

# Develop People and Units Before Developing Technology

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*Agesilaus answers a man who asks why Sparta has no walls by pointing to the army and saying, 'There are Sparta's walls.'*

—Silius Italicus<sup>1</sup>

**D**URING THE 1st century A.D., Silius Italicus recognized the supremacy of man over machine as he decried Rome's reliance on its walls to defend it against attack. The French learned the lesson when they saw that the Maginot Line was no match for the Wehrmacht. The lesson—that a nation's soldiers, not new technology, are its best defense—is worth remembering as America's Army builds its 21st-century force.

Is the Army in danger of placing too much reliance on new technology? The Army has long studied the requirements for the Objective Force, which it expects to field between 2010 and 2020. The operational and organizational (O/O) plan outlines the capabilities this new force would require. The Objective Force would depend heavily on technological improvements. The plan recognizes the need for a new way of thinking about soldiers, leaders, and units to enable them to use new technology to their advantage instead of relying on technology to make up for personnel inadequacies.

U.S. Army Training and Doctrine Command (TRADOC) Pamphlet (Pam) 525-3-901, *The United States Army Objective Force Operational and Organizational Plan for Maneuver Units of Action*, states, "By far the most important design requirement of the Objective Force UA [unit of action] will be the development of adaptive soldiers, leaders, and units."<sup>2</sup> Because brigade- and battalion-level commanders of tomorrow's UAs are now lieutenants, captains, or majors, the Army must begin now to design and field the organizations to develop leaders with the skills and attributes the future fighting force will need.

Unfortunately, many of the Army's organizational and administrative requirements undermine the attributes that leaders, soldiers, and units explicitly re-

quire for the Objective Force. The most egregious is the Army's individual-centric personnel policy. The individual replacement system continuously rips apart the cohesion that fighting teams need. The Army must institute a unit-centric personnel policy to build individual skills, but not at the expense of operational units. The Army does not need to wait for new technology; such a system is possible now.

## Always Ready? Never Ready

In *Path to Victory*, Major Don Vandergriff explains the origin of the individual-replacement system, which stems from a strategy that assumes the full mobilization of the Nation's resources to conduct a war.<sup>3</sup> Chief of the Army Reserve Lieutenant General James R. Helmly recently claimed, "All of our processes are built for wars in which we have some amount of warning time; against a distinct state actor; against which we mobilize a large amount of forces, and then it's over and they go home."<sup>4</sup>

Helmly was speaking of U.S. Army Reserve (USAR) mobilization plans, but what he said relates to the Total Army as well. The Army's policies support the notion that there will be a long lag between the decision to employ the Army and its actual use.

Military affairs writer and reporter Elaine Grossman says, "Nearly all the services are organized around a preset rotational base for portions of their force to train up, deploy to expeditionary operations, return for a recovery period, then train up again. The Navy has deployed carrier battle groups in this manner for many years, and the Air Force adopted a similar approach with its Aerospace Expeditionary Forces in late 1999.

"Army officials say their objective is to keep all their active-duty forces at the highest state of readiness, and—at least thus far—have rejected the naval model of a rotational base for their own use."<sup>5</sup>

The Army clings to the belief that all active units should be ready to deploy at any time. Young Army leaders quickly learn that a unit or division cannot stay at readiness condition 1 indefinitely. Numerous

RAND Corporation studies, Government Accounting Office reports, Center for Army Lessons Learned articles, and internal reports corroborate that, in general, Army units cannot perform no-notice deployments as easily as unit-readiness reports indicate. A former battalion commander who researched the issue at the Army War College discovered that 30 to 40 percent of individuals in a unit cannot deploy once alerted for a small-scale contingency despite the fact that unit commanders, in strict accordance with regulations, were reporting readiness levels of between 91 to 97 percent.<sup>6</sup>

The primary reasons for the disparity between reported and actual readiness levels are that many soldiers are awaiting permanent changes of station (PCSs), expirations in terms of service, or retirement. Others have been stabilized because they have recently returned from senior service colleges or Korea or were attending professional schools. These symptoms of the Army's individual-centric personnel system demonstrate the sheer folly of expecting units with varying degrees of individual readiness to immediately deploy with any reasonable standard. A continuous stream of arriving and departing soldiers and leaders virtually guarantees that the high levels of trained Army units required in the post-Cold War world will be impossible to attain.

Because of the demand for always-ready units, units cannot stand down to absorb turnover and begin an intensive training cycle. Instead, units experience turnover at a near-constant rate. Units never reach the level of being totally untrained, but because of the constant turnover, they never reach true excellence either. The Army's training doctrine describes a narrow band in which units are designed to operate; there is even a name for it—the band of excellence. In truth, it is a band of mediocrity.

## A Proposal

U.S. Army Colonel Timothy R. Reese makes a compelling case for a rotational readiness system: "We constantly find ourselves retraining on the most basic tasks since, as a unit, we cannot get beyond the rudiments of our profession when individuals are constantly missing from the training."<sup>7</sup> The problem is ongoing personnel turbulence. Replacing the individual replacement system with a unit-centric system would correct many of the deficiencies Reese identifies.

In a unit-centric system, the Army would rotate deployable, all-arms units through sequential readiness phases. Unit personnel would move within a single 6-month phase at the beginning of a 2-year cycle. For the next 2 years, the unit would train together with the same people in the same positions.

In the second year, the unit would be available for deployment.

Unit readiness would climb steadily to "excellence" when the unit would be deployable. After the unit's deployability window closes, the unit would stand down for remanning and retraining. Since deployability windows would be staggered, some units would always be immediately ready for action. This proposal will require changes in organization, training, and personnel.

**Organizational changes.** The brigade would become the all-arms, deployable, modular unit that the Army would provide to a corps or joint task force. Today's brigade combat team (BCT) is formed by adding attachments, or "slices," of combat arms, combat support (CS), or combat service support (CSS). The new brigade would closely resemble today's BCT in capability, but slices would be organic, not attached.<sup>8</sup> The division would no longer have deployable assets and, hence, would no longer be a tactical unit. Instead, divisions would consist of four similarly organized brigades, with each division having a different mix of capabilities to allow the Army to keep a broad array of light to heavy capabilities always available. The division's mission would be to organize, train, equip, and deploy brigades.

**Training changes.** Each of the four brigades in a division would rotate sequentially through four training phases over a 2-year period. At any given time, one brigade would be unavailable for training because its soldiers would be in individual training at home station and at Army schools. Another brigade would be in an intensive train-up process. The third and fourth brigades would have already completed training, including a rotation to a combat training center (CTC) and would be ready to deploy. At the close of a unit's deployability window, it would stand down and then begin the process again.

**Personnel changes.** All personnel policies for the operational brigades would be unit-centric. Schools, PCSs, and changes of command, would be timed to support the unit's training mission, rather than detract from it. At the end of this 6-month phase, personnel would be locked into a position for 18 months and moved only by exception. Promotions would not alter positions. There is nothing inherently wrong in having a captain as a company executive officer or a staff sergeant as a platoon sergeant with a promotable staff sergeant in the platoon. Personnel changes would be infrequent, but in the uncommon event of leader incompetence, the officer or soldier would be removed as quickly as possible. Ideally, these changes would be made not later than 3 months into the 6-month unit-training phase.



UNIT	POSSIBLE LOCATION	TYPE	PROPOSED # BDE TROOPS <sup>2</sup>	PROPOSED # DIVISION TROOP <sup>3</sup>	PROPOSED TOTAL DIVISION STRENGTH <sup>4</sup>	CURRENT TOTAL DIVISION STRENGTH <sup>5</sup>	CHANGE
1ID	Riley, KS	Heavy, LCD	4521	1842	21056		
2ID	Lewis, WA	IBCT	4121	1842	19356		
3ID	Stewart, GA	Heavy, LCD	4521	1842	21056		
4ID	Carson, CO	Heavy, XXI	4341	1951	20400		
1OID (MTN)	Drum, NY	Light	3139	1052	14393		
25ID	Hawaii	Light	3139	1052	14393		
82d (ABN)	Bragg, NC	ABN	3577	1135	16337		
101st (AA)	Campbell, KY	AA	3565	1373	16524		
1AD	Germany	Heavy <sup>1</sup>	4285	1842	20053		
1CD	Hood, TX	Heavy, XXI <sup>1</sup>	4120	1951	19461		
					183,030	156,107	26,923

- Two heavy divisions, 1AD and 1CD, would be armor heavy. That is, each brigade would have two armor battalions and one infantry battalion. The three other heavy divisions would have infantry heavy brigades with the opposite mix of battalions.
- Numbers are taken from FORSCOM Regulation 350-50-1, Annex A. Does not include nondivisional and rotational support assets. Does take into account the addition of an engineer company and a third maneuver battalion not on the current rotational troop lists. For a heavy brigade, includes the GS Avn element.
- Divisional (nondeployable) assets include the HHC, a MSB, and the OPFOR BN which is configured as that division's currently configured cavalry squadron.
- Assumes that brigades in Phases I and II are 10% overstrength, brigades in Phase III/IV are 5% overstrength, and brigades in Phase V are at 100% strength. Also includes the divisional elements.
- Includes 151,098 personnel in 10 divisions (DAMO-FDF, Jun 99), 3,809 personnel in the 172d SIB (unit web page), and the approximately 1,200 soldiers assigned to the 173d (SETAF).

Figure 2.

## Advantages

A unit-centric personnel system would build much of the “bill” for Army trainees, transients, holdees, or students into units that are, by definition, C4 for individual training.<sup>9</sup> This would allow an increase in the percentage of assignments to tactical units, without increasing the force’s overall size.

Time on station (TOS) would increase. Overseas commitments (especially to Korea) would drive average TOS down. Current TOS for soldiers in Korea averages 14.3 months. In the continental United States (CONUS), the average TOS is 30.9 months. Movements to and from Korea account for 22 percent of CONUS turnover.

Replacing Korea-based forces with CONUS-based rotating units would increase CONUS TOS by 12.8 months.<sup>10</sup> The target TOS should be greater than 48 months to allow soldiers to spend two or more complete training cycle rotations with the same unit, increasing cohesion and competence. Also, the Army could enjoy significant cost savings if it removed some of its permanently based overseas units and replaced them with rotating units.<sup>11</sup>

Longer TOS at CONUS locations could lead to greater community involvement, a benefit of inestimable value to spouses and families. One demographic change that all services are confronting with difficulty is the rise in the number of two-wage-earner families. Increasing TOS allows spouses to complete their education or gain fulfilling employment.

Knowing when a soldier is available for deployment will be of inestimable value to families struggling under the omnipresent burden of deployability. Also, personnel managers would find it much easier to schedule schooling and moves.

## Challenges

Changing from an individual to a rotational readiness system will not be easy. Since the brigade combat team, as defined by U.S. Army Forces Command (FC) Regulation 350-50-1, *Training at the National Training Center*, does not include aviation assets, except for a small amount of general support (GS) aviation support, this analysis does not look at most divisional aviation assets.<sup>12</sup> Undoubtedly, there will exist a need for reconnaissance, attack, and additional lift assets within the BCT. A good starting point would be for each brigade to receive

Avg. Army Strength	480000
Division Strength	156107
% of Army in Divisions	32.5%
TTHS	68900
Estimated TTHS that is attributable to divisions	22408
Additional Requirement	4515

\* Almost certainly 32.5% is an underestimate of the TTHS that is attributable to divisional elements since those elements disproportionately include those who make up the bulk of the Army's TTHS (IET and OBC). This underestimate will likely compensate for the estimated 4,500 person shortfall.

Figure 3.

a company of each and maintenance assets to support them. Including these assets within the brigade would not increase personnel numbers significantly but might necessitate acquiring new aircraft and the equipment to support them.

Combat support and CSS branches could lose commands. However, many of those units were never operational commands. Division Artillery and Division Command commanders rarely have operational control of all their organic assets even when entire divisions deploy. This also applies to air defense artillery, signal, and military intelligence units. Rarely, if ever, do these battalions train, deploy, and operate as intact units. One reason why a senior officer from each branch or functional area should be in the division is that he can help train specialized units and individuals with niche skills. Eliminating branch identities should be considered at the field grade level or, perhaps, consolidating the branches into three areas: combat, CS, and CSS.

More cohesive units place greater demands on leaders. The 1980s Cohesion, Operational Readiness, and Training (COHORT) experiment found that the more cohesive units led to greater soldier self-motivation, which required more leaders with special skills.<sup>13</sup> Many COHORT unit leaders were of an age that they had developed their leadership skills in a draftee environment, so it is probable that the skills needed to lead self-motivated soldiers had been developed during the post-conscript decades. Those leadership skills and attributes, therefore, might not be special as much as different from those that were more common during an earlier era.

Unit-centric personnel policies that produce more cohesive units could substantially benefit from teaming—an organizational concept corporations use. Of course, this implies reassessing old leadership ideas and norms. The power of rank, authoritarian leadership, and the definition of fraternization, among others, would be up for review. Leaders would have to be more team-focused than authority-driven, which would require a significant change in the institutional mindset.

Rotating units through readiness levels might appear to decrease available Army combat power, but the opposite is actually true. Today's divisions find it difficult to deploy two brigades simultaneously. The 82d Airborne complained that with one brigade deployed to Afghanistan, it had difficulty meeting its required missions.<sup>14</sup> Committing a second brigade would cause the rest of the division to become ineffective.

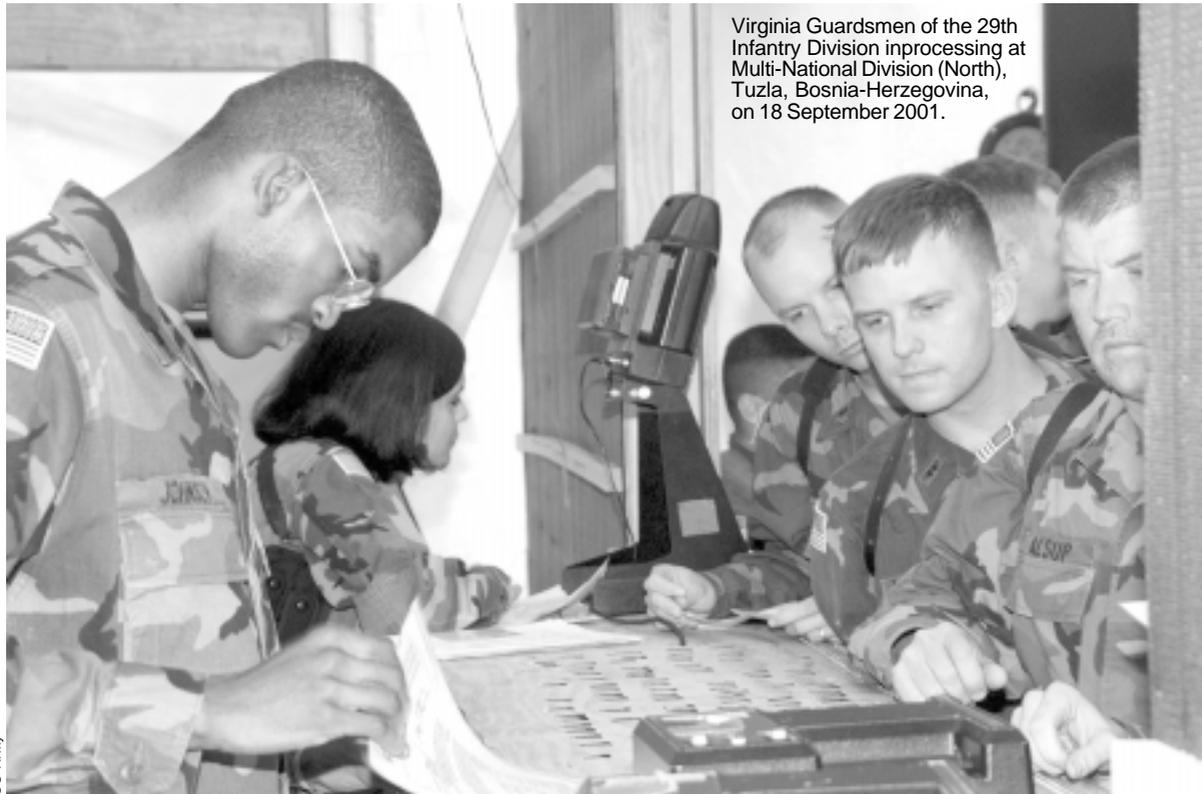
Although a division is composed of three brigades, it cannot deploy three separate brigades simultaneously.<sup>15</sup> The divisional units necessary to support a single deployed brigade do not exist in triplicate. For many functions (personnel, maintenance, medical, command and control), it is nearly as difficult to support one deployed brigade as it is to support the entire division. Economies of scale actually allow the division to reduce support requirements for an entire division. In other words, divisions are not designed to facilitate the detachment of individual brigades. To say that the deployment of a brigade essentially commits the entire division is no exaggeration.

Exacerbating a division's inability to deploy three brigades is the individual replacement system itself. Because of attendance at professional schools, pending moves or retirements, and Army and local policies that prohibit the deployment of soldiers who have recently returned from overseas, only 70 percent of today's soldiers are available for immediate deployment.<sup>16</sup> Currently, when the first brigade deploys, it often "trades" its nondeployable soldiers for deployable ones from the other two brigades, which leaves the remainder of the division in an even less deployable condition.

Reese says, "We train individuals who belong temporarily to a unit. They move in and out of those units based on their personal professional development time line. What the unit is doing is of little or no consequence."<sup>17</sup> The net effect is that three-brigade divisions are barely able to field two brigades for deployment.

Rotating readiness through four brigades within a division would mean that one brigade would be immediately ready to deploy and a second could deploy within 30 days. Brigades would also be continuously reforming and would be ready to relieve previously deployed brigades. These brigades would enjoy the benefit of having recently completed training, including a brigade-level CTC rotation with the same personnel in the same positions. Therefore, not only could a division with a unit-manning system more easily field two brigades, it could field better trained and more effective units than currently possible.

The personnel replacement system might not lend itself to use by the U.S. Army National Guard (ARNG) or the USAR. If so, would a unit-centric personnel system in the Regular Army but not in Reserve Components (RC) create two systems, each with its own rules and standards? At minimum, the Army would need to rethink the roles, missions,



Virginia Guardsmen of the 29th Infantry Division inprocessing at Multi-National Division (North), Tuzla, Bosnia-Herzegovina, on 18 September 2001.

U.S. Army

and functions of RC elements. By all accounts, however, an honest reappraisal of RC organizations is long overdue.

A change would induce a significant one-time cost as divisions add infrastructure. In addition to having to stand up a fourth brigade, each division would have to create four times the number of support elements needed to support one brigade. Further analysis might indicate that each division would need only three brigade “sets” of equipment.

Because a unit in Phase I might not need its equipment. Having that equipment when the unit does not have the manpower to maintain it causes difficulties. Once fielded, operation and maintenance costs should not be significantly greater than they are today. If units rotate to Korea for 6-month deployments, overseas infrastructure costs and PCS costs and entitlements will decline. Millennium Challenge 2002, part of the Joint Forces Command’s Transformation efforts, demonstrated the utility of keeping some forces overseas to expand global coverage. Therefore, the expected cost savings associated with rotating CONUS-based units overseas must be balanced against the strategic and operational benefits.<sup>18</sup>

Since there would be no individual replacements once a unit began Phase II, a unit-centric readiness

system would require a greater-than-100-percent fill of personnel to make up for attrition, which implies a requirement to study attrition rates by rank and military occupational specialty. Also, a new soldier would not be assigned to a unit in Phase I until after completing basic training, which can reduce attrition during the 2-year cycle.

Leaders must determine the grounds for removal. Most contentious of these is pregnancy. If, during Phase I, a soldier finds herself pregnant, and thus nondeployable, should she be removed from a unit with an upcoming deployability window? Leaders must also evaluate any other reasons why soldiers might be nondeployable for extended periods. During Phase I, it also makes sense for units to front-load all deployability requirements, including medical, dental, legal, and other regulatory and administrative requirements, as well as mandatory individual training such as prevention of sexual harassment.<sup>19</sup> Knowing that everyone is ready administratively would allow units to concentrate their entire effort on unit training and deployment.

A unit-centric system might create more limited options for soldiers in their reenlistment windows. To join a deployable brigade, soldiers must agree to extend their service through the end of the unit’s deployability window.<sup>20</sup> Some units would not be

available to a reenlisting soldier, but because at any given time every division will have one brigade in Phase I, every division would be accepting soldiers at all times. Obviously, the U.S. Army Recruiting Command and retention specialists must have increased visibility of the “supply chain” of available personnel and positions. Web-based personnel assignment systems currently under development will help in this area.

The inflexible nature of a unit-centric system could prevent new soldiers from coming on active duty except during the first phase of unit rotations, which could cause the Army difficulty in dealing with the bubble of new enlistees and officers who join the Army during the summer months following high school and college graduations.<sup>21</sup> Each division will require a nondeployable support element that would have an opposing force (OPFOR) within it. This unit, with the division’s support and staff elements, would continuously need new personnel because it would not be operating under the same unit-replacement system.

The OPFOR battalion, although a nondeployable unit, would be one of the most active units in the division. Because it would go to the field more often than any other unit in the division, unit personnel would acquire an incredible amount of operational knowledge in a short time—not unlike that which new soldiers now receive when they are assigned to Army OPFOR units at the Army’s training centers. The new system would afford ample opportunities for soldiers to learn their craft, if they are not immediately assigned to an operational brigade.

Not every unit can rotate its people by unit, so the Army must have two personnel systems: a unit-centric model for deployable units of brigade size and smaller and an individual replacement system for headquarters and unmodified table of organization and equipment units. Even within the division, two systems would exist since the Army would fill nondeployable division assets individually.

Does this plan create a system of haves and have-nots? Not necessarily. The unit-centric system would not be built around deployable brigades so much as it would be founded on the concept of systematically building rotating deployable units. Occupational fields that do not often deploy as entire brigades (such as military intelligence and military police units) could employ the same type of rotational system using smaller units. Conversely, corps assets that do not organize as divisions (such as armored cavalry, aviation, and artillery units) can amalgamate four similar organizations under one training “division”

headquarters, to ensure a ready supply of operational units.

What is fundamental is not the rotational unit’s size, but that units organize, train, deploy, and demobilize as units, not as groups of people assembled temporarily. Unfortunately, the Army’s personnel managers would have to cope with two different personnel systems simultaneously. Recognizing that fact is the first step to bridging gaps between them.

During periods of extended combat, how can units sustain effectiveness? Creating a personnel system suitable for a peacetime training environment but not suitable for war would be unacceptable. Bringing untrained soldiers to a unit already in combat would be a tragic mistake. Under the new plan, units within a unit-centric model would achieve combat power while in sustained combat, although the phases could be compressed.

One concern about using a unit-readiness system is that a unit rotating out of combat would somehow be stripped of combat veterans before it returned to combat. This must not happen. Once combat strength drops to a certain percentage, the unit would have to be pulled off the line and reformed with new personnel to keep necessary combat experience in the unit.

A unit-centric system would create the opportunity for greater inequity between units. A unit that loses a disproportionate number of its people in Phases I and II, whether for unavoidable reasons or because of leadership failure, would feel a need to equalize differences between units. For leadership issues, this would call for identifying and eliminating problems early, even if that meant an early relief of command.<sup>22</sup> At times, circumstances might warrant cross-leveling personnel within the brigade. Such moves should occur early and involve the least amount of travel. If cross-leveling will solve the problem at the company or battalion level, that should be the first choice. Only as a last resort should the brigade look outside itself for new personnel. Ideally, to create as much of a unit bond as possible, brigades should attempt to make all personnel moves not later than halfway through the unit training cycle.

If a division has deployed one or even two brigades, how could it simultaneously train the next brigade? The division headquarters must have organic subject matter experts (observers and controllers) and an OPFOR. Before the Combat Maneuver Training Center (CMTC) at Hohenfels, Germany, had a permanent OPFOR, divisions provided their own OPFOR for training. The divisional cavalry

Rangers with the 173d Army Airborne Brigade, disembark a C-17 at Aviano Air Base, Italy, after a year-long deployment to Iraq, 20 February 2004.



US Air Force

squadron often performed the OPFOR mission for the rest of the division. Since many of today's brigades have organic reconnaissance assets, the divisional cavalry squadron is still available to perform the OPFOR mission.

Each division would need a permanent OPFOR unit similar in size and capability to existing divisional cavalry squadrons. Such a unit, though nondeployable, would be a formidable force for training deployable brigades. Given that every 6 months it would train another brigade in the field, the OPFOR battalion would contain skilled soldiers. In fact, having this unit at the division level would act as a relief valve by absorbing excess soldiers arriving in the unit because of the cyclical nature of the Army enlistment process. The unit would also serve as a potential pool of personnel for uncommon occurrences, such as when a brigade requires additional personnel from outside the unit.

The CTCs would need to support entire brigades. For this system to work properly, an entire brigade should conduct a training exercise involving real (not virtual) deployment to confront a realistic enemy over realistic distances. Currently, the CTC only supports two maneuver battalions, so it would have to change its operations or expand its size to accommodate three maneuver battalions simultaneously. Congress must address this significant issue because the cur-

rent practice of training only two-thirds of a brigade is unacceptable.

As the Army's basic maneuver units, deployed brigades work directly for a corps or joint task force commander, which implies an eventual increase in the amount of joint training brigades need. Because each unit would have a known deployability window, brigades would have to coordinate training with units in the other services with similar deployment windows. In the areas of air/sea mobility and close air support, this would be especially important.

### **Why Change Now?**

One of the lessons learned from the COHORT experiment is that the Army tried to do too much at one time—fielding a new unit, creating new doctrine, employing new equipment, and building a new manning system while simultaneously moving an entire unit's families and household goods.<sup>23</sup> The Army has identified the need for a more cohesive team structure in future units. TRADOC Pam 525-3-90 states that because of the nature of the Army's future objective force, "It is essential to develop soldier and leader skills and a high level of unit cohesion, [and the Army's plan requires a] new level of competency in leaders . . . who have guile, courage, and are tactically smart. [Furthermore, the new Objective Force organization is centered on]

fighting teams who are competent and capable at the collective level."<sup>24</sup>

The Army envisions that new methods of training and leader development will be essential to building a "new competency" at the unit level, which implies that today's methods are inadequate.<sup>25</sup> The Army need not wait until it is ready to field the Objective Force before it attempts new personnel policies to support it. The COHORT experiment demonstrates that waiting to field new equipment, units, and doctrine and to implement a new personnel policy is too great a change to do simultaneously.

While current equipment limits the extent to which commanders can link information horizontally and vertically, employing a unit replacement system now would build the institutional knowledge to exponentially increase capabilities when the new equipment is ready. The Army must not wait for a change in technology before it can benefit from a change in personnel policies.

Special Assistant to the Secretary of Defense Ken Krieg, in remarks about past military transformations, says, "They were not just about the weapons; they were about the way minds came together to use the weapons."<sup>26</sup> Waiting to make needed changes until the needed technology is available will not only doom the possibility of meaningful change,

it will send the message to the force that technology is more important than those who are to wield it.

According to Colonel Julie Trego Manta, the Army's individual replacement system "focuses on personal career development and desires, rather than Army needs and readiness."<sup>27</sup> What the Nation needs is an Army focused on unit readiness. The Army can do that now—at little cost. One option is to reorganize the existing force to create a system that builds 10 highly trained maneuver brigades that would be available immediately and 10 more to be available within a month. Marine Corps Major General James N. Mattis recently said, "If we change the way we think, and it doesn't cost a lot, in [Washington, D.C.] that's a big selling point."<sup>28</sup>

The Army has experience with pilot programs and can implement a unit replacement personnel system servicewide within 1 year. The increased cohesion of a unit replacement system that would build combat power without increasing force structure, and do so at reduced cost, would prepare the Army of today for the Objective Force, whatever shape it might take. This plan would allow all combat units to serve in an organization with a focus on readiness. In an uncertain world where no-notice deployments are the norm, a unit replacement system will be a necessary force multiplier. *MR*

## NOTES

1. D.C. Feeny, "A Commentary on Silius Italicus Book I," dissertation (England: Oxford University, 1982), on-line at <<http://uts.cc.utexas.edu/~silver/Silius/silius-comm.html>>, accessed 19 September 2002.

2. U.S. Army Training and Doctrine Command (TRADOC) Pamphlet (Pam) 525-3-90, *The United States Army Objective Force Operational and Organizational Plan for Maneuver Unit of Action* (Washington, DC: U.S. Government Printing Office [GPO], 22 July 2002), 132.

3. Donald Vandergriff, *The Path to Victory: America's Army and the Revolution in Human Affairs* (Monterey, CA: Presidio Press, 2002).

4. James R. Helmly, quoted in Lisa Burgess, "'Third Force' To Fill Gap Between Active Duty And Reserves Is Subject Of Study," *Pacific Stars and Stripes*, 26 June 2002.

5. Elaine Grossman, "Inside the Pentagon," *Inside Washington Publishers*, 8 August 2002, on-line at <[www.fas.org/sgp/news/2002/05/ftp053002.html](http://www.fas.org/sgp/news/2002/05/ftp053002.html)>, accessed 9 April 2004.

6. Joseph A. Moore, Jr., *Personnel Readiness in a Force Projection Army*, Strategy Research Project (Carlisle, PA: U.S. Army War College, 2000), 11.

7. COL Timothy R. Reese, "The Blind Men and the Elephant," *Armor* (May-June 2002): 8.

8. I am assuming that the new brigades will be of approximately the same composition as the various types of brigade combat teams, per U.S. Forces Command (FC) Regulation 350-50-1, *Training at the National Training Center*, Annex A, "Troop List—Template" (Washington, DC: GPO, 1 July 02). See on-line at <[www.forscom.army.mil/pubs/Pubs/2530/SEC1-7\\_1.HTM](http://www.forscom.army.mil/pubs/Pubs/2530/SEC1-7_1.HTM)>, accessed 9 April 2004. Added to this organization are a third maneuver battalion and other elements that are similarly only two-thirds of what normally support a brigade (the engineer battalion, for example).

9. The Army designates individuals not currently in units as trainees, transients, holdees, or students (TTHS). Recently, the Army has averaged roughly 70,000 soldiers in TTHS every day.

10. *PERSCOM Stabilization Task Force IPR*, slide 4, 26 January 1999. (No other publishing data given.)

11. W. Michael Hix, Herbert J. Shukiar, Janet M. Hanley, Richard J. Kaplan, Jennifer H. Kawata, Grant N. Marshall, and Peter J.E. Stan, *Personnel Turbulence: The Policy Determinants of Permanent Change of Station Moves* (Santa Monica, CA: RAND, 1998), 41. The authors say, "The net effect of returning all overseas authorizations to CONUS would increase the CONUS stability index by about 17 months and save \$444 million a year, more than half the entire enlisted PCS-move budget."

12. FC Regulation 350-50-1.

13. Faris R. Kirkland and Linette R. Sparacino, eds., "Unit Manning System Field Evaluation," Technical Report No. 5, Walter Reed Army Institute of Research, Washington, D.C., September 1987, 2.

14. Henry Cunningham, quoted in "82nd Too Busy To Join Mideast Mission," *Fayetteville Observer*, 21 August 2002, and "Rotating Deployment Has Soldiers Working Harder Than Ever," 26 August 2002, which reports that with one of the 82d's three brigades deployed, the division had to give up one mission—Operation Bright Star.

15. The 10th Mountain Division, Fort Drum, New York, is composed of only two maneuver brigades.

16. Moore, 11.

17. Reese, 10.

18. For more information about Millennium Challenge 2002, see on-line at <[www.irwin.army.mil/g3/MC2002/](http://www.irwin.army.mil/g3/MC2002/)>, accessed 14 April 2004.

19. When appropriate, the Army should consider exempting units that stay together for 2 years from the annual requirement to conduct certain types of administrative training. Doing so would free substantial training time during Phase II and later.

20. A soldier might need to extend past the date of a unit's deployability window as there might be legislative or regulatory requirements that mandate that an individual have sufficient time to take advantage of the Army Career Alumni Program or other end-of-term benefits.

21. Delaying entry of potential enlistees and officers is a particularly acute problem. In 2002, over 800 new lieutenants waited an average of 5-1/2 months—some over 400 days—from graduation until coming on active duty. The effect of joining an organization that will not pay them, house them, or provide them health insurance bears watching to see if those unfortunate new officers will leave the Army more quickly than their peers.

22. Kirkland and Sparacino's study of COHORT indicates that bad leadership at any level in a tightly knit unit has a pronounced destructive effect. Commanders who relieved incompetent subordinate leaders "usually enhanced" the unit's effectiveness (76).

23. *Ibid.*, 2.

24. TRADOC Pam 525-3-90, 25.

25. *Ibid.*, 120.

26. Ken Krieg, remarks, U.S. Naval Institute Transformation Forum 2002, Alexandria, Virginia, 5 September 2002.

27. COL Julie Trego Manta, *An Enlisted Assignment System for a Transformed Army*, Strategy Research Project (Carlisle, PA: U.S. Army War College, 2001), 1.

28. MG James N. Mattis, remarks, U.S. Naval Institute Transformation Forum 2002, Alexandria, Virginia, 5 September 2002.

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