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Title 10 of the U.S. Code charges the Army to organize, train, and equip a force for land combat. DTLOMS provides a framework for discharging that responsibility. In light of Transformation, information warfare, and 11 September, the Army's charter and the DTLMOS imperatives might need updating. Rick Brown argues that teaming and adapting should be considered for inclusion in Title 10's mission to the Army and that DTLOMS should incorporate time as a seventh imperative.

THE SIX IMPERATIVES—doctrine, training, leader development, organization, materiel, and soldiers (DTLOMS)—have served the Army well. They served as a compass and provided focus during the Army's rebuilding after Vietnam.¹ They also served as a translation vehicle from the general Army mission mandated by Congress in Title 10 of the *U.S. Code* to specific foci for the practical policies and programs of rebuilding.² A leader of this first Transformation, General Carl Vuono, Chief of Staff of the Army at the time, commented: "I've always used the six imperatives as a way to describe how the Army internally reshaped itself."

The six imperatives have served as operating guidance for the various U.S. Army Training and Doctrine Command (TRADOC) proponents charged with guiding the actual rebuilding. The imperatives provided the foundation for a concept-based requirements system that guided overall Army development; however, as future forces evolve, the imperatives must also evolve. To these six imperatives should be added a seventh, the element of time. In addition, Title 10, which defines the Army's fundamental responsibilities, directs the Army to organize, train, and equip forces to win the Nation's land wars. These responsibilities should be expanded to include the development of individuals and units highly focused on both teaming and adapting.

Further, it is essential that balance or harmony among the six imperatives be created and sustained in tactical operations—a dynamic balance tailored and readjusted as necessary for executing any mission. This idea is not new. Field Manual (FM) 1.0, *The Army*, prescribes such balance: "The Army, balanced across the six imperatives, can achieve sustained land force dominance throughout the range of military operations and across the spectrum of conflict." Balance means that each imperative is in harmony with the other imperatives. That is, each DTLOMS element supports every other element, and that element is positioned for rapid adaptation to take advantage of opportunity or to reduce adversity.

What should harmony be in the context of full-spectrum operations? Harmony means that the imperatives mutually reinforce each other; that each imperative undergoes near-continuous modification or improvement; and that each imperative adapts more rapidly to changing combat conditions than does the enemy's comparable imperative. Harmony also means that change in one imperative is routinely translated into complementary and reinforcing change in the other imperatives. For example, leader-development changes initiated to prepare for implementation of new doctrine or training are likely to change the training requirements for

new equipment. That change is expected and satisfied routinely.

Such cross-DTLOMS harmony, which reinforces change by extending it horizontally across other imperatives, is necessary but not sufficient to create full balance. That is, there must also be reachdown—backward compatibility with previous DTLOMS imperatives that might be used by legacy or hedge forces or that might have been provided to allies.⁵ For example, new radios should talk to old ones. New ammunition should be usable in old weapons. New tactics, techniques, and procedures (TTP) should accommodate prior TTP when possible.

Title 10's current mandate to organize, to train, and to equip forces certainly generates capable landpower force, and organizing, training, and equipping are all traditional force-management requirements; however, the functions of organizing, training, and equipping are insufficient to generate the kind of forces required today.

Reachdown sustains an umbilical cord to allied or friendly forces joining in revolving coalitions that might be accustomed to prior Army DTLOMS. Reachdown creates longitudinal harmony between older and newer manifestations of DTLOMS imperatives that complements cross-DTLOMS harmony. In sum, DTLOMS should be configured to support harmony on two axes: harmony among the DTLOMS imperatives to reinforce continuing advances and harmony with forces accustomed to earlier DTLOMS versions to retain continuity of operations

Balance increases in relative importance in the fighting concepts of recent writings, particularly in *Conceptual Foundations of a Transformed US Army* and in *Concept Paper for the Objective Force.*⁶ Note the issue of balance: "At base, the challenges confronting the Army today have less to do with materiel than with organization, doctrine, education, and training. As in the past, victory on future battlefields will not result from technology alone, but rather from the creativity with which it is employed."

The objective then is a continuously evolving harmony of imperatives, which is challenging to sustain within landpower itself much less with other services in joint operations. Creating and sustaining synergy with armies of other nations will be even more difficult. The role of legacy forces seems likely to be to maintain backward compatibility to less well-supported allies across the six imperatives, which is

somewhat similar to having the responsibility to support hedge forces.⁸ The goal is not just harmony to create a whole much greater than the sum of the parts, it is also the sustainment of a compatibility that permits basic interoperability across past generations of DTLOMS. Shared standing operations procedures and standardization agreements can help, but a broader effort extending across each imperative is needed.

Growing Challenge

The challenge grows as flexible and modular fighting organizations become common, as is foreseen in current thought about the nature of the Objective Force. General John Abrams expresses the vision well: "Enabled with information, Army units take on an expeditionary quality. This expeditionary force will have the capability to assume asymmetric advantage in any mission assigned. These capabilities will allow adaptive force packaging to suit mission requirements as prioritized by the Combatant Commander. Modular mission packages will be created to provide Combatant Commanders with forces required for theater operations based upon speed for deployment and entry, specific capabilities required by environmental or threat characteristics, or endurance for sustained operations. Force readiness will be a function of the ability to rapidly tailor the force to meet full spectrum mission requirements. The intent is to make Army forces available on a timely basis at the point of decision without pooling critical force multipliers at senior tactical levels until needed."9

Harmonious balance of DTLOMS is a precondition to adaptive force packaging and permits the rapid tailoring of the force. Without thoughtful, sustained balance of DTLOMS across the Active Component (AC), Reserve Component (RC), and civilian force, just-in-time organizing en route to combat can create unacceptable national risk. The balance must be dynamic, as recognized in FM 1.0: "These imperatives are interconnected, and constantly evolving; this cycle is a continuous process. In every period of change we must carefully balance the Army imperatives." ¹¹⁰

Synchronization of the six imperatives is assumed in the Army's implementation of Title 10, which expresses fundamental Army responsibilities for providing forces ready to fight in joint and combined operations, often on little notice. TRADOC was created to ensure synchronization as the Army rebuilt after Vietnam, but are current Army force-management mandates, which Title 10 implies, adequate for the likely future? Is enough expected of Army force development, based on current interpretations of Title 10 requirements?



A current leader imperative challenge is to take advantage of the diverse experiential lore resident in today's young leaders. Clearly there is an abiding case for according increased authority and responsibility to these highly experienced young leaders. The situation is analogous to the intensive World War II combat experience that created young but competent leaders.

The congressional charge is broad. Section 3062 of Title 10 states, "It is the intent of Congress to provide an Army that is capable, in conjunction with the other armed forces, of

- preserving the peace and security, and providing for the defense of the United States, the Territories, Commonwealths, and possessions, and any areas occupied by the United States;
 - supporting the national policies;
 - implementing the national objectives; and
- overcoming any nations responsible for aggressive acts that imperil the peace and security of the United States.

"In general, the Army, within the Department of the Army, includes land combat and service forces and such aviation and water transport as may be organic therein. It shall be organized, trained and equipped primarily for prompt and sustained combat incident to operations on land. It is responsible for the preparation of land forces necessary for the effective prosecution of war, except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Army to meet the needs of war."¹¹

More should be expected. Forces provided to operating commanders in chief of unified commands need expanded capabilities. Title 10's current mandate to organize, to train, and to equip forces certainly generates capable landpower force, and organizing, training, and equipping are all traditional force-management requirements; however, the functions of organizing, training, and equipping are insufficient to generate the kind of forces required today. Additional Title 10 implementation-management categories seem necessary to enable consistent, reliable harmonization of the six DTLOMS imperatives, particularly when the forces will operate routinely in joint and combined environments. Additional Title 10 management responsibilities should include developing enhanced capabilities for teaming and

adapting, both of which would be regarded with equal importance to organizing, training, and equipping. The new mandate should be to prepare all Army soldiers and units to operate as high-performing teams not only prepared to handle uncertain change but to seek, welcome, and positively thrive on change, more rapidly than any potential opponent.

Teaming. If unit capabilities are uncoordinated, it is simply insufficient to have harmony across

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DTLOMS. If leaders fail to act to common purpose, the best "new" item, however capable, will not produce results in the fight. The product must be teamed with other capabilities; for example, leaders at all echelons must realize the necessity of developing effective team leadership through shared vision, trust, competence, and confidence—despite incessant personnel turbulence. Army management guidance should mandate that the Army determine and provide to operating forces DTLOMS characteristics that enable those forces to rapidly, yet routinely, build and regenerate high-performing teams to execute Army, joint, or combined operations.

Because the Army always teams to fight and because team composition will be highly flexible to dominate local mission, enemy, terrain and weather, troops and support available, time available, and civil considerations (METT-TC), teaming must be specifically recognized and supported. Teaming, which often takes place at the last minute because of the just-in-time nature of modular force composition, could be enhanced by increasing the number of liaison officers embedded in organizations; by using common standardization agreements; or by creating combined and joint modular mission packages—"plug-ins/plug-outs"—that routinely team and train with Army units.

An immediate objective could be to shape DTLOMS to support teams. This objective is not impossible and is already done exceedingly well between AC and RC units. Such teaming has made hybrid AC, Army National Guard (ARNG), and U.S. Army Reserve (USAR) organizations routinely successful. Operations in Panama saw remarkable teaming across light infantry, mounted, airborne, and

Special Forces units. Different combinations have evolved in Afghanistan. This is quite an achievement! Which of these new practices should be acknowledged and provided resources through codification in force-management practices drawn from Title 10 requirements?

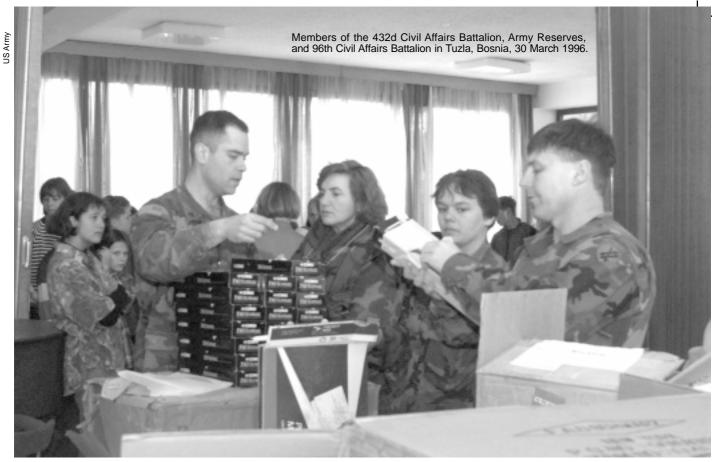
Adapting. Army forces routinely adapt to change, brought about by battlefield success or failure, faster than can any enemy. The Title 10 implied task would be to create infrastructure to magnify the existing American proclivity to innovate—always finding the better way. Army imperatives would be designed not just to permit but, rather, to accelerate institutionalization of innovation across DTLOMS. Institutionalizing innovation would be done initially for Army and joint forces then, eventually, for coalition partners, however behind they might be.

An example of programs supporting adapting could be local command "good idea" funds—funds and the authority to spend them—to establish locally generated, improved practices. Shared task, condition, and standard, and shared doctrine and TTP executed by prepared leaders, would ensure that startling local adaptations would fit a broader framework of incessant unit innovation across landpower. The crossorganizational fit of continuous innovation would be supported by emerging Army Knowledge Management (AKM) practices such as the sharing of ideas online characteristic of companycommand.com or platoonleader.org. Army Knowledge Online (AKO) offers powerful teaming opportunities. Hundreds if not thousands of these communities of practice seem likely as the Worldwide Web expands.

The practical effect of Title 10's insistence on adaptation would be extraordinary emphasis on developing modular cross-DTLOMS plug-ins/plug-outs combat, combat support, and combat service support capabilities. Quality soldiers and the shared rigor of task, condition, and standard permit high unit proficiency, despite flexible individual soldier assignment policies. Materiel plug-ins/plug-outs lead to a family of fighting vehicles in the Future Combat System (FCS) of the Objective Force, a project with a 30-year development period. ¹² Unit cohesion remains vitally important to unit performance.

Assessment must be built into all activities. Accelerating spiral development—a quicker decision loop—encourages local innovation and could lead potentially to a disparate, fragmented unity of purpose across the Army. Is this a risk? Yes. But assessment to ensure necessary uniformity now can be far more comprehensive in forcing commonality to compensate for encouraged local variations stimulated by encouraged adaptation.

The unifying presence of combat training center (CTC) rotations is a powerful assessment cross-



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leveler—a "hamburger helper" extension of self-awareness sought recently by the Army Training and Leader Development Panel (ATLDP). The future presages extensive communities of practice that share information and knowledge to enhance awareness—generating a far higher level of sensitivity to external events that will be shared within leader teams.¹³ The explosive development of companycommand.com demonstrates the remarkable unifying potential of AKM in ensuring that extraordinary local adaptation does not erode the desirable balanced harmony of DTLOMS across the Army.

Doctrine and TTP

How might existing DTLOMS change if influenced by the guiding hand of enlarged Title 10 direction? Link doctrine to TTP derived from a method acquired in shared experiential learning AKM provides. Knowledge-mining of strong communities of practice such as companycommander.com might provide a way to speed doctrine development. A stimulating sharing of current and emergent practices between doctrine writers and practicing leaders could accelerate the creation and institutionalization of new doctrine and TTP. Members of an appropriate community of practice stationed at a CTC could observe and confirm unit doc-

trine and TTP adaptation during a CTC rotation and spread the gospel of new tactical practices. Doing so would certainly serve to encourage innovative adaptation and sharing of evolving best practices and good ideas.

Such practices would co-opt more diverse leader development in developing doctrine and would lead to more rapid understanding and application of emerging doctrine and TTP. Also, more unit leaders would participate in doctrinal development, and because more units leaders will have been co-opted into doctrine and TTP development, more leaders would quickly understand, accept, and execute new doctrine and TTP. Emerging AKM, implemented through AKO, seems to provide emerging capabilities to reshape and inform with respect to doctrine and TTP. Just as companycommand.com provides boilerplate orders and reporting formats, TTP could be similarly disseminated. The ubiquitous nature of doctrine and TTP should ensure that advances are shared across all imperatives.

Link doctrine and TTP formulation to military attachés schooled to seek out local national military adaptations. Steal good ideas globally, then scrub them through online communities of practice linked to various forms of simulation. TRADOC proponents could overwatch informal classified or

unclassified online "trials" in chat rooms with closely controlled access. Use the power of AKO to permit much more detailed acquisition and analysis of foreign tactical practices.

TTP could be developed for various mixes of high/low DTLOMS or cross-cultural assimilation. These should be provided routinely in legacy forces to take advantage of their built-in bridge to less-DTLOMS-balanced armies. Reachback from deployed forces is necessary to readiness, but it is not enough. There is an abiding need to reach doctrine and TTP down to militarily less advanced coalition partners—doctrine and TTP tailored for the particular user.

In sum, the key to balanced harmony in doctrine and TTP development adjusting to increased emphasis on teaming and adapting is not just a fountain of U.S. innovation, it is also an explosive dissemination of doctrine and TTP plus "a way" to very high performing leader teams who know their adaptation to advantage U.S. innovation will be rewarded. This is both desirable and feasible in One Army in months not years.

Training

Identified by the recent ATLDP, most training changes required to adjust to increased focus on teaming and adapting are underway. There is clear understanding of the purpose and need to institutionalize self-awareness and adaptation. The Army is making the necessary policy and program decisions. A second training revolution is occurring. New training practices are receiving resources although, unfortunately, at a slow rate. Institutional leader professional development is facing significant beneficial improvement. The CTCs are being assimilated and modernized. AKM opens new opportunities for distributed individual, team, and unit learning.

As always, more can be done. First, the Army should establish several common learning practices. Learning means neither training nor education but embraces both. The natural breadth of learning ensures increased understanding across multiple imperatives. As more soldiers become leaders, down to and including squad, crew, or section, the focus on learning, not just training, becomes more important. By tradition, soldiers learn as individuals, but now, with greater attention to preparing teams of leaders, soldiers should learn in horizontal and vertical teams. New learning practices might be required.

All unit learning is experiential, requiring task performance to standard. Unexpected change that requires team adaptability for success is routine. ¹⁵ Learning occurs in basic skills, knowledge, and attributes (SKA) plus actual fighting-team SKA. These experiences result in near-continuous learning of

critical tasks because of the need to adapt to everpresent change. Learning also becomes near-continuous because of the inevitable turnover of team membership caused by personnel turbulence or attrition.

Advanced training is intensive, totally team-based, and linked to new doctrine and TTP. Training becomes absolutely execution-based, as does current practice in multiechelon, multigrade leader training during Gauntlet exercises at the U.S. Army Armor School. This is the future of institutional training, literally learning by doing.

Training combinations of plays or combinations of battlefield operating system (BOS) integrated tasks, in packages of virtual, constructive, or live simulations, are designed deliberately to draw on balanced DTLOMS.¹⁶ These plays become appropriate TTP for unit-of-action and below and are trained as audibles consistent with executionbased decisionmaking described in FM 6.0, Command and Control.¹⁷ Examples are joint suppression of enemy air defense or hasty breach. Then, new capabilities in macro/leader team packages as part of new equipment training should be introduced. All fighting teams exist only in cross-reinforced joint or combined organizations. Unit training must occur in such organizations. The critical path, which should be a focal point of learning research and development (R&D), is rapid team learning to master tasks, conditions, and standards of a niche capability so as to dominate the local situation. In sum, TTP should be designed to be easily learned by teams of leaders.

Learning R&D should also address improved evaluation of learning. All learning, both training and education and individual and team, is assessed routinely at all echelons. Demonstrated proficiency in actual combat task organizations or teams becomes routine. When the team cannot be assembled, distributed demonstrated actual team proficiency is permitted.

Leader

Support of the leader imperative to increase adaptability and teaming is obvious. Solid leaders are the lifeblood of tactical success, and today's leaders are profoundly adaptive. If they were not, they would not have survived the personnel attrition of the past decade or the incredible diversity of assignment experiences in the complex force-projection operations of a heavily committed Army. Ask 10 different leaders, E4 or above where they have served during the past 5 years, and the geographical and mission diversity of service they describe will be remarkable. The Balkans operations have become old hat; increased leader learning occurs routinely. What

a "virtuous circle" of leader experience and competence! Repeated CTC tours create a bank of midintensity combat lore in young leaders. Repetitive stability and support operations (SASO) develop complementary background lore in complex civilmilitary, joint, and combined operations.

A current leader imperative challenge is to take advantage of the diverse experiential lore resident in today's young leaders. Clearly there is an abiding case for according increased authority and responsibility to these highly experienced young leaders. The situation is analogous to the intensive World War II combat experience that created young but competent leaders. Subsequently, those leaders led the Army for decades. Another example is the acknowledged competence of today's senior leaders, who honed their very considerable skills as platoon leaders or company commanders in Vietnam.

Justifiable pride of accomplishment of today's young, adaptive leaders has been gained from clear operational successes in spite of the increased complexity of the operational environment. ¹⁸ How should the Army further hone and exploit this bank of valuable experience?

The School of Command Preparation (SCP) at Fort Leavenworth has new, highly effective learning tools that are in the process of being adapted to online learning. "Think Like a Commander" and "Duffers Drift" stimulate effective individual and team learning. They capitalize on student experience to create powerful learning environments that encourage leaders how to think, not what to think. Such techniques can be extended throughout the institutional leader-development programs.

In addition to the innovations at SCP, and as a result of vast improvements in digital communications, individual leaders can and should work together to become proficient leader teams, combining expertise in joint, multicultural, and multinational organizations. Examples abound from the Afghanistan campaign. Leaders can also perform routinely in teams because of diversity of SKAs acquired from serving in proconsul positions. Battalion and company commanders and staff officers serving in SASO acknowledge the vital interactions of political, military, social, and economic forces. They must draw on teamed experts as well as serve competently in vertical chains of coordination under multinational force commanders or civilians. If commanders and staff officers cannot team, they will be ineffective leaders. The challenge is how to help them. How can we teach them to develop team leadership? How can we teach them to have shared vision, trust, competence, and confidence? This is clearly a case for the human factors of R&D supporting team development in the leader imperative.



The new soldier learns adapting and teaming from the moment he or she comes onto active duty, whether it be basic training or a comparable initial Army experience. What is vitally important is that soldiers learn in the context or environment of selfless service to the nation. They acquire the values, attitudes, and skills associated with service beyond self.

All leader development in preparation for Objective Force operations requires additional cross-battle-field operating system familiarity so future tactical leaders can more easily combine or recombine at every echelon into new teams, continuously evolving before the enemy can. To sustain balanced harmony, each leader will need to understand the enduring application of the six imperatives.

Yet, an even deeper understanding will be required. Leaders clearly should understand the interrelationships of the imperatives as the imperatives are applied at their level of responsibility. Leaders must also understand the implications of the interrelationships as they interact one or two echelons

higher. The challenge is to possess the SKAs and motivation to adapt or adjust the balance within the six imperatives to retain battlespace dominance. Adapting or adjusting interrelationships with higher echelons in accordance with higher intent is the essence of a knowledge-based force. Routinely, leaders must be prepared to assume responsibilities one or two levels higher. The tools for doing so are becom-

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ing increasingly available. AKM practices enable increasingly effective communities of practice that can be encouraged to support teams of leaders, either vertically or horizontally. Company-command.com provides useful knowledge well above and also below company, battery, or troop echelons. A thoughtful command team such as a squad-platoon-company leader team serving in Kosovo can readily acquire valuable how-to tips from company-command.com. This is only the tip of the iceberg.¹⁹

There is not much to be done to sensitize the leader imperative to adapting and to teaming. This imperative is there now.

Organization

Adaptive force packaging and routine preparation of modular mission packages—plug-ins/plug-outs—provide a doctrine and TTP prescription of design requirements for organizations to be highly adaptive. What was an exceptional ad hoc-niche force-design feature years ago has now become a routine expectation.²⁰

Plug-in capability is not simply a BOS's reachback capability; it is plug-in of joint, combined, and civilian resources, and increasingly since 11 September 2001, it is interagency. Organizations are designed to facilitate adaptation, often on short notice. Common characteristics, which will ensure organizational adaptability, are coming. Characteristics might include, for example, maximum commonality of support functions and organizational design to facilitate easy plug-in of any BOS capability.

Organizational design can also be configured to support teaming. Examples are increased authority

and organizational flexibility to team with industry beyond typical current agreements to use commercial equipment or to establish dual use, such as use of the Civil Reserve Air Fleet. Organizations could be authorized to establish long-term teaming with industry. Why not teaming with AOL-Time-Warner, Citicorp, Bechtel, American Airlines, or Wal-Martdepending on METT-TC—to form new civil-military combinations? What about teaming with certain foreign organizations or multinational corporations to ensure support when deployed? Precedents abound in contract support of equipment or of installation support. Increased civil-military association is essential in urban warfare and, more recently, in homeland security. Associations such as these could be sustained out of the AC or RC.

A broad definition of the post-11 September national security team, which includes dominant international corporations, might presage variable civilmilitary organizations that are highly flexible in response to the unexpected. The USAR might be the best organizational structure for generating national expertise to be made available as plug-ins. The Army can create organizational frameworks that it cannot sustain in its normal force structure but that could be fleshed out and rapidly teamed with private-sector capability to provide world-class capability when required. This is exactly what was done as AT&T migrated to the Army Signal Corps during World War II. Where military organizations and corporations have teamed to share new and different institutional responsibilities, it should be mandated that these new patterns of relationships will be subject to "sunshine laws" that would subject such relationships to congressional review and rechartering. There are many paths available by which to make organization more adaptive and more supportive of teaming.

Materiel

The ability to adapt materiel rapidly to the advantage of battlefield opportunities has been sought for years. An example of adapting materiel to opportunity has been the future close combat vehicle (FCCV) development effort. The FCCV "is really a family of vehicles with very specific characteristics. The goal is to employ a single common chassis that meets the needs of the AirLand 2000 force, both light and heavy. This single FCCV chassis will be fully integrated with the principles of Vetronics and will be capable of performing various functions through the addition of various mixes of capability modules. The FCCV can be viewed as nothing more than a mobile, variable protected space, which can be left as is or fitted out-tailored—with one or more capability modules which have been optimized for specific battlefield functions. . . . In the final outcome, the design and construction of all modular capabilities must permit the close combat force the inherent flexibility to tailor itself at the subunit level—a level as low as is technically, economically and practically feasible."²¹

The vision of 1983, renewed with the equipping of the interim brigade combat team, continues to fruition in the Future Combat System (FCS). "Mobile, variable protected space" evolved through the M1A2 Abrams with design thermal optics in the Commander's Independent Thermal Viewer (CITV) to a hoped-for drop in laser or other killing mechanisms selectively replacing the CITV thermal viewer. Also, a plate was placed in the roof of the M1A1 to permit selective retrofit of advanced technologies from the M1A2. The FCS will supplant all of this as the logical product of decades of materiel development. Adaptation through continuing product improvement is old hat to the materiel community.

There are, however, vital new materiel capabilities emerging as the global Internet and increasingly rugged distributed communications and data processing systems provide opportunities to create families of interlocking global communities of practice within AKM "e-mail for life." Access to globally linked Internet service providers that connect wireless wide-band personal digital assistants—the low end of the U.S. Department of Defense networkcentric warfare capability—will be available for combat, force projection, and peacetime preparations. Automatic language translation will come, as will individually tailored leader portals configured for cross-unit, joint, and combined leader-team building. The foregoing capabilities comprise a knowledge revolution, not just an information revolution, and the knowledge revolution is the surest source and sustainer of future harmony across all six imperatives.

Soldier

The last of the six imperatives is arguably the most important—the provision for competent, confident, disciplined young soldiers proud to serve their country. Each of the other imperatives defers to the soldier as the ultimate arbiter of that imperative's adequacy.

The new soldier learns adapting and teaming from the moment he or she comes onto active duty, whether it be basic training or a comparable initial Army experience. What is vitally important is that soldiers learn in the context or environment of selfless service to the Nation. They acquire the values, attitudes, and skills associated with service beyond self. They must demonstrate disciplined performance to standard. Instilling, practicing, and enlarging this value in the solder must characterize the future soldier imperative. "Soldierization" of the new soldier must be even better than it is today. Regreening on the values, attributes, skills, and actions of more responsible positions during professional development in an institutional setting is becoming less frequent. Young soldiers increasingly face responsibilities in unexpected situations, often under great stress. They have, in fact, become national strategic assets placed in complex situations that often require personal actions of near-instantaneous tactical, operational, and strategic importance. They must have a solid foundation in duty, honor, and selfless service to the Nation. Therein lies the challenge—increased early soldierization to prepare young volunteers for careers of professional service.

Time

The conceptualization and practical realization across the Army of the interrelated nature of the six imperatives of DTLOMS has been a dominant force—perhaps the dominant one—in creating the U.S. Army as it exists today. As with most major advances examined after the fact, the six imperatives appear obvious and intuitive. They are not. Before the creation of TRADOC, there was neither the conceptualization nor an organization that could foster practical management tools to ensure that all organizations had a place within the Army's organizational responsibilities and authorities, particularly organizations that fielded capabilities matching doctrine that defined how the Army intended to fight and win.

But, are these six imperatives sufficient today? Perhaps a seventh imperative is needed—time. While vitally important resources of money and manpower expended routinely across all Army endeavors are justified annually within the executive and legislative branches, time is not. Yet, most unit leaders identify time as the most critical resource in accomplishing their missions. Worry about time is not limited to the chain of command. In recent surveys conducted by the ATLDP, concern about migration of additional responsibilities to units without allocation or acknowledgment of the time required to accomplish assigned tasks adequately was a significant issue to officers and noncommissioned officers (NCOs).²²

Genuinely new and powerful capabilities are being fielded to units, and new and important responsibilities are being assigned to soldiers. The information revolution provides marvelous opportunities for distributed learning. The computer at the kitchen table enables a soldier to complete a mandatory professional-development course no longer taught in residence by a TRADOC striving to conserve resources. Degree completion by distributed learning during unit assignment induces a young person to

enlist. A professional-development course prepares a young leader for possible deployment. All are genuinely good ideas now enabled through distributed learning. With AKO, the opportunities for distributed learning increase exponentially. But all of these demands increase soldier time. Who allocates this time?

Many senior headquarters feel free to give unit time away. How much is too much? Who determines this? How? Who protects the time available

One allocation plan might allocate
30 percent of the time available to day-to-day
administration, 30 percent to professional
development (individual and team, officer
and NCO), and 40 percent to unit mission
training. Whatever the allocation percentages,
commanders would be expected to allocate
enough time to permit subordinate leaders
to further allocate time as they
deemed appropriate.

to the company, battery, troop commander? How? Protecting time without further restricting the commander's freedom to address mission accomplishment is a terribly difficult issue. How does the Army do this? Faced with a decade of resource anemia and fewer personnel, time has been the only resource left, in theory, to the unit commander. Is time also to be regulated?

Instinct strongly resists regulating time within the small unit. First, the local commander, who knows the unit's needs best, is deprived of the necessary flexibility to exercise responsibilities. When presented detailed guidance for the use of time in their units, commanders are, in effect, receiving ultimate guidance about how to train their units to perform their missions.

There is also a practical problem. How does one mandate the use of time across an organization as complex as the Army? This might be thought through from strategic, operational, and tactical perspectives. Several current policies that address the allocation of time at various echelons, plus ways they might be expanded, follow.

Strategic perspective. At the strategic level, the Army could—

- Develop routine time-use guidance for units, such as percentage of duty time to be set aside for NCO and officer individual and leader-team professional development.
- Issue general guidance on the use of time. The Army has had general rules for the use of time in the past. For example, the traditional military

decisionmaking process (MDMP) recommends allocating two-thirds of planning time to subordinate organizations. Another example is the Army's recent decision to limit the time that units were permitted to prepare for deployment to the Balkans.

- Schedule 4-day weekends. Turn 3-day weekends, created by national holidays on Mondays, into 4-day weekends by encouraging training holidays on the preceding Friday. Expand this practice.
- Other services have recognized the extraordinary import of predictability in requirements for time in units. Aside from other considerations, predictability might be compelling justification for going to a deployment cycle as used by the Air Force or the sea services—one unit deployed, a second preparing to deploy, a third recovering from deployment—red, white, blue cycles. Rather than having two units in support of one unit preparing to deploy, as is currently the case, there might be a requirement for three additional units to support one unit preparing to deploy so the one unit can focus completely on individual soldier and leader development—a learning cycle advantaging AKM's great potential.
- ☐ Establish officer time similar to NCO time that NCOs use to train soldiers on individual tasks.²³ Conduct vertical and horizontal team-building exercises—Army, joint, and combined.

Operational perspective. At the operational level, the Army could—

- ☐ Slow operating tempo (OPTEMPO). Several years ago III Corps prohibited training on weekends—an important senior command initiative to slow OPTEMPO. Although this policy did not specify a time allocation, it implied the use of percentages to allocate time to unit readiness, to selfdevelopment, and to family time. One allocation plan might allocate 30 percent of the time available to day-to-day administration, 30 percent to professional development (individual and team, officer and NCO), and 40 percent to unit mission training. Whatever the allocation percentages, commanders would be expected to allocate enough time to permit subordinate leaders to further allocate time as they deemed appropriate. The allocation issue is not time-efficiency, but rather, time-effectiveness as seen by platoon leaders and company commanders; it is a small unit decision. Allocations might vary from one operational command to another for mission reasons; nevertheless, the discipline of having to formally address what the percentages should be brings time allocation forward as a command issue.
- © Coordinate block leave at training installations with local school systems' vacation time. The Army's centralized installation management could support national or state programs to allow local in-

stallation commanders to create incentives for local school boards to tailor school vacations to support unit schedules.

Tactical perspective. At the tactical level, the Army could reward commanders for effective use of time as measured by agreed-on standards. The effectiveness with which a period of time is used is, in part, measured against how that time might be used differently. In economics, this comparison is called opportunity cost. What might be the cost of using that time differently? What is foregone by using the time for one purpose versus another? So, effectiveness is in the eye of the beholder. The commander has one standard of measurement—unit readiness. The average family member has another—family unity. The ultimate arbiter must be the chain of command with its many responsibilities and authorities. The Army's strategic guidance on time allocation should provide guidance on what are acceptable and unacceptable costs. However, rules that govern the use of time must not preempt the chain of command's flexibility.

Efficiency in the use of time is profoundly affected by instability of personnel. The effects of turbulence and turnover of individuals and, indirectly, of teams simply have to be acknowledged in unit administration. The time required to regain team proficiency and cohesion after personnel instability must be acknowledged, or time efficiencies will evaporate. Furthermore, leader time, already important and normally quite fragmented, is about to become vastly more conflicted as a result of distributed learning.

Looking Forward

The six imperatives look as applicable for the future as they have been for the past quarter century. The practices associated with each imperative should ensure that the six imperatives harmonize. Harmony means that the imperatives mutually reinforce one another, that each imperative undergoes near-continuous modification or improvement, and that each imperative adapts more rapidly to changing combat conditions than does any enemies' comparable imperatives. Also, harmony means that change in one imperative is routinely translated into complementary and reinforcing change in the other imperatives.

As the Army looks forward to a leader-dominant force, existing almost as one giant brain of hundreds if not thousands of communities of practice linked by AKO, the current characterization of DTLOMS is incomplete. The executive and legislative branches should set the Title 10 bar higher. Teaming and adapting capabilities should be added to organizing, training, and equipping as major and abiding institutional responsibilities of the U.S. Army.

Time, already the scarcest commodity in units, is about to become scarcer. Therefore, time should become a seventh DTLOMS imperative so that it receives the necessary command attention and balance with the other six imperatives. DTLOMS-T? MR

NOTES

- 1. U.S. Army Field Manual (FM) 1.0, The Army (Washington, DC: U.S. Govern ment Printing Office (GPO), 14 June 2001), chapter 1, 27fn. Thoughtful leaders are adding or replacing areas of emphasis in DTLOMS to reflect current challenges. S becomes P for Personnel, reflecting the clear need for quality Army civilian support. F, for Facilities, is added to highlight the importance of facilities for force projection. The revised imperatives become DTLOMPF. I demur, for the additions are essentially management-oriented. DTLOMS clearly focuses on combat effectiveness in the TOE unit—the cutting edge of the Army. I too shall propose an addition, but that addition is clearly directed at improved combat readiness in the TOE unit. I believe that centrality of focus on small units should be retained.
 - 2. *U.S. Code,* Title 10, online at <uscode.house-gov/title_10.htm> 3. Carl Vuono, personal interview, 6 November 1996.

 - FM 1.0, chapter 3, 31.
- 5. See Frederic J. Brown, "Quality Over Quantity—and Hedges," Military Review (July-August 2002).
- 6. Huba Wass de Czege and Richard Sinnreich, "Conceptual Foundations of a Transformed US Army," no. 40, Land Warfare Paper, Institute of Land Warfare. March 2002. 43; Headquartes, U.S. Department of the Army, Concept for the Objective Force (Washington, DC: GPO, October 2001), 20.
 - 7. Wass de Czege and Sinnreich, 2.
- 8. For additional discussion of legacy and hedge forces, see Brown, "Transformation under Attack," Military Review (May-June 2002).
- 10. FM 1.0, chapter 3, 31.

- Association of the U.S. Army, 2001 Profile of the US Army, 7.
 U.S. Army Armor Center, "FCCV Family" (Fort Knox, KY: 10 May 1983) to IBDE LAV Family of the late 1990s to FCS 2003.
- Richard McDermott, "Learning Across Teams: The Role of Communities of Practice in Team Organizations," Knowledge Management Review (May-June 1999).
 For an excellent discussion of the importance of communities of practice, see Major Peter Kilner "Transforming Army Learning Thropugh Communities of Practice" Military Review (May-June 2002), 21-27.
- 15. Brown, "Preparation of Leaders," IDA D2382 (January 2000), IV-1fn.
- 16. Some packages might be unbalanced to instruct experientially the need to seek
- 17. FM 6-0, Command and Control (Washington, DC: GPO, TBP)
- 18. Successes include the Balkans, Afghanistan, and Partnership for Peace. There is simply no comparison between the situation in the Balkans today and the situation pe ceived by the world from 1993 to 1995.
- 19. Nested leader team learning at the interim brigade combat team is a superb example of the potential for vertical leader team learning.
 20. Brown, Army in Transition II (Washington, DC: Brassey's, Inc., 1993), 18fn.
- 21. U.S. Army Armor Center, 8.
- 22. Discussion by Stan Halpin of the Army Research Institute, Fort Leavenworth, KS, 03 April 2002.
- 23. There were comparable time allocations in units before World War II, but the Army was far less committed than it is today.

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