The upcoming year will prove pivotal to the U.S. Army. The modified priorities of the current administration, rapidly evolving civil-military engagements overseas, two ongoing campaigns, spiraling technologies development, the need for recapitalization, and declining resources will require decisions from Army leaders in a compressed time frame. Almost any course of action chosen in response to previous priorities will affect force structure (the size and balance between the operational and institutional Army) and the organizational design of the operational Army (the composition and command and control structure of our operational forces). By definition, these experimental modifications related to force structure and design will reduce capacity. The Army’s leadership must make choices that optimize its ability to accomplish the mission with less manpower.1

Several recommendations for changes to the Army’s organization have already been identified. The most pivotal change has been the configuration of the brigade combat team (BCT) as the unit of action. Some advocate reorganizing the Army’s artillery into a more traditional division artillery-like structure to support the BCTs. Such recommendations are far-ranging, and the method of analysis supporting this “divarty” concept involves an inductive method of identifying problems through experimentation and then reverse engineering corrective measures. However, deductive recommendations typically serve best during a time of constricting resources like the one we now face. Deductive methods provide greater efficiency and consistency by accounting for conditions that are prevalent rather than through experimentation examining possibilities. Deductive analysis in this case suggests that the organizational design of the unit of action, the BCT, would perform best with an organic field artillery battalion. Given current and anticipated conditions, retaining the organic artillery battalion in the BCT would be a better option for the BCT unit of action.
Build Teams the Way They Fight

The maxim that Soldiers fight not for ideology or glory, but for their comrades, has long been accepted. Accordingly, one logically expects that the configuration of a unit should reflect the way it will deploy and fight in order to increase its cohesion. This logic has not always been the case for the Army. However, in 2004, Army Chief of Staff General Peter Schoomaker implemented the conversion that changed the Army’s unit of employment. Implementing this tenet down to the brigade level allowed for inherent combat arms and services to become part of a standing organization. The codification of this unit of action concept resulted in new tables of organization and equipment (TO&E) for maneuver brigades. Under this table of organization, unit of action brigades (hereafter referred to as brigade combat teams, or BCTs) now had—

- Three maneuver battalions (heavy brigade combat teams have multiple combat arms companies within the battalions).
- An artillery battalion.
- A logistics battalion.
- Several enabling combat service support companies assigned to a special troops battalion.

Before this change, the Army’s central unit of employment was the division. Soldiers worked in one of the division’s three infantry or armor brigades or in the aviation, logistics, or artillery brigade. A comparatively small number of Soldiers filled billets in separate battalions such as signal or military intelligence, or in separate companies like the military police. When deployed, each maneuver brigade (except aviation) typically reorganized its force for operations upon receiving attachments from each of the other formations. When the unit returned to garrison, all attachments reverted to their parent unit’s control.

The Army as a Learning Organization

As a profession, the Army cannot lose sight of the purpose behind organizational design. In an effort to retain their corporate identity, leaders cannot stand as a special interest bastion defending jurisdictional dogma; their collective charge is ensuring that the Army serves the Nation. No organizational design can be sacrosanct. The Army’s organization of combat forces adapts, as required, so that it can best achieve its mission. The Army’s organizational adaptations since World War II serve as a clear indicator of this dynamic. A brief review of its modern organizational changes (1946 to 1992) and those in the postmodern era (1993 to present) provides a clear picture of the essential factors that drive organizational change, many of which apply today.

Modern organizational changes. The modern Army is traditionally composed of several types of combat forces—such as airborne, air assault, light infantry, mechanized infantry, and armor—each organized as part of a division. Within each of these categories, there are further variations. The armored cavalry regiment is distinct from the armor brigade. Air assault infantry is distinct from light infantry. Since World War II, the division has served as the Army’s central combat organization, the baseline formation for deployment and action. Since the 1950s, the Army’s heavy division has seen several organization modications intended to improve its effectiveness by increasing its size, incorporating new technology, or mitigating a reduction in resources. Whether the change was driven by new capabilities, such as the fielding of the Apache helicopter, or a big reduction in manpower as a cost savings, the result was largely an increase in the size of the division to create economy of scale.

Concurrent with these changes were changes in the echelon of command between battalion and division; these intermediate organizations were iteratively regiments, brigades, combat commands, battle groups, and with the Reorganization of the Army Division (ROAD) program in the 1960s, brigades yet again. Since then, brigades have remained the intermediate formation, although their size has expanded and contracted with each change in the division’s organization. However, the essential premise behind the brigade’s organization was nesting it within the division structure, as the division remained the base Army unit for deployment. A heavy brigade’s...
organization had a headquarters company and a combination of three armor or infantry battalions. When deployed, it received habitual support from a logistics and artillery battalion and would routinely have an attached engineer battalion, all from separate parent brigades. On a mission-by-mission basis, the division headquarters would briefly attach small, specialized units such as military police, air defense, and military intelligence to subordinate brigades. This transient organizational arrangement reduced the unity of command and complicated operational synchronization.

These division-centric designs reflected a doctrine and a strategy that envisioned multiple corps campaigns against a Cold War, Soviet-type enemy. After the fall of the Iron Curtain in 1989, the division organization underwent several small modifications. While few considered these latter changes as an improvement, those who did considered the changes a peacetime necessity to free monies for research and meet the practical personnel levels of an all-volunteer force. The division-centric paradigm produced two significant systemic outcomes: the brigade entered combat with a formation distinct from garrison and training, and the brigade had limited capability to operate independently from its parent division.

**Postmodern organizational changes.** Serious attempts to address these two shortcomings did not begin in earnest until the 1980s, despite requests from combatant commanders for formations below the division level that could operate independently in a Joint service environment. Some attribute this lethargy to an institutional desire to focus on the Cold War paradigm of conventional warfare. Even so, professional scholarship ultimately enabled the chief of staff to effect a design change in 2004 while conducting two campaigns. The increasing commitment of the Army across the spectrum of conflict, the emergence of transnational enemies, and the necessity of Joint service operations compelled a bold adjustment to the basic organization of the Army.

In the post-Desert Storm period, Colonel Douglas Macgregor evaluated several land campaigns to determine how organizations adapted their structure in response to rapid changes in the methods and tools of warfare. While these adaptations to the formations varied widely, a consistent pattern emerged: once deployed to combat, self-contained,
robust, brigade-size units were the optimal solution for employing new technology, weapons, and doctrine. They proved most adaptable. With this as a start point, Macgregor used computer modeling to test kinetic capabilities and strategic lift requirements. The results led him to design a six-battalion formation of combat arms and combat support units, which he called a “combat group.” He argued that the “combat group” should replace the division as the Army’s base organization, with echelon-above-corps organizations possessing discrete capabilities reconfigured as augmentation.

Brigadier General Huba Wass de Czege and Richard Sinnreich worked towards the same end by considering the changing nature of the threat and a significantly increased mission set. They concluded that—

The defining quality of the current operational environment is the growing convergence of military challenges once associated with distinctly different kinds of contingencies. Because of this gradual but accelerating convergence of military challenges, it is becoming infeasible to design military forces, especially ground forces, to deal uniquely with one aspect of the conflict spectrum or another. Instead, the emerging operational environment will place a premium on Army forces that are organized, equipped, and trained to shift rapidly and smoothly from any point on the conflict spectrum to another, precluding the need to improvise for any mission that diverges in scale or character from a single preconceived design requirement.

Put differently, the era of hyper-specialization of Soldiers assigned to specialized maneuver units has passed. While this assessment provided a compelling reason for changing the Army’s operational design, it did not indicate the echelons affected. Subsequent analysis produced two additional conclusions. First, “recent wargames repeatedly revealed that much of the load on strategic mobility assets, especially in the early phases of conflict, is associated with organizational overdesign—the inclusion in basic tables of organization and equipment of capabilities and resources that are essential to combat performance only in certain conditions or at certain stages of battle.” Thus, by modularizing units at lower levels, Army forces could be tailored for specific missions and thus reduce the strategic transportation requirements. This first conclusion, while pragmatic, also supports their second operational conclusion:

Army formations must be inherently adaptable to a broad range of operational tasks without forfeiting the cohesion essential to effective combat performance. That cohesion is most essential at the tactical level of engagement, where both soldiers and units are under the greatest stress, and where rapid combined-arms synchronization is most vital. [Accordingly], the Army will require stable combined-arms formations at the smallest level capable of independent operational commitment.

Clearly, many of Macgregor, Wass de Czege, and Sinnreich’s conclusions are shared. Moreover, where their respective conclusions differ, they are not contradictory.

Organizational design principles. When compiled, the above pre- and post-9/11 research on Army organizational design provide patterns and conclusions that partially account for the Army’s success to date with the unit-of-action BCT. Great Soldiers and leadership will always have a preeminent role in any Army organization’s success. With regard to ground combat forces, a synthesis of the above provides five organizational design principles that can provide evaluation criteria for assessing proposed organizational changes in a resource and time-constrained environment:

● Mission. Mission accomplishment and the protection of Soldiers are the two foremost considerations in organizational design.

● Adaptiveness. The Army changes its organizational design in response to the enemy and new technology. Composite brigades are most capable of integrating changed doctrine, technology, and weapons.

● Cohesion. Cohesion is the cornerstone of a unit’s combat effectiveness; more is better. The degree of cohesion in a unit is proportional to the training and time Soldiers spend together at all levels. Standing brigades, comprised of combat and support units, achieve better cohesion and as a result produce battlefield effects greater than the sum of their parts.
• Full Spectrum Capabilities. The contemporary environment demands composite units below the division level, as they are most capable of adapting to the rapidly changing spectrum of conflict found within a single area of operations.

• Joint Operations Capabilities. Joint operations benefit from composite brigades as they enable mission specific force structure and avoid overburdening strategic lift with excessive or redundant capabilities.

These five principles are not inclusive; others may exist. However, compelling reasons should accompany any organizational design proposal that does not meet these proven five principles.

Organizational Design Today

The Army’s current emphasis on the BCT design suggests there is alignment with the aforementioned criteria. The Army’s 2008 strategy explains that the Army will continue to operate across the spectrum of conflict with state and nonstate actors increasingly employing technology with long-term force implications. The Army campaign plan applies this strategy by increasing the size of the Army to create a larger pool of brigades that are cohesive, agile, and can integrate among components, other services, and nations. The Army follows these guidelines in its modernization policy: “The Army must continually review its structure and capabilities to ensure it remains adaptive and responsive to the evolving world security environment.” Clearly, the Army sees the implementation of the modular brigade design as a significant improvement and does not intend to revert to the division-centric paradigm.

This continued commitment is significant. Organizational theorists assert that the natural tendency of the Army in the wake of such significant change would be to dismiss the relevant lessons of recent combat experience and “fall prey to the willful amnesia to which the Army succumbed after Vietnam.” H.R. McMaster’s recent assessment of the initial U.S. strategy in Iraq underscores this institutional behavior as a significant concern.

The Army’s synchronized commitment to the BCT speaks volumes about the success of modular formations in combat to date. However, while the Army appears to have overcome its institutional tendency...
to revert to a previous organizational design, it does not acknowledge a need for further adaptation.

Rather, some are calling for an increase in the number of modular “fires brigades” with habitual relationships to maneuver brigade combat teams similar to the division artillery paradigm. Proponents argue that this change is necessary because of—

● A decline in artillery competence at training centers.
● Low morale from a reduction in senior officer billets and decreases in Field Artillery branch (FA) missions.
● A loss of technical knowledge within the branch.

In a resource-constrained environment, such a change would require moving the field artillery battalions from the BCTs to new fires brigades. While the FA branch observations may be valid, such concerns violate the five organizational design principles and rely on unstated, questionable assumptions.

Without question, FA skills typically found at Grafenwoehr in the mid-1980s are not apparent today, but the same condition also exists with Abrams tanks, Bradley Fighting Vehicles, and air defense artillery gunnery. Should we correct these latter weapon deficiencies by reverting to brigade-pure formations for each? Obviously, this makes no sense for the modular BCT, when armor and infantry skills have also atrophied. Moreover, this recommendation implies that there are no successful FA units—that principles one (mission) and two (adaptiveness) were not being met in the BCT concept—so a categorical change is required. This logic does disservice to the accomplishments of units like 1-82 Field Artillery of 1st Brigade, 1st Cavalry Division, which fired thousands of rounds in support of combat operations without incident, combat-tested Excalibur for the Army, and conducted counterinsurgency operations near Taji, Iraq, during Operation Iraqi Freedom 06-08.

With such unit-to-unit disparities, it seems more accurate to conclude that FA battalions in the modular BCT can be effective if properly led and trained. Gian Gentile makes a strong case for more emphasis on core mission essential task lists, but that discussion is outside the scope of this article.

Some observers attribute low morale among junior FA officers to the loss of senior officer billets under the unit of action design and to the atypical missions FA units have had to perform. For this argument to be compelling, we have to conclude that principle three (cohesion) does not apply in this case. The morale and cohesion of the fighting unit have remained definitive combat multipliers throughout history. While FA officers deserve a competitive chance for advancement, an artillery career path under a division artillery-like design should not come at the expense of a brigade’s cohesion. Organizations in the Army are designed foremost to accomplish the mission (principle one), not to self-perpetuate. Moreover, other branches have had significant reductions in senior billets but have not seen a corresponding decline in junior officer morale or branch effectiveness. Many units—from a variety of branches—have had to conduct atypical missions and have been successful.

Is a loss of technical skill within a branch a reason for changing the current modular BCT design? Armored cavalry regiments have a long history of successfully integrating artillery, maneuver, and aviation. Their field artillery assets are assigned as batteries at the squadron level. The 3d Armored Cavalry Regiment’s success in Tal Afar further demonstrates the effectiveness of combined arms brigades that include FA units. It seems plausible that there are other ways to preserve artillery institutional technical knowledge (such as force generation and professional military education modifications) without implementing changes that violate the principles of cohesion and utility.

Summary Analysis

While the next five years will challenge the Army with operational requirements, declining resources, and new priorities, the Army’s actions during the last ten years with regard to organizational design have positioned it to adjust efficiently. Demonstrating that

The morale and cohesion of the fighting unit have remained definitive combat multipliers throughout history.
it is a learning organization, the Army has adopted a modular brigade-centric organizational design that meets current and anticipated mission requirements. A review of the literature on this topic suggests five principles to use to assess proposed changes to this organizational design. These principles demonstrate that a recent proposal to change the artillery organization inappropriately attributes perceived FA branch problems to the BCT design. They also indicate that further analysis of the utility of the armored cavalry regiment’s table of organization and equipment is warranted. The armored cavalry regiment’s long established table of organization and equipment (with Abrams tanks and Bradley fighting vehicles, with mortars at the troop level and with artillery at the squadron level) may justify the permanent assignment of tank and infantry platoons within the maneuver companies to improve cohesion and codify tactical employment patterns that have existed since World War II. This same logic suggests that a comparison of lessons learned from the armored cavalry regiment’s table of organization and equipment to the lessons learned under the BCT’s current table of organization and equipment may provide compelling reasons to retain other companies—such as engineers—within the brigade’s combined arms battalions rather than assigning them to the BCT’s special troops battalion.

In the interim, the current unit-of-action BCT is a significant improvement over the divisional design and remains the most effective formation for the Army. MR

NOTES

1. The author is most appreciative of the comments provided by reviewers and the insight of Colonel Greg Reilly.
3. TOE: Table of Organization and Equipment. A resource document that specifies the personnel and equipment required for each echelon of subordinate command. Also expressed with small changes as an MTOE for Modified TOE.
7. Ibid.
8. The logistic, engineer, and field artillery battalions would each come from a distinct brigade-size unit, commanded in garrison by a branch-affiliated lieutenant colonel.
9. Force XXI, implemented in the late 1990’s, reduced the number of infantry and armor companies in a battalion from four to three, and added a reconnaissance troop to the brigade. It compounded the challenges of cohesion and task organization by consolidating most of the logistical personnel in the division support command.