



Maintaining the Combat Edge

Major General Michael S. Tucker, U.S. Army, with Major Jason P. Conroy, U.S. Army

The Army has to regain its edge in fighting conventional wars while retaining what it has learned about fighting unconventional wars.

— Secretary of Defense Robert M. Gates, 10 October 2007¹

Major General Michael S. Tucker is the commander of 2nd Infantry Division in the Republic of Korea. He recently completed a tour as the deputy chief of staff (operations) for the International Security Assistance Force in Afghanistan. He also served as a brigade commander in Iraq. He holds a B.S. from the University of Maryland, an MPA from Shippensburg University, and an MMAS from the U.S. Army Command and General Staff College.

Major Jason P. Conroy, U.S. Army, is the chief of Operational Assessments at the Joint Functional Component Command for Space, Vandenberg Air Force Base, and the author of *Heavy Metal: a Tank Company's Battle to Baghdad* (Potomac Books, 2005).

PHOTO: Soldiers from the Republic of Korea 75th Mechanized Infantry Brigade and the U.S. 2nd Infantry Division hustle toward their fighting positions during a combined arms live fire exercise, 18 April 2010. (Photo by SGT Karla Elliott, 2ID Public Affairs)

THE UNITED STATES has been at war in Iraq and Afghanistan for over nine years. During this time, there have been profound changes in the Army's force structure across all warfighting functions. These changes have accompanied a steady atrophy in our ability to conduct major combat operations (MCO) and should give us cause for concern. Much of the unit structure and training competency that existed nine years ago are no longer present, even though the National Security Strategy of May 2010 mandates: "We must maintain our military's conventional superiority, while enhancing its capacity to defeat asymmetric threats."²

The Army's recent shift to emphasize a single mission essential task list (METL) is a positive change. However, due to the short dwell time within the Army Force Generation (ARFORGEN) model, we have not fully exercised the modular force structures that exist in the Army today under the rigor of our new METL. Our modular force has also not been subject to long-term ARFORGEN requirements and sustainment operations at home station. This shift in focus to a single METL, combined with extended dwell periods, will allow commanders at all echelons to experience and identify modularity's effect on their units.

The changes toward modularity have transformed the Army from a division-based structure optimized for fighting large-scale conventional wars to a brigade-based expeditionary force largely stationed in the continental United States. While this reorganization has proven to be versatile and effective in support of Operations Iraqi Freedom and Enduring Freedom, we have yet to truly test the modular force in support of our new METL. Many senior leaders, both military and civilian, have recognized this shortcoming; however,

U.S. Army, SGT Andrea Merritt



A Bradley Fighting Vehicle tows an M58 mine-clearing line charge as it prepares to clear a simulated minefield while an Apache helicopter provides fire support during the 2nd Infantry Division combined arms live fire exercise, 18 April 2010.

they have had few opportunities to observe training events focused on major combat operations conducted by a modular force. The capabilities, types, and numbers of this modular force are in need of review as we increase dwell times and focus on preparing trained and ready forces.

Our veteran Army is an effective stability and counterinsurgency force, but our junior leaders and soldiers are untrained on the wide area security and combined arms maneuver tasks found in our current METL. The pool of available talent to restore these capabilities is dwindling at the brigade level and below. Currently, the Army's only expertise and experience with these skill sets resides with senior noncommissioned officers and senior field grade officers. If we have not effectively trained and mentored our junior leaders on such skills, we will lose hard-earned institutional knowledge resident in the Army of Desert Storm and Operation Iraqi Freedom I.

Insights garnered from battalion-, brigade-, and division-level exercises conducted within the 2nd Infantry Division (2ID) over the past several years confirm that the Army must swiftly use its intellectual capital to restore balance in training. Not only is 2ID the Army's only forward-deployed committed division, it is also the Army's only modular divi-

sion currently focused full time on major combat operations in support of the Army's new METL. The 2ID regularly trains for wide area security and combined arms maneuver tasks during a variety of full-spectrum training events.

Preparing for Hybrid Opponents

We have learned through painful experience that the wars we fight are seldom the wars that we planned. As a result, the United States needs a broad portfolio of military capabilities with maximum versatility across the widest possible spectrum of conflict. — Secretary of Defense Robert M. Gates, 2 February 2010³

If we have learned anything from the current conflicts, it is that our enemies will seek to use a full array of threats against us. They will employ a mixture of these threats and transition among them over the course of an extended campaign. This mixture of threats has been labeled the "hybrid threat" in FM 5-0, *The Operations Process*.⁴ However, the reality of Russian tanks rolling into the Republic of Georgia not long ago was an important reminder that nation-states and their militaries still matter. Of more interest to 2ID is the North Korean threat 30 kilometers from our division headquarters.

Israel's failure against Hezbollah in 2006 demonstrates the risk of neglecting MCO skills for an extended period. When called upon to conduct major combat operations against a hybrid threat, the Israeli Defense Forces failed to achieve tactical, operational, or strategic success. Returning to full spectrum training resulted in dramatic success in the 2008-2009 Gaza campaign. A recent RAND study reported the Israeli Forces learned that the basics of joint combined arms fire and maneuver were necessary for successful operations against hybrid opponents and that tanks and infantry fighting vehicles provided mobile and precise firepower to close with and destroy the enemy.⁵

Army at a Tipping Point

Focused on protracted counterinsurgency missions since the fall of Baghdad in 2003, the Army is at a tipping point. We all but stopped training on tasks supporting MCO several years ago, and we are now clearly seeing the effects of this shift. We have made enormous gains in stability and counterinsurgency skills such as protecting the population, training host nation security forces, and integrating joint and interagency enablers. However, these gains have come at the expense of our ability to conduct MCO. In the long term, the ARFORGEN model will provide a versatile mix of tailorable, rotating networked organizations.⁶ But, the process has barely been able to keep up with the demand of deploying units in support of OIF and OEF. In many cases, the demand has exceeded the supply, leaving no strategic flexibility. Many units are on a nearly 1:1 "boots on the ground" (BOG) to dwell time ratio, which exceeds of the Army's immediate goals of 1:2 for the Active Component and 1:4 for the Reserve Component.⁷ The Army has already identified that it cannot maintain this pace and retain an all-volunteer force for an extended period of time. Consequently, the longer-term Army goal is 1:3 for the Active Component and 1:5 for the Reserve Component. The BOG-to-dwell time ratio must increase so the force can rest, recuperate, reset, and retrain. With a longer dwell time, training must include combined arms offensive and defensive operations to maintain our hard-earned superiority in MCO. We must increase professional military education attendance to address the current backlog and ensure we prepare NCOs and officers

for greater decision-making and leadership responsibilities across the full spectrum of operations.

After 12 months of distributing food at refugee camps or negotiating with local officials, armor companies and field artillery batteries find it difficult to skillfully conduct gunnery. In addition, many, if not most, of the intelligence tactics, techniques, and procedures that we use during MCO reside almost solely in the personal experiences and memories of senior NCOs and field grade officers who trained and executed those tasks early in their careers. Order of battle skill sets have become a lost art among junior military intelligence personnel. Today, intelligence analysts are more like police detectives looking for "persons of interest." The average soldier cannot identify threat equipment, threat capabilities, or the significance of signature equipment, but he can identify individuals or persons on watch lists.

Units now receive junior NCOs and officers who have had little or no training on offensive and defensive operations against conventionally organized and equipped enemies. They have little or no knowledge of breaching or gap crossing operations and have difficulty analyzing the terrain, visualizing enemy courses of action, and developing event templates to identify signature equipment and high-value targets. These tasks and skills are crucial and quickly atrophy if not practiced.

With budget supplementals and Overseas Contingency Operations funding over the past nine years, the Army has enjoyed abundant resources, but in the future, we can expect tightening budgets that affect our weapon systems, capabilities, and size. We must examine how to organize and train for the future while fighting our ongoing wars. We must make hard choices about the training, capabilities, and force structure of our organizations. We should anticipate external pressure across our institutions to accept efficiencies that generate "good enough" organizations capable of executing our METL.

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Many of our revised training models already reflect this reality, and budgetary constraints will increase the challenge.

Current Force Structure

The purpose of modularity was to create a brigade-based Army more responsive to the needs of geographic combatant commanders by better employing Joint capabilities, facilitating force packaging and rapid deployment, and fighting as self-contained units in nonlinear, noncontiguous areas of operations. The goal of this effort was to enhance ongoing operations by reorganizing existing units within the Army's structure. The centerpiece of this reorganization is the brigade combat team (BCT), and the result of modularity is that brigades are no longer tied to specific headquarters or posts. Essentially, modularity means organizations task-organized for the operational environment.

There are still many concerns with the composition, structure, and number of modular organizations. Some of these concerns are with the numbers, capabilities, and types of BCTs in the Army. The number of BCTs grew from 33 to 43 and the BCTs became much more versatile and self-contained;

however, heavy and infantry BCTs gave up significant capability with the loss of a maneuver battalion in favor of a reconnaissance battalion. Before modularity, more than half of the total brigades in the Army were heavy brigades. The proposed number of heavy brigades in Total Army Analysis 12-17 is 17 of the 45 BCTs, or 38 percent. Although the Stryker BCT provides exceptional maneuverability and firepower, it lacks protection and is extremely vulnerable to tanks and most anti-tank weapon systems our adversaries employ. Infantry BCTs are essential during MCO; however, they lack a vehicle that provides mobility or protection. Only in the last several years have BCTs been issued a mix of up-armored HMMWVs and mine-resistant ambush-protected vehicles (MRAPs) while deployed. Without mobility and a mounted weapon system, the infantry BCT does not have staying power against mounted hybrid threats. The infantry BCT needs a ground combat vehicle that provides mobility and protection to its maneuver elements. The Army's ongoing effort to provide it is an encouraging step.

Most of the controversy over the conversion of organizations to a modular design has been



U.S. Army, SGT Karla Elliott

Soldiers from 2nd Battalion, 9th Infantry Regiment prepare for lanes training during a 2nd Infantry Division combined arms live fire exercise, 18 April 2010.

about the command and control structure above the brigade level. The Army decided on the three structures of division, corps, and theater army headquarters. The modular corps and division designs are similar, but with two key differences.

Divisions are the Army's primary tactical warfighting headquarters. While BCTs are the basic building blocks of the Army's tactical formations and the principal means of executing engagements, divisions utilize their more robust staff to integrate engagements into battles. The division headquarters' principal task is synchronizing subordinate brigade operations.

Second, the higher-grade rank structure of the corps headquarters makes it a better choice for transitioning to a Joint headquarters such as a Joint Forces Land Component Command or Joint task forces. The Army continues to struggle with the role of the division and corps headquarters and their relationship to brigades. Some worry that "we've PowerPointed over the problem of the Army division and corps headquarters echelons of commands and what their roles should be. The Army is more than just a collection of brigades."⁸ The Army has still not truly tested and validated these headquarters for MCO.

Atrophied Skills

As we seek innovations in our training, we will never forget that at every echelon of our profession we must still rely on our leaders to be masters of their weapons systems, skillful in unit tactics, and competent in combined arms operations and the integration of organic and joint fires. —General Martin E. Dempsey, June 2010⁹

Leader and soldier skills critical to the Army's ability to conduct MCO are disappearing from our tactical units at a rapid pace. Many of our senior leaders have recognized this shortcoming, but few have had the opportunity to observe the results of our Army's dilemma during training events oriented toward our new METL. Maneuvering mounted forces to close with and destroy the enemy through direct and indirect fire is quickly becoming a lost art. Today's maneuver organizations are very good at operating at the independent platoon level, but they cannot operate as a maneuver element in an integrated combined arms force. They are very comfortable conducting platoon patrols in a mix

of up-armored HMMWVs and MRAPs for short durations from forward operating bases. However, it has been years since platoons have maneuvered as part of a larger company or battalion formation over extended distances and time, integrating both direct and indirect fires.

There has been less demand for indirect fires. Fire support in counterinsurgency and stability operations requires a much smaller volume of fires than that required during MCO. In Iraq and Afghanistan, maneuver commanders often task their fires organizations to perform missions outside their core competencies (i.e., provisional maneuver battalion, escort missions, base defense). Now a generation of company grade officers and junior NCOs are not proficient in the tasks associated with the delivery and coordination of indirect fires. Because of collateral damage considerations and target sets that do not require a large volume of fire, we seldom mass fires at the battery level or higher in stability and COIN operations.

Another core maneuver task that has atrophied, and one that has been impacted by the modular organization, is combined arms breaching. This complex task requires synchronization, which necessitates detailed reverse-breach planning, clear sub-unit instructions, well-rehearsed forces, and effective command and control. This type of training and education is lacking today, with only senior NCOs and officers retaining the skill sets to plan and execute this complicated operation. Moreover, having only one engineer company within each heavy BCT significantly limits its ability to accomplish this task.

Diminishing combat engineer expertise in executing gap crossings is acute. Engineer soldiers do not have the experience to plan or advise their battalion and brigade commanders on executing this task to standard. Exacerbating the problem is the absence of an engineer battalion in the heavy BCTs, which means the brigade commander's expert for engineering operations is a major on the

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Photo courtesy of 6-37 FA

The Avenger Weapon System engages a target with a Stinger missile during a live-fire exercise conducted by 6th Battalion, 52nd Air Defense Artillery, near Dacheon Beach, Korea, 13-20 November 2010.

brigade staff who might not have a background in breaching or gap-crossing operations. The current initiative to restructure the brigade special troops battalion as a brigade engineer battalion with an additional engineer company may address this concern. However, this initiative does not address the training and oversight of the military intelligence company or the signal company in the heavy BCT (which falls under the special troops battalion).

The build-up of forward operating bases and corresponding contract support has led to erosion in Army sustainment capabilities that once ensured our freedom of action and extended operational reach. Major combat operations demand high volumes of materiel—particularly fuel, ammunition, and spare parts—to prosecute operations over extended distances. We have seen repeatedly that our logisticians are unaccustomed to processing the volume of supply requests necessary to maintain combat power or executing supply trains by echelon over extended distances. Also, many of our operators are no longer accustomed to maintaining their own vehicles. The quick development and fielding of MRAPs has meant contracting the necessary maintenance support. Stryker vehicles are also primarily maintained by contractors.¹⁰

Contracting is an essential service in the sustainment field, but it can be a double-edged sword. In 2ID, a shortage of mid-level maintenance personnel has meant units are unable to

perform required services. To ensure that units maintain their operational readiness, 2ID contracted the services for some equipment across the fleet. While this is necessary to sustain the operational readiness of a “fight tonight” unit, it deprives our maintenance personnel of key training and competence required for lengthy major combat operations.¹¹

Many Army leaders are losing the art of battlefield decision-making or mission command. Once our “bread and butter,” making decisions based on what the forward commander can observe, sense, and hear on the radio is becoming a lost art. An enormous amount of untranslated, unusable information now inundates commanders via satellite downlink. Moreover, commanders have come to expect near-perfect situational awareness prior to making a decision. Such information is often only available within stationary tactical operations centers with fixed, robust command, control, communications, computers, intelligence, surveillance, and reconnaissance architecture. Commanders are uncomfortable with making decisions while on the move based on FM radio or Blue Force Tracker reports.

Combined arms battalions depend on the experience of senior NCOs and company and field grade officers to meet basic gunnery standards. However, what was routine seven or eight years ago is discovery learning today. It is more difficult to achieve gunnery standards and skill levels because of the

design and nature of our modular organizations. Commanders from the branch associated with the battalion's regiment usually lead combined arms battalions. The other two field grade officers usually come from the Armor and Infantry branches. Seldom are all three officers familiar with appropriate gunnery skills. This often results in a lack of coaching and expertise, particularly within units suffering acute shortages of mid- and senior-grade NCOs. We gain little efficiency during gunnery training because the unit is essentially firing a task-organized gunnery routine every time it goes out to the range. 2ID is returning to pure fleet gunneries up to the Table VIII level to generate efficiency and reduce the length of the gun lines, while maximizing platform expertise.

Recent observations with gunnery densities in Korea reveal alarming trends in section-and-crew drills and proficiencies. Training videos reveal that crew members are not proficient in crew drills pre-to-fire checks. Vehicle crew evaluators and unit leaders do not know what "right looks like," and thus are unable to make necessary corrections. Leaders are not familiar nor proficient with weapon systems. This loss of core competencies in branch-specific weapon systems is at an all-time high in the force.

Modular Division Challenges and Solutions

One of the biggest challenges of the division headquarters is that it is not authorized intelligence, surveillance, and reconnaissance assets. However, many division intelligence officers fail to realize that they can still influence the use of BCT assets to answer the division commander's priority information requirements, while still supporting those of the BCT commander. When the division headquarters receives its own organic assets, such as the future Sky Warrior, and more battlefield surveillance brigades are fielded, this will cease to be an issue.

Modularity and the shift away from the division-based structure to a brigade-based structure has also meant less warfighting experience and knowledge of critical functions among battalion and brigade commanders. Military Intelligence, Signal, Air Defense Artillery, Logistics, Field Artillery, and Engineer branches have lost the divisional brigade and battalion commanders that used to mentor junior and mid-grade officers in their respective branches. To

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mitigate this loss of training oversight, 2ID has established responsibility for select warfighting functions in all of the brigades across the division using Central Selection List lieutenant colonels from the division staff. Without this oversight, staff officers would fill key developmental positions without a mentor. The training plans for warfighting functions are included in 2ID quarterly training briefs and published in the division's guidance.

The current modular structure limits the division's ability to conduct shaping operations. In most cases, the division's ability to conduct shaping operations is determined by the number and type of support brigades (combat aviation, fires, battlefield surveillance, and maneuver enhancement). The support brigade in highest demand is the maneuver enhancement brigade, which provides mobility, breaching, and gap-crossing capabilities, as well as military police and civil affairs specialties. These assets are critical, especially since the BCTs only have one engineer company with extremely limited mobility, counter-mobility, and survivability assets. In accordance with Field Manual 3-0, "for major combat operations, divisions should have at least one of each type of support brigade attached or OPCON to it."¹² There are 14 corps and division headquarters in the Active Component, but only three battlefield surveillance brigades and maneuver enhancement brigades and six fires brigades. The disproportionate number of support brigades does not allow each division and corps to conduct full spectrum exercises with the assumed array of support brigades. Future division-level exercises should include a representative capability of the five support brigades (battlefield surveillance, combat aviation, fires, maneuver enhancement, and sustainment) and a mix of BCTs to fully test the modular headquarters across all warfighting functions.

The divisional command posts are another challenge. Conducting major combat operations is arguably more dynamic and presents more demanding

challenges than those in a COIN environment. The operational tempo of major combat operations, along with the demand for rapid synchronization of warfighting functions, requires close consideration of how we train and organize our command posts for combat. With the current division design, two command posts exist—a robust division main command post (DMAIN) and a much smaller division tactical command post (DTAC)—as well as the mobile command group. While the DMAIN can conduct all the necessary functions in a stationary position when properly manned and equipped, we still have not tested it in an MCO environment while under enemy pressure and constant movement. The DTAC is much smaller than the DMAIN and only designed to oversee operations for limited missions and for limited periods. Not designed as an alternate command post, it normally integrates into the DMAIN along with the logistics assets, formally known as the division rear command post. In 2ID, we have identified the requirement for a sustainment operation center. With the threat of enemy indirect fire during MCO, division command posts require hardened command and control vehicles to protect vital communication links. They must also be flexible enough to displace on very short notice. Currently, division-level command posts operate from various forms of tents that lack protection and impair the division's ability to conduct mission command and control on the move.

Restoring Balance in Training and Preparing the Army

One of the Army's concerns . . . is getting back to training for high intensity situations—a capability vitally important to deter aggression

and shape behavior of other nations... [O]ne of the principle challenges the Army faces is to regain the traditional edge of fighting conventional wars... —Secretary of Defense Robert M. Gates, 10 October 2007¹³

Our senior NCOs and field grade officers demonstrated great proficiency in OIF I. We need to consider carefully how far we should allow this MCO capability to diminish. We must achieve a balance across the full spectrum of operations and mitigate the risks associated with our ability to deter rivals from threatening U.S. national security interests. The Army will continue to face conflict from one end of the spectrum to the other, and at a bare minimum, it must maintain a basic level of proficiency in major combat operations.

We have an approaching window of opportunity to focus on improving our MCO capabilities as the Army prepares to drawdown in Iraq. The decrease in the demand for forces provides an excellent opportunity to improve our superiority in major combat operations. Our MCO intellectual capital will soon retire, so if we make it a priority now, we can make significant headway before the impending era of constrained resources.

As stated by Secretary of Defense Gates, the Army has to regain its conventional fighting edge in order to deter potential adversaries. As we lengthen dwell times and increase opportunities to train and maintain our units, commanders will also need to be aware of the challenges with modularity masked during repeated deployments to OEF and OIF. Commanders must develop training strategies that capitalize on the existing experience in their formations and produce forces capable of facing hybrid threat contingencies and conducting major combat operations. **MR**

NOTES

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2. *National Security Strategy* (Washington, DC: The White House, May 2010), 5.

3. Gates, "Opening Summary, Budget Request," testimony to the Senate Armed Services Committee, Washington, D.C., 2 February 2010, <<http://www.defense.gov/speeches/speech.aspx?speechid=1417>> (9 August 2010).

4. FM 5-0, *The Operations Process (Final Approved Draft)* (Washington, DC: Government Printing Office, 25 February 2010) 3-4.

5. David E. Johnson, "Military Capabilities for Hybrid War: Insights from the Israel Defense Forces in Lebanon and Gaza" (Santa Monica, CA: RAND OP-285-A, 2010) 36-37.

6. "Army Force Generation," U.S. Army *Stand To!*, 20 July 2010, <<http://www.army.mil/standto/archive/2010/07/20/>> (11 Aug 2010).

7. U.S. Army, "2009 Army Posture Statement," Addendum E (Army Force Generation), 7 May 2009, <http://www.army.mil/aps/09/addenda/addenda_e.html> (18 April 2010).

8. LTG David Barno, U.S. Army (Retired), "A general covers an Army war game," from *The Best Defense: Tom Rick's Daily Take on National Security, Foreign Policy*, 17 May 2010, <http://tricks.foreignpolicy.com/posts/2010/05/17/a_general_covers_an_army_war_game> (11 August 2010).

9. General Martin E. Dempsey, "Training Development for an Expeditionary Army," *Army Magazine*, June 2009, 14-16.

10. With modularity and the shift from a division-based structure to a brigade-based structure, many of the personnel, maintenance, and materiel management functions shifted from the division to the brigades. In most cases, the brigade now manages these three key functions. However, the knowledge, expertise, and proper rank structure do not exist at the brigade level. Prior to modularity, seasoned senior war-

rant officers in the division materiel management center managed supply commodities such as ammunition, vehicles of all types, and repair parts for the entire division. Today, we have delegated the property book functions to the brigade. The brigade property book section is authorized one CW2 as the property book officer. If there is a warrant officer assigned to this position, it is usually one who has just completed the basic course. This reduction in skill and experience hinders proper analysis of unit equipment authorizations, on-hand quantities, shortages, excess, and unit property book fidelity. Additionally, by decentralizing the property book teams, we have reduced the division accountability technician's ability to provide constant "over the shoulder" teaching, coaching, and mentoring to newly assigned property book officers. Modularity also consolidated equipment at the brigade level, which further degrades proper oversight and accountability. In the case of ammunition, an NCO at the division headquarters (usually without the necessary skill level, expertise, and authority) has replaced the senior warrant officer who managed ammunition directly at the materiel management center.

11. Modularity has also had a significant impact on the maintenance organizations and structures within BCTs. Maneuver commanders, who are ultimately responsible for the maintenance of their assigned equipment, no longer have organic maintenance

assets. They now have a robust forward support company in the brigade support battalion with maintenance assets. This company provides direct support to the maneuver battalion and is typically, but not always, attached. However, with this organizational structure change, the battalion staff lost the battalion maintenance officer, typically an experienced captain handpicked by the battalion commander or executive officer. The maintenance control officer in the forward support company now fills this role. This is a logistician slot, typically filled by a new second lieutenant from the Transportation, Quartermaster, or Ordnance branch. The loss in knowledge and experience has placed additional requirements on the battalion maintenance technician (a warrant officer) to fill the gap. Most commanders end up using the battalion maintenance technician as their battalion maintenance officer preventing him from providing technical expertise and supervision of support and maintenance systems clerks, diagnostics, troubleshooting, and battalion repair parts management. It is crucial for the maintenance control officer billet to be changed back to a captain position.

12. U.S. Army, *Field Manual 3-0: Operations*, Appendix C, Para. C-20 (30 April 2010).

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