Adding to that the capability to operate effectively dispersed and in distributed operations means that digital leaders will be bolder and less risk-adverse than their analog counterparts. Operations can be executed in a less centralized manner and will not be influenced as much by inclement weather and limited visibility. Actions that used to be done sequentially can now be done simultaneously, such as moving to assembly areas, rehearsals, and resupply operations. Brigade combat teams during field training exercises are already

capable of resupplying while simultaneously occupying assembly areas, and transitioning between missions quickly, over difficult terrain, at night. These developments are also being seen to a lesser extent with units currently operating in Afghanistan and Iraq. Networked forces will have the revolutionary capabilities to adjust rapidly to changing tactical situations and synchronize their efforts “in-stride”— on the move and in the midst of ongoing operations — with minimal direction or intervention.

Information age warfare, as a result of more information being pushed to lower levels (Transformation envisions interconnectivity reaching down to the individual Soldier), will devolve power to the lowest leaders, making more important decisions, quicker, with greater tactical and even strategic consequences. The Army’s junior leaders will need to understand and thrive on sometimes rapidly changing situations and evolving missions. In the U.S. Army Command and General Staff College paper “Envisioning Future Warfare,” Gordon R. Sullivan and James M. Dubik said, “Information age warfare fought under extremely ambiguous threat, geographic and political conditions will require an unprecedented degree of discipline, quick thinking, cohesion and technical competence....” They also wrote that in the information age, “Leaders will guide by vision and policy, not by procedure-based rules.” The implied movement from procedural leadership to visionary leadership illustrates the replacement of the AirLand Battle leader by the Force XXI leader. Net-centric warfare, which is a hoped for but as yet unrealized development of the revolution in military affairs, will be leadership intensive, and yet writings on net-centric warfare do not spell out a new leadership model.

Digitization is a hallmark of Transformation. At the heart of digitization is the emergence of integrated battlespace C3I (command, control, communications, and information) systems, which is a reality today with the successful fielding of FBCB2. Christopher J. Toomey, in his “Army Digitization: Making it Ready for Prime Time,” gives an excellent explanation of the new phenomenon of



Jennifer Sowell

The FBCB2 Commander's Digital Assistant is a portable device that can be used all over the battlefield to track Soldiers, map the battlefield, and send messages.

digitization of the battlespace. Digitization enhances opportunities for applying mass, according to an early study of the transition from analog to digital operations at the brigade level and below. Because of the reality of full battlespace digitization, battlefield visualization — something that junior leaders only did informally before, when possible — is now a realistic and fully developed possibility for junior leaders. The authors of the study (Marcus G. Dudley, John C. Johnston, William S. Jones and Christopher P. Strauss) conclude “[Situational awareness] is one of the most positive aspects of digitization. Battlefield visualization leads to better [situational understanding] at all echelons. More accurate information, especially on the enemy, boosts leader confidence.... Digital capabilities empower units to maneuver and engage the enemy when and where the commander chooses.... Digital capabilities give the commander and his staff more time to think and analyze. The enhanced capabilities improve planning, decision-making, and synchronization.” Digitization also poses unique problems and challenges to junior leaders, which merely accentuate the new demands and expectations under Force XXI Operations. Dudley and his fellow authors also noted that it has already been observed that digitization, if not properly implemented and managed, may lead to micromanagement of subordinates and significantly increase the problems inherent in controlling fires within the battlespace. Digitization of the battlespace is a reality, a significant component of the current

revolution in military affairs, and the single most important capability that allows the realization of Force XXI Operations.

An RMA is transforming the nature of warfare and implementation of Force XXI Operations will allow future commanders to practice a vastly improved form of battle command and thus dominate future battlespaces. According to Earl H. Tilford, Jr., in his article “The Revolution in Military Affairs: Prospect and Cautions,” revolution in Military Affairs can be defined as a significant change “...in the nature of warfare brought about by the innovative application of technologies which, combined with dramatic changes in military doctrine, and operational concepts, fundamentally alters the character and conduct of operations.” The RMA is connected to Army Transformation in two significant ways. First, the RMA will permit the highly digitized battle command systems necessary to execute the highly dispersed and high tempo form of warfare at extended ranges envisioned by Transformation. Second, the RMA is transforming the nature of the battlespace — geographically vast, including both physical and cyber space — and if future force leaders are to be able to exploit the new nature of battlespace, they will need to be educated and trained in a warfare that is successful in this changed environment.

The leader outlined in doctrinal manuals today is radically different than the one outlined under AirLand Battle. AirLand Battle was designed for a particular threat and environment. The forces developed by the late 1980s, and victorious in the 1991 Gulf War, were tailored to that doctrine, and leaders were developed for that doctrine and

those forces. The AirLand Battle leader is a product of AirLand Battle doctrine and the threat environment that it was designed to confront. Still, the Army's leadership doctrine has not transformed. Even though the leadership model under Force XXI Operations is unclear and underdeveloped, there are clear implications. TRADOC Pamphlet 525-5 includes references to the future Force XXI leader, such as the reference to “a new generation of leaders adept in the art of command.” The Force XXI leader can be distinguished from the AirLand Battle leader by the following characteristics: procedural leadership is replaced by creative leadership, formulaic tactics by sophisticated tactics, firepower based operations by information based operations, and tightly nested planning and orders by changing and more fluid planning and orders. Just as Force XXI Operations was a dramatic break with AirLand Battle, so too the Force XXI leader is radically different than the AirLand Battle leader. The technically and tactically proficient manager of detailed processes, adhering to essentially formulaic tactical principles and prescriptions gives way to a far more mentally agile, reflective, and transformational leader.

AirLand Battle called for synchronization as well as aggressive initiative at all levels of Army leadership. Still, the initiative envisioned was firmly within a fully articulated plan of battle, grounded in the “physics” of march rates, maximum effective ranges of weapons, and so forth. The initiative outlined was not

of the sort to emerge later with respect to a blurring of military operations and operations other than war, and asymmetric threats including terrorists and criminals. The form of Army leadership suggested by Force XXI Operations is moving away from a clearly defined, procedure-based model, albeit slowly and with some resistance. The combination of an information rich battlespace and increased speed of operations will put revolutionary demands on leaders. The clarity and predictability of AirLand Battle gave way to a sometimes murky and “complex” full spectrum operations. The mechanical model of AirLand Battle gave way to a new focus on “intuition” and a revived emphasis on initiative at even lower levels — trained and continuously informed Soldiers. An “intuitive feel for combat” is a key concept in the battlefield visualization concept which is the heart of battle command. Highlighted here are the abilities to envision events, make applicable decisions, and act rapidly under contact. And even more specifically, current and emerging technologies will allow leaders to know enough of the operational picture to make the correct decisions quickly and within very short windows of opportunity.

The relative importance of innovation, creativity, and risk taking under AirLand Battle increases dramatically under Force XXI. Accelerated, collaborative planning will become more commonplace. With the regular, ongoing rotations of Operation Enduring Freedom and Operation Iraqi Freedom, junior Army leaders are gaining a breadth of experience not seen since the Vietnam era. The Global War on Terrorism means that junior Army leaders will be far more active, involved in more operations, and thus gaining experience faster.

Future warfare has been characterized as complex, protracted, ambiguous, and asymmetric — the resultant doctrine is necessarily flexible and imprecise. Battle command is a significant change and will reach all the way down to the junior officer level. Battle command “...is the ability to make, communicate, and implement sound decisions, through superior knowledge, faster than the enemy can react, and at a controlled operational tempo.” Battle command will continue to be a combination

of art and science — as it always has been — however, in the future the art component will grow in significance. Although battle command is a revolutionary concept of “applying leadership and decision making to achieve mission success,” the core definition of leadership in the Transformation architecture remains the same as it has since the Vietnam conflict. Battle command refers more to how leadership is exercised: entirely or almost entirely through digital and computerized systems. Huba Wass de Czege, a regular author on Transformation issues, has argued that warfare against an asymmetric enemy, as can be expected will be more and more the norm into the future, requires more art than science. Junior leaders under Force XXI will be expected to be cognizant of these factors and have a basic understanding of the nature of joint and combined operations at higher echelons. There will also be a certain amount of jointness and combinedness at the junior level, multinational patrols for example, and use of interpreters at the squad and platoon level, but admittedly the changes here will not be as dramatic as in the areas of weapons and other advance warfighting technologies.

Where AirLand Battle was inextricably linked to a place (Central Europe) and threat (Soviet Union), Force XXI has been called a “mind-set.” Force XXI leaders will be trained for more rapid decision making and team building. Although military leaders have always been expected to be team builders, the future environment will be dominated by ad hoc and task or mission based teams. In the future the rule will be that relationships will be inter-netted, based on need and expertise as opposed to chain of command. Other changes include a move from plan-centric to intent-centric operations, physical to virtual rehearsals, and from static command and control to command and control on the move.

Self-development, one of three pillars of leader development in the Army, will be transformed and greatly improved due to the extensive access to computerized databases. Future force leaders at the most junior level will need to access the latest reports, lessons learned, TTPs (tactics, techniques, and procedures), training documents, relevant professional articles,

technical updates, and computer-based instruction on a regular basis and productively use their limited time. Force XXI leaders will be fully “plugged-in.”

Force XXI leaders must be more flexible in dealing with complex operating environments that include aspects of combat operations, civilian support, humanitarian relief, and peace keeping all in one. More mentally agile to deal with fast paced operations. Adaptive to deal with changing, asymmetric threats, and ambiguous threat environments. More independent thinking and more aggressive in initiative to act quickly to grasp key opportunities while staying within the intent of higher commands and at times, the operational and strategic settings as well. Force XXI Operations signaled a new model of how leaders would think at all levels. Just as the current geopolitical situation does not allow us the luxury of focusing on one set of threat and geographic conditions, it also does not allow us the comfort of using one, detailed, predictable leadership model.

Force XXI Operations will require a new generation of leaders who have been specially trained and prepared for leading in an ambiguous, complex, and changing environment. Junior leadership must be trained in a new model of leadership from the beginning, as opposed to thinking that it will be developed later in their careers. Kenneth A. Romaine, in “Developing Lieutenants in a Transforming Army,” argues that because of the complex and ambiguous operating environment we face today, we can no longer assume that junior leaders do not need a lot of the same skills and attributes of more senior leaders. “Whether negotiating, mediating disputes, or interpreting rules of engagement, young leaders face difficult decisions that require a broad understanding of the mission’s context,” Romaine said. These are capabilities and experiences that must be made a part of junior leader development. Typically references to leadership under Force XXI Operations focus on brigade and up. The new leadership that is emerging as a result of revolutions in information management, technologies, operations, and organizations is not only for senior levels. There are unique challenges associated

with future operations in extended battlespace and in an information rich environment. Junior leaders will probably be called on to perform leadership tasks several echelons above what has been traditionally expected. An expanded knowledge base and understanding will be necessary. The leadership development that was first spelled out generally in TRADOC Pamphlet 525-5 will need to begin from the start. For Force XXI in particular, a new leadership will be required all the way down the chain to the most junior leaders. Force XXI leaders need to be developed from the start, at the junior level, in line with the projected understanding of future warfare presented in TRADOC Pamphlet 525-5.

Dr. Bruce Avolio, a noted author on the subject of transformational leadership, identifies three major components of what he calls "full range" leadership: transformational leadership, transactional leadership, and non-transactional (or laissez-faire) leadership. Since the last is not really a form of leadership at all, we can say that there are two primary kinds of leadership, transactional and transformational. According to Avolio, "All three of these components, when combined, produce adaptive leadership that can adjust or modify with each situation." Transformational leadership is defined by Avolio as the process whereby leaders develop followers into leaders. Transformational leaders are at home within dynamic, changing institutions and are ready to be agents of change, as the situation requires. Bernard M. Bass, another specialist on Full Range Leadership, and in particular, transformational leadership, argues that transformational leadership is a particularly effective and appropriate leadership style for the military. Transformational leadership is primarily concerned with values, ethics, standards, and long-term goals, where transactional leadership, as the name implies, is concerned with short-term rewards. Transactional leadership has been identified with management by exception and passive leadership, or in other words, leaders wait for problems to arise before implementing corrective measures. Another noted author and researcher on leadership issues, James MacGregor Burns, writes that the transforming leader "is one who, though initially driven by the search for individual acknowledgment and recognition, ultimately advances communal purpose by being attuned to the objectives of his or her followers." For all these reasons it is clear that as long as the Army is committed to change, both institutional and operational, and wedded to the idea of being a learning organization, transformational leadership should be a centerpiece of leadership doctrine.

There is an important connection between Army Transformation, future war, and transformational leadership. With all that is demanded under Force XXI, for leaders at all levels to be adaptive, quick thinkers, provide vision and direction amidst chaos and ambiguity, this suggests that transformational leadership is the leadership mode of choice for the future force. Although there were transformational aspects present in printed doctrinal materials, the leadership model suggested by AirLand Battle was essentially transactional. Transformational leadership was deemed important but not necessary, as indicated by it garnering only a passing mention in FM 22-100. AirLand Battle leaders were administrators of detailed, hierarchical systems in peacetime,

executors of a mechanical doctrine based on detailed tasks during operations. More than merely more of the same, Force XXI leaders will need to be far more transformational and technologically capable. Transformational leadership is the answer to the leadership demands of Force XXI. Force XXI leadership also emphasizes the importance of improving systems as well as operating successfully within them. Thomas D. Huse's central argument, in his Command and General Staff College monograph, "Transformational Leadership in an Era of Change," is that transformational leadership is necessary for the Army to operate effectively in the present asymmetric operating environment and weather the change it is facing today and into the foreseeable future. The leadership model under AirLand Battle which was primarily transactional, has given way to a more transformational leadership model under Force XXI Operations.

The Army has always ostensibly required the best leaders possible. The Army's Transformation Roadmap for 2003 spells out clearly the need for "competent, confident, self-aware and decisive leaders, prepared for the challenges of full-spectrum operations in joint, interagency and multinational environments." The Army's leadership expectations are clearly high. Junior leaders will lead positively amidst near continuous organizational, institutional and operational change; lead ethically and serve as a constant ethical standard for the institution; and lead diverse units across the full spectrum of operational environments from humanitarian assistance to major theater conflict. There is no reason to believe the fundamentals of leadership have changed much since the age of Hannibal and Caesar, however the manner in which leadership will be exercised under Force XXI Operations is revolutionary. Force XXI leaders will do what Army leaders have always done, but they will do more and they will do it in revolutionary ways.

The Army is comfortable with its antiquated leadership model as evidence by its defense of the current Be-Know-Do leadership doctrine (the SKAB model). According to the Army's Transformation Roadmap for 2003: "...the Army's leadership framework of 'Be, Know, Do' is relevant to realizing both Current and Future Force capabilities." Change in the area of leadership doctrine will be more difficult than simply integrating new technologies like smaller, more powerful radios or red-dot aiming lights. According to the statements made in TRADOC Pamphlet 525-5, Force XXI should focus more on leadership than earlier doctrine, along with emerging technology. A large amount of attention has been given to future force structures, the so-called Units of Action and Units of Execution, information-based warfare, and new weapons. An equal amount of attention should be given to what implications these developments will have on junior Army leaders, as they will be the leaders needed in the future to complete Army Transformation, which is not projected to be complete before 2030. As it is, the Army has experienced a tortuous process of trying to replace FM 22-100 and as yet has not been able to produce an updated joint version of military leadership doctrine. A replacement for FM 22-100 is conspicuously missing from current joint doctrine publications. The changed model, with a much greater role for transformational leadership at all levels, will be significantly more complex than its AirLand Battle-dated

predecessor. It is easier to address organizational and technological changes than to overhaul the thing that most distinguishes the Army as a professional organization — its leadership model. Walter F. Ulmer, Jr., quoting Paul Van Riper and Robert H. Scales, Jr. in his very important article, “Military Leadership into the 21st Century: Another ‘Bridge Too Far?’,” notes that leadership more than technology will determine who wins and who loses in future warfare.

Basic warrior skills and the fundamental nature of close combat, and hence leadership, will not dramatically change as a result of Army Transformation. Current U.S. Army doctrine holds that leadership is the most significant element of combat power and there is no reason to believe this will change. Force XXI Operations has already begun to change organizations and operations at the company level, and changing operational concepts have already reached down all the way to the junior officer level of platoon leaders and company commanders. The first Force XXI division organization — the “digitized” 4th Infantry Division — has already demonstrated itself in combat operations during Operation Iraqi Freedom.

These are the revolutionary developments junior leaders can expect to experience today and in the future: flatter, more inter-netted organizations, the complete digitization of the battlespace and the continuing drive for information dominance, faster, more rapidly changing operations, and an ambiguous and asymmetric threat environment. Future force organizations will be necessarily flatter as a result of the wide availability of planning information. Planning will no longer need to be done up and down rigid chains of command but also across multiple organizational lines according to the availability of relevant information and operational needs. Junior leaders must be prepared for future force structures that are flatter, more inter-netted — generally speaking, an “organic” organization model, as opposed to a mechanical model. The realities of joint and combined operations, noncombat operations, and nontraditional threats present themselves to even junior leaders today, requiring a



Sergeant Michael A. Abney

Soldiers with the 82nd Airborne Division’s 1st Battalion, 505th Parachute Infantry Regiment, enter a building during a combat raid in Zurmat, Afghanistan.

broader understanding of war including “ideas on military art and science that go beyond traditional models and the views of primarily Western theorists.” Changing doctrine, changing nature of warfare with the realization of the information age, and changing warfighting technologies all mean changes to the character of tactical operations — the experience of junior Army leaders.

The Force XXI leadership implications are the most sweeping and profound that the Army has faced since the Second World War. The heavy emphasis on information systems and networks is what is driving the higher demands for mentally agile, intuitive, and adaptive Soldiers. That study also implies that there are inherent risks in assuming that Soldiers can be transformed according to a new skill set appropriate to Force XXI Operations. This adds to the importance of determining with more clarity exactly what will be expected of junior leaders in the future force. The Force XXI junior leader — once properly trained and developed — should be more aggressive, more knowledgeable, more informed, and more confident.

The Army will continue to recognize the primacy of leadership. According to Army Chief of Staff General Shinseki, “We are about leadership; it is our stock in trade....” The Army also recognizes

that to remain relevant in the current joint warfare environment it must complete Transformation. That process is dependent on developing a new breed of leader, optimized for dealing with future threats, prevailing in future war and thriving in change. The Army recognizes that it must understand the leadership implications of the RMA. For these reasons, the full implications of Force XXI must be understood, disseminated, and acted on, starting with junior leaders today. The Army is convinced that in order to exploit geopolitical and technological changes and successfully practice an emerging revolutionary form of warfare, what some have called information age warfare, the Army must embrace a radically new doctrine — that doctrine was first presented in 1994 as Force XXI Operations. Although TRADOC Pamphlet 525-5 signaled revolutionary changes for junior Army leaders, more attention has been given to emerging technologies and organizational changes than to a revising the Army’s leadership model.

First Lieutenant Marco J. Lyons is currently serving as Support Platoon Leader, Headquarters and Headquarters Company, 1st Battalion, 26th Infantry, Task Force 1-26, in Samarra, Iraq. He is a 2001 graduate of Officer Candidate School.

The complete reference list for this article is on file with *Infantry Magazine*.
