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A STRATEGIC ANALYSIS OF THE MANEUVER ENHANCEMENT BRIGADE

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ABSTRACT

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TITLE: A STRATEGIC ANALYSIS OF THE MANEUVER ENHANCEMENT BRIGADE

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As part of the Army's transformation to a modular, brigade-based structure, the maneuver enhancement (ME) brigade supports the National Military Strategy, Joint Concepts, and the Army Strategic Planning Guidance/Army Campaign Plan. This support brigade will enhance the full dimensional protection and freedom of maneuver of supported Army, joint, or multinational headquarters across the full range of military operations. During major combat operations, the brigade could oversee river crossings, protect forces and critical infrastructure, and reinforce brigade combat teams with tailored engineer, military police, air/missile defense, chemical, or other supporting capabilities. The ME brigade does not replace theater functional brigade headquarters, but provides an intermediate multifunctional capability. The unit might also exploit sensitive sites, support special operations units, or serve as joint security coordinator (JSC). After recent operations in Iraq and Afghanistan, the Secretary of Defense tasked the Army to develop modular forces, like ME brigades, to specifically conduct stabilization and reconstruction missions. This paper will analyze emerging ME brigade mission sets and recommend further refinements to concepts for employment in a joint, interagency, and multinational environment.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

A STRATEGIC ANALYSIS OF THE MANEUVER ENHANCEMENT BRIGADE

> Army forces will be organized into modular, capabilities-based unit designs to enable rapid force packaging and deployment and sustained land combat.....key to a Campaign Quality Army with Joint and Expeditionary Capabilities.[1]
>
> —General Peter Schoomaker, Chief of Staff, Army

Moving beyond the previous division-based structure, General Schoomaker envisions a modular, brigade-based force that supports the National Military Strategy, emerging Joint Concepts, the Army Strategic Planning Guidance, and the Army Campaign Plan. Announcing his "Focus Areas" in August 2003, the Chief of Staff tasked the U.S. Army Training and Doctrine Command (TRADOC) to develop modular unit designs and concepts.[2] Subsequently, Task Force Modularity developed headquarters, combat, and support organizations to replace or augment current unit designs.

Modular organizations are rapidly deployable, agile, tailorable, scalable, versatile, and more self-contained than previous units.[3] The Unit of Employment – X (UEx) is the primary modular warfighting headquarters, providing many functions divisions or corps now perform. The Unit of Employment – Y (UEy) provides the army service component headquarters.[4] New infantry (light) and heavy (armored/mechanized) brigade combat team designs complement the medium Stryker Brigade Combat Team (SBCT). For sustained land operations, these headquarters and combat elements require additional support.

Modular support brigades will provide functional and reinforcing capabilities to brigade combat teams, other support brigades, UEx, UEy, and various joint force elements. In the past, division or corps level organizations provided habitually task organized or mission specific reinforcing capabilities. The five new support brigade types are: aviation; fires; sustainment; maneuver enhancement; and battlefield surveillance. Functional theater brigades will augment support brigades with additional engineer, military police, intelligence, signal, or other support.

The maneuver enhancement (ME) brigade enhances the full dimensional protection and freedom of maneuver of supported army, joint, and multinational forces. It does not replace theater functional headquarters, like engineer or military police brigades, but provides an intermediate multifunctional capability. The design addresses recent developments in operating environment, battlespace configuration, joint concepts, and transformation, while continuing to support enduring requirements. This paper will analyze emerging mission sets for this unit design and recommend further refinements.

ASYMMETRIC THREATS, NONLINEAR BATTLESPACE, AND EMERGING MISSIONS

> Our position as the world's leading military power only reinforces the imperative for adaptation, innovation, and learning. Emerging powers study our successes, efficiently copy our strengths, and tailor their capabilities to attack our perceived vulnerabilities. Others develop asymmetric strategies and threats that avoid or circumvent our current capabilities altogether.[5]
>
> — Brigadier General David Fastabend

On the modern battlefield, fewer adversaries will attack U.S. strengths and risk defeat. Wise opponents will follow Sun Tzu's advice to "avoid strength and strike weakness."[6] They will employ asymmetric weapons, tactics, and procedures against perceived vulnerabilities.[7] U.S. forces must guard against conventional threats, along with improvised explosive devices, hostile information operations, opponents who ignore the laws of war, and weapons of mass effects and terror. In this environment, the enemy is hard to identify and difficult to protect against.

While linearity characterized the great European wars of the twentieth century, the modern battlefield is less well defined and more unpredictable. During the Cold War, the U.S. military divided battlespace between enemy and friendly with distinct forward lines and rear areas. Designating contiguous areas of operation reduced risk and eliminated vulnerable unassigned areas between units.[8] Conversely, recent actions, like the 507th Maintenance Company's unfortunate engagement near An Nasiriyah in March 2003, blur these "rear" and "forward" distinctions. Close combat may occur anywhere. The trend continues toward greater non-linearity, highly mobile warfare, and insurgent tactics. The current lexicon refers to nonlinear operations as distributed.[9] In distributed operations, with no adjacent friendly forces, units must provide all-around security including their flanks and rear.

Along with changes in threat and battlespace geometry, vagaries in operational phasing call for unprecedented unit flexibility. As the Center for Army Lessons Learned recently noted, operations in Afghanistan and Iraq display the "importance of rapid, fluid transitions from major combat operations to stability operations and back again."[10] In this complex environment, special operations, civil affairs, psychological operations, and conventional forces must work together closely. U.S. military forces must cooperate with coalition allies, government agencies, host nation authorities, and other security forces. Yet in failed or liberated totalitarian states, government institutions may crumble as easily as the decrepit physical infrastructure.

Modern "come as you are" military operations require units to be flexible, multifunctional, and capable of supporting stability and reconstruction operations with little notice or preparation. Many air defense, field artillery, and other units learned this lesson in Iraq.[11] Winston Churchill once cautioned, "Those who can win a war well can rarely make a good peace, and those who

could make a good peace would never have won the war."[12] Yet this is precisely the agility across the range of military operations which this environment demands of all unit types. There is little or no demarcation in time and space between major combat and "Phase IV" operations.

To paraphrase Clausewitz on the proper application of historical examples, one must separate the enduring from the irrelevant.[13] While not seeking to fight the last war again, this paper draws heavily from lessons learned in Afghanistan and Iraq. Important missions emerged that were on few standing organizations' mission essential task lists: exploiting sensitive sites, handling detainees, and protecting critical infrastructure from war damage, looting, or sabotage. Acting on a Defense Science Board recommendation, the Secretary of Defense tasked the Army to develop modular forces better able to perform stabilization and reconstruction.[14]

APPLICATION OF JOINT AND ARMY CONCEPTS TO DEVELOP UNIT CAPABILITIES

Even before Sun Tzu and others wrote about war, commanders wrestled with the impact of enemy, terrain, weather, and other influences on military operations. Then as now, leaders sought to maximize their ability to gain intelligence, protect and sustain their armies, maneuver forces to apply overwhelming combat power, and exercise command and control. In 413 BC, the Syracusans defeated the Athenian superpower on Sicily in what Thucydides called, "…the greatest reverse that ever befell a Hellenic army."[15] With their mighty navy defeated, 40,000 Athenians attempted to break out toward their allies. As they crossed rivers and moved through mountain passes, the Syracusans cut the Athenians to pieces with harassing "missiles" and non-linear engagements. The Athenians could not maneuver to apply dominant force or even protect and sustain themselves. Over 2,300 years later in Egypt, Field Marshall Erwin Rommel, a master of maneuver, attacked the British El Alamein line. Over half of his forces either guarded or operated supply lines, which extended over 1,400 miles back to Tripoli.[16] Even today, commanders struggle to properly maneuver, protect, and sustain forces. The armed services must develop, man, train, and equip forces capable of these essential functions.

JOINT OPERATIONS CONCEPTS GUIDE MANEUVER ENHANCEMENT BRIGADE DESIGN

Under the Joint Capabilities Integration and Development System, the Joint Operations Concepts (JOpsC) provide a framework to develop specific capabilities. JOpsC provide "an overarching description of how the future Joint Force will operate across the entire range of military operations."[17] The Joint Operating Concepts are: Major Combat Operations, Stability Operations, Homeland Security, and Strategic Deterrence.[18] The Joint Functional Concepts (JFCs) are: Joint Command and Control; Battlespace Awareness; Focused Logistics; and Protection.[19] Maneuver enhancement brigades could perform missions spanning all four JOCs

and provide capabilities across all five JFCs. They most significantly enhance joint capabilities under the Force Application, Focused Logistics, and Protection JFCs.

Force Application represents "the integrated use of maneuver and engagement to create effects necessary to achieve assigned mission objectives."[20] Focused Logistics seeks to improve transportation networks and logistics systems which are vulnerable to enemy attack or disruption.[21] The Protection JFC "describes how the Joint Force integrates key capabilities to effectively protect personnel, information, and physical assets of the United States, deployed forces, allies, and friends."[22] The ME brigade concept emphasizes maneuver enhancement and protection, which clearly aligns with these joint concepts.

Protection preserves the force's potential to fight at the decisive time and place. Figure 1 displays key protection activities and mission capability areas.[23] Under the Protection JFC, the ME brigade must provide persistent threat detection; timely warning dissemination; and layered active or passive, lethal and non-lethal countermeasures.[24]

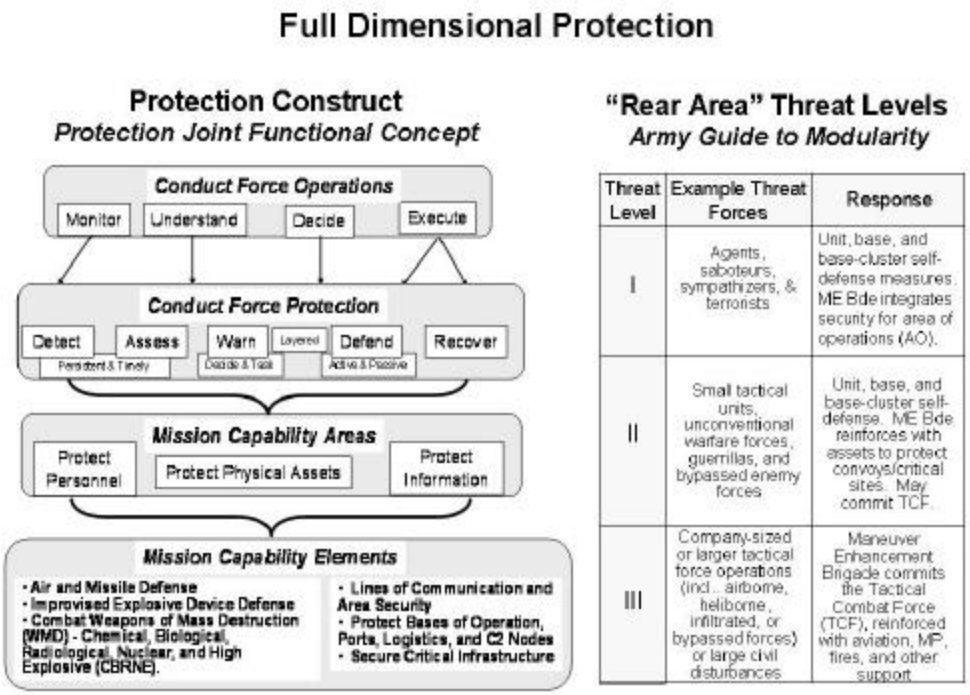

FIGURE 1. FULL DIMENSIONAL PROTECTION

Based on joint and Army doctrine, Figure 1 also outlines potential ME brigade response measures to ground based threat levels I-III.[25] Units provide self-defense for bases and base clusters. A ME brigade could employ a tactical combat force (TCF) against higher level threats.

In accordance with draft Joint Pub 3-10, Joint Security Coordinators (JSC) "facilitate protection of joint bases that support force projection, movement control, sustainment, command and control, airbases/airfields, seaports, detention facilities, and other activities that support the joint force."[26] As JSC, a ME brigade could also oversee area damage control and consequence management actions to respond, assist, and restore facilities after an attack.

Further defining required unit capabilities are the Joint Enabling Concepts for Information Operations; Interagency Coordination; Multinational Operations; Theater Air and Missile Defense; and Chemical, Biological, Radiation, and Nuclear Defense.[27] To meet the National Military Strategy's "Desired Attributes of the Force," the ME brigades must be networked, expeditionary, decentralized, adaptable, effective, persistent, capable of information/decision superiority, and fully integrated with joint, interagency, and multinational partners.[28]

ME BRIGADE CONCEPT DEVELOPMENT AND ORGANIZATIONAL DESIGN

As part of Task Force Modularity, Professor John Bonin of the U.S. Army War College, Mr. Clint Ancker of the U.S. Army Combined Arms Center, along with representatives of various other organizations, developed the initial Protection Support Unit of Action (later maneuver enhancement brigade) concept.[29] In August 2004, the TRADOC Futures Center through the U.S. Army Maneuver Support Center (MANSCEN) assigned the U.S. Army Maneuver Support Battle Lab (MSBL) to "develop and experiment with the ME brigade" concept.[30] MANSCEN established a General Officer Working Group, to refine the mission statement, employment concepts, and organizational design.[31] This group included MSBL, Military Police, Air Defense, Chemical, and Engineer school representatives and a retired major general "graybeard" advisor. Headquarters, Department of the Army (HQDA), TRADOC, various major commands, and other agencies conducted a Modular Support Force Analysis from August – December 2004 to determine requirements and resourcing for modular support forces, including ME brigades.[32]

ARMY CONCEPTS SUPPORT MANEUVER ENHANCEMENT BRIGADE DESIGN

The maneuver enhancement brigade concept is shaping and being shaped by various emerging Army concepts and force structure initiatives. Some of these predate TF Modularity's inception in August 2003. The U.S. Army Engineer School's Assured Mobility and Future Engineer Force concepts fit well with modular force structure development.[33] Assured Mobility is "a framework of processes, actions, and enabling capabilities intended to guarantee the force

commander the ability to maneuver…to achieve his intent."[34] Future Engineer Force uses a joint capabilities framework to develop embedded engineer baseline forces, specialized mission modules, and engineer command and control elements.[35] The Air Defense Artillery School recently updated its Air and Missile Defense (AMD) Forces Operational and Organizational Plan and continues to work towards an improved Joint Theater AMD concept.[36] Over the past two years, the Military Police School conducted a bottom-up force structure review and created more modular internment and resettlement units.[37] Under MANSCEN direction, the Military Police, Chemical, and Engineer Schools are reshaping doctrine for the modular force.

MANEUVER ENHANCEMENT BRIGADE MISSIONS AND ORGANIZATION

ME BRIGADE MISSION STATEMENT AND POTENTIAL MISSION SETS

Derived from various sources, Figure 2 displays the brigade's organization, mission statement, and proposed mission sets.[38] The maneuver enhancement (ME) brigade supports maneuver and mobility, protects forces and critical infrastructure, and mitigates effects of hostile action. During major combat operations, the ME brigade could serve as a river crossing headquarters, protect the UEx security area, and reinforce brigade combat team functional capabilities. This unit might also oversee stability and reconstruction operations, sensitive site exploitation, or serve as joint security coordinator (JSC) for a small joint security area (JSA). The Maneuver Support Battle Lab and ME Brigade General Officer Working Group recognize two major mission types.[39] In functional missions, the brigade supports other units with specific engineer, air/missile defense, military police, chemical, and other capabilities. For protection missions, the brigade headquarters manages terrain, provides area security, controls forces, and protects critical infrastructure, lines of communication, and security areas. These mission sets overlap significantly and distinctions between them may seem artificial or contradictory.

ORGANIC ELEMENTS (SEE FIGURE 2)

The ME brigade provides a flexible, multifunctional command and control structure. Organic elements are the headquarters and headquarters company, a network support (signal) company, and a brigade support battalion.[40] The staff includes Air and Missile Defense, Engineer, Military Police, and Chemical/Explosive Ordnance Disposal planning cells along with a small fire support element. If required for air/missile defense missions, it may receive a modular Technical Fire Control Section.[41]

The brigade staff must establish communications and maintain digital connectivity through Army Battle Command Systems such as the Air and Missile Defense Warning System. Close

coordination with UEx staff counterparts is essential. In some capacities formerly provided by divisional or corps elements, the ME brigade staff may supplement the UEx staff. Linkage to theater capabilities and reach-back systems will augment the limited staffing and partially offset technical shortcomings. The ME brigade must rely on the Battlefield Surveillance Brigade for intelligence support, the Fires Brigade for fires, and other support brigades for additional sustainment and aviation support. Connectivity is critical.

FIGURE 2. MANEUVER ENHANCEMENT BRIGADE MISSIONS AND ORGANIZATION

TASK ORGANIZED ELEMENTS (SEE FIGURE 2)

Based on the mission, a higher headquarters could assign, attach, or place under maneuver enhancement brigade operational control a variety of unit types.[42] Engineer forces might include combat engineering, construction, bridging, route/area clearance, route maintenance, and geospatial modules. Military police units could provide combat support, internment/resettlement, law and order, military working dog, and criminal investigation support. Chemical capabilities may include reconnaissance, decontamination, biological detection, smoke, and technical escort. The mission might require-short range air/missile defense,

explosive ordnance disposal (EOD), or civil affairs units. The brigade can command and control tactical combat force maneuver units against Level I-III threats.[43]

AD HOC HEADQUARTERS IN RECENT OPERATIONS

Ad hoc headquarters provide command and control for missions where no standing headquarters exists, such as area security or river crossing.[44] Emerging missions call for even more flexible, adaptive headquarters to alleviate these ad hoc requirements.

OPERATION ENDURING FREEDOM (OEF)

In Afghanistan, military police, chemical, engineer, civil affairs, and various support units experienced command and control challenges. Small, highly specialized units, like Biological Integrated Defense System platoons arrived without their "normal" higher headquarters. Unanticipated missions like detainee operations and sensitive site exploitation compounded by "force caps and mobility constraints" prevented U.S. Army Forces Central Command (ARCENT) from bringing in "doctrinally self-sufficient" organizations.[45] The ARCENT staff (e.g. provost marshal and chemical officer) assumed "command functions normally reserved for theater level specialized commands" for some small units.[46] The C3 – Exercises officer commanded a task force providing life support and force protection at Bagram Air Base.[47] In a small theater, like Afghanistan, a properly tailored maneuver enhancement brigade might serve as an operational protection and maneuver support headquarters to oversee such "orphaned" units.

OPERATION IRAQI FREEDOM - 3RD INFANTRY DIVISION ENGINEER BRIGADE

During Operation Iraqi Freedom, the 3rd Infantry Division Engineer Brigade functioned in some ways like a maneuver enhancement brigade headquarters. The brigade, augmented by an engineer group headquarters, commanded four combat engineer battalions, a construction battalion, four bridge companies, a terrain detachment, and an explosive ordnance disposal company.[48] At times, they also controlled an air defense battalion and a mechanized task force. The headquarters planned and executed four division passages of lines; several crossing operations; and provided traffic control due to a military police shortfall.[49] At Baghdad Airport, the brigade conducted terrain management, life support, and force protection.[50] With little guidance or notice, the unit assisted in initial assessments and efforts to restore power, water, and sewage to portions of Baghdad.[51] Problems included staff personnel shortfalls, insufficient logistics support, and inadequate communications. In a similar situation, a maneuver enhancement brigade headquarters would possess more robust logistics and communications, but would lack the engineer brigade's functional planning expertise.

OPERATION IRAQI FREEDOM – 75TH EXPLOITATION TASK FORCE

Sensitive sites possess "special diplomatic, informational, military, or economic sensitivity."[52] They impact national elements of power and usually require interagency coordination and augmentation. In May 2003, the Pentagon tracked roughly 1,000 sensitive sites in Iraq, including 600 suspected weapons of mass destruction sites.[53] During OIF, the 75th Field Artillery Brigade (Exploitation Task Force) conducted sensitive site exploitation using specialized teams.[54] Mobile Exploitation Teams performed detailed site analysis, while Site Survey Teams provided direct support to marine and army divisions. The task force included the 52nd EOD Detachment, 87th Chemical Battalion, intelligence assets, and aviation elements. In July 2003, the Iraq Survey Group took over, with 600 experts from the Defense Threat Reduction Agency, Central Intelligence Agency, and other agencies.[55] The importance of chemical, military police, explosive ordnance disposal, and related capabilities suggests this could be an appropriate maneuver enhancement brigade mission.

RIVER CROSSING HEADQUARTERS

Projecting combat power across large water obstacles is a highly complex combined arms operation, which requires careful planning, effective command and control, and specialized support. Under current doctrine, a division level crossing with multiple crossing areas requires crossing-force and crossing-area commanders along with crossing-force and area engineers.[56] The crossing area engineer controls crossing sites and means (assault boats and bridging equipment), maintains routes, and oversees mobility related capabilities.[57] The crossing area headquarters oversees maneuver support units providing traffic control, air/missile defense, concealment, and crossing area security.[58]

The mix of engineer, military police, chemical, and air/missile defense units points to a maneuver enhancement brigade headquarters. However, combining all crossing-force commander and crossing-force engineer functions under a ME brigade may be risky considering the enemy situation and magnitude of the operation. The crossing is crucial to the tactical plan; it is not just a technical event. The UEx headquarters must plan and orchestrate brigade combat team maneuver to seize near-shore objectives, assault across the river, secure the bridgehead, and continue the attack.[59] The UEx must synchronize fires, intelligence, maneuver, and sustainment. However, the maneuver enhancement brigade can assume a greater role than the old crossing-force engineer headquarters for terrain management, battlefield circulation, and crossing area protection. If the crossing is particularly large or complex, an engineer brigade headquarters should assist the UEx.

FUNCTIONAL SUPPORT TO ARMY FORCES

Maneuver enhancement brigades will typically provide functional support to brigade combat teams or other support brigades under the same UEx. For example, heavy brigade combat teams need maneuver and protection capabilities like assault bridging and short range air defense. To support complex or extended missions, the ME brigade would require theater assets to augment capabilities. For these missions, a functional brigade might provide a more suitable command and control headquarters. Assessing the ME brigade's value or liability as an intermediate headquarters must consider the mission complexity, staff capabilities, number of functional elements (e.g. MP or AMD battalions) involved, and related factors.

ESTABLISH/MAINTAIN GROUND LINES OF COMMUNICATION

Maintaining limited and congested ground lines of communication across forbidding terrain presents huge challenges. The ME brigade might control one or more engineer mission forces (battalion headquarters) with a variety of engineer mission teams and engineer effects modules.[60] These modules could provide tailored combat engineer, horizontal/vertical construction, mobility augmentation, bridging, and route/area clearance capabilities.[61] Typical supporting tasks could include mine and debris clearance, route and bridge reconnaissance, bypass construction, and gap crossing.[62] When available, military police would conduct traffic management and control to include marking and signing.

RESTORE INFRASTRUCTURE, MAINTAIN PORTS, AND CONDUCT RECONSTRUCTION

A ME brigade might conduct initial triage and minor repairs to critical infrastructure. However, utility restoration, port repairs, and permanent reconstruction missions require immense effort and specialized skills. As soon as possible, the ME brigade should handoff to an engineer brigade, the U.S. Army Corps of Engineers (USACE), and other government agencies.[63] Engineer brigades can coordinate for specialized engineer elements; facilities engineer detachments; power specialists; and USACE Field Force Engineering assets. They can link back to USACE centers and laboratories using "Tele-engineering" capabilities.

AREA DAMAGE CONTROL AND CONSEQUENCE MANAGEMENT

Area damage control includes "measures taken before, during, or after hostile action or natural or manmade disasters to reduce the probability of damage and minimize its effects."[64] Appropriate response might require engineer, military police, explosive ordnance disposal, chemical reconnaissance, decontamination, civil affairs, medical, and logistics elements. A

properly task organized maneuver enhancement brigade could coordinate and execute area damage control over a limited geographic area.

Consequence management (CM) entails "measures taken to protect health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of a chemical, biological, nuclear, and/or high yield explosive situation."[65] The CM mission could be domestic, in support of U.S. government, state, and local authorities, or deployed in theater working with host nation authorities with widely varied local capabilities. The ME brigade might perform initial CM actions, prior to turning the mission over to functional theater assets or civilian agencies.

INTERNMENT AND RESETTLEMENT OPERATIONS

Internment and resettlement (I/R) encompasses detainees, enemy prisoners of war, and civilian refugees. Prior to OIF, planners expected 16,000 – 57,000 prisoners of war and many displaced civilians.[66] However, most military police units deployed late. This left divisional military police companies with an impossible mission load to conduct I/R operations, along with high-value asset and area security, law enforcement, and main supply route regulation.[67] Other troops hastily assumed security missions to free military police units.

In the modular construct, brigade combat team MP platoons will perform initial internment and resettlement until handover to ME brigade military police elements. Appropriately task organized, a maneuver enhancement brigade could conduct I/R operations of limited duration and volume, until turnover to a specialized theater level military police brigade or command.

PROTECTION MISSIONS IN UEx AREA OF RESPONSIBILITY

The protection mission set requires the maneuver enhancement brigade to exercise command and control over bases and base clusters, manage terrain, provide point and area security, and maneuver a tactical combat force. There is significant tension between this and the functional mission set. As the October 2004 TRADOC emerging insights report stated, the brigade "currently is tasked with two major missions which are each best executed at the exclusion of the other."[68] Adapted from various sources, Figure 3 depicts potential ME brigade geographic areas of operations and protection missions.[69]

REAR AREA HEADQUARTERS, TERRAIN MANAGEMENT, AND AREA SECURITY

As previously mentioned, true "rear areas" may not exist in an area of operations. Unit boundaries are not always contiguous and the maneuver enhancement brigade cannot be ubiquitous. Depending on the relative sizes of UEx and BCT areas of operations, assigning all

the unassigned area to a ME brigade could stretch limited capabilities and increase risk to an unacceptable level.[70] Area size, threat situation, tactical combat force composition, and functional mission load will constrain ME brigade effectiveness. Commanders must assess and mitigate risk. If ME brigade elements are unavailable, the UEx may divert other forces to provide security. Other units must defend themselves, their bases, and surrounding terrain.

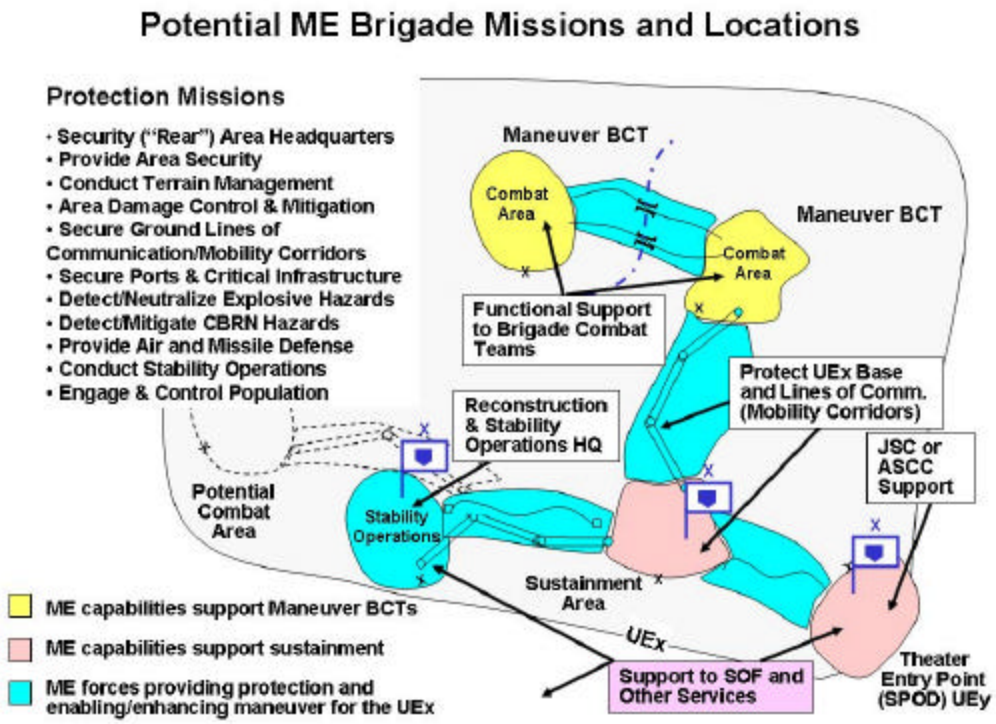

FIGURE 3. POTENTIAL ME BRIGADE MISSIONS AND LOCATIONS

SECURE LINES OF COMMUNICATION, PORTS, AND CRITICAL INFRASTRUCTURE

The 1st Marine Division OIF After Action Report (AAR) also identified a significant military police shortfall to provide security and traffic control on three main supply routes.[71] On short notice and without prior coordination, the Marines were called to rescue Army fuel tankers near Nasiriyah. The 3rd Infantry Division AAR noted that, "security of lines of communication that extend over 600 kilometers requires every soldier to be a rifleman."[72] In the march to Baghdad, V Corps committed significant combat elements from the 101st and 82nd Airborne Divisions and 2nd Cavalry Regiment to secure lines of communication and bases.

To address this issue, the Military Police school is developing a Mobility Corridor Operational and Organizational Plan which describes "a layered and integrated security approach to lines of communication security."[73] This concept would focus limited security, route clearance/maintenance, and sustainment assets on active mobility corridors. Commanders could "pulse" resources to "turn-on" an inactive mobility corridor.

In this mission set, effectiveness depends upon route length, number of critical infrastructure sites, threat, functional mission load, and available military police, tactical combat force, or other protection assets. During initial post-hostilities operations in Iraq, the available troops could not secure all critical civilian infrastructure, so priority went to militarily significant or sensitive sites. Consequently, vandals looted many sites. Planners must identify and prioritize critical infrastructure security requirements. The maneuver enhancement brigade is only part of the security solution. Every unit must remain vigilant and involved in security.

PROVIDE AIR AND MISSILE DEFENSE

The ME Brigade General Officer Working Group and Maneuver Support Battle Lab categorize air and missile defense as part of the "Functional Mission Set."[74] It also fits into the protection mission set. A TRADOC operational assessment in October 2004 limited ME brigade authority to positioning short-range air defense systems like Avenger and the Surface-Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM).[75] The theater Army Air and Missile Defense Command (AAMDC) will normally position medium and high altitude systems like Patriot. As Brigadier General Mahon of the Air Defense School suggested, a maneuver enhancement brigade does not possess the "system expertise and ability to integrate with joint and combined headquarters."[76] The brigade's limited air/missile defense staff would be greatly challenged to properly assess the threat, site, initialize, and coordinate Patriot systems. Considering past fratricide problems, it seems prudent to keep Patriot systems well coordinated and linked through the AAMDC to the Joint Force Air Component Command.

DETECT AND MITIGATE CHEMICAL/BIOLOGICAL/RADIOLOGICAL/NUCLEAR HAZARDS

This mission also straddles the protection and functional categories. The maneuver enhancement brigade's capabilities depend upon task organized chemical assets. The brigade chemical section and UEx chemical section must maintain communications linkages via digital Army Battle Command Systems and the Joint Warning and Reporting System. The ME brigade must integrate appropriate capabilities for threat warning, planning, active/passive defense, engineering, host nation support, and consequence management.[77]

DETECT AND NEUTRALIZE EXPLOSIVE HAZARDS

Combat engineer route and area clearance units and explosive ordnance disposal (EOD) teams often work together to perform this mission. During recent operations, units established Mine Action Centers or Mine/Explosive Hazard Centers to maintain databases and coordinate actions to deal with mines, unexploded ordnance, and other explosive hazards. With the increased threat of improvised explosive devices (IED), the Army's IED Task Force and Countermine/Counter Booby Trap Center at Fort Leonard Wood provide resources and reach back assistance capability.[78] The IED Task Force provides tactics, techniques, and procedures; intelligence; new equipment training and integration; and other support. During transition and post-hostility operations, units often clear UXO and destroy enemy ammunition and weapons caches. Based upon OIF experience, the 3rd Infantry Division recommends at least one EOD company for a division (or UEx) zone during major combat operations and two EOD companies during stability operations.[79] ME brigades should establish a Mine/Explosive Hazard Center or similar organization to coordinate activities and integrate EOD and engineer assets.

SENSITIVE SITE EXPLOITATION

Special Text (ST) 3-90.15 outlines Tactics, Techniques, and Procedures for Sensitive Site Exploitation (SSE).[80] A task organized maneuver enhancement brigade could conduct this mission on a limited scale, with appropriate military police, chemical, engineer, and other assets. Mobile Exploitation Teams and Site Survey Teams may include 20-40 soldiers with Nuclear, Biological, and Chemical reconnaissance, explosive ordnance disposal, criminal investigation, human intelligence, and security specialties, as well as Defense Threat Reduction Agency technical experts.[81] The brigade should form a Combined Joint Military Operations Center to plan, target, conduct intelligence fusion, and coordinate SSE missions closely with the UEx G-2, Effects Coordination Cell, and other intelligence or targeting elements.[82] Ultimately the brigade would likely turnover this mission to a civilian agency, such as the CIA's Iraq Survey Group or a United Nations/International Atomic Energy Agency inspection team.

ENGAGE AND CONTROL POPULATION

With civil affairs augmentation, the maneuver enhancement brigade's engineers, military police, security, and other elements would conduct civil military operations (CMO).[83] V Corps established these CMO objectives for OIF: (1) Create a secure environment (establish civil order, eliminate arms caches/paramilitary threats, and train security personnel); (2) Facilitate establishment of local governments (to include leadership, infrastructure, bureaucracy, schools); (3) Support economic development (identify local and regional economic centers of gravity;

restore utilities, healthcare, food distribution, and public services; and develop commerce and financial institutions).[84] Maneuver enhancement brigade elements could play an important role in achieving some of these objectives.

SUPPORT TO JOINT, SPECIAL OPERATIONS, AND THEATER FORCES

A maneuver enhancement brigade might serve as a Joint Security Coordinator to oversee security, communications, intelligence, terrain management, limited sustainment, infrastructure development, and host-nation support for a small Joint Security Area.[85] The brigade can support other services, special operations forces, and theater forces. A ME brigade could support multinational forces, if augmented by more robust sustainment assets and a liaison team with linguists and foreign area expertise.

SUPPORT TO OTHER SERVICES

The Army provides a wide array of support to other services, especially the Marine Corps or Air Force, based upon interservice agreements and executive agency determinations. This includes port operations, engineering, theater missile defense, and enemy prisoner of war or detainee processing.[86] During OIF, the Army attached over 2,700 soldiers to the First Marine Expeditionary Force. This included five Patriot batteries; two engineer battalions; three bridge companies; a military police battalion, a chemical battalion; and smaller units.[87] The maneuver enhancement brigade provides a potential headquarters for units supporting other services. The brigade might support a U.S. Air Force Aerospace Expeditionary Force with area security, base air/missile defense, detainee operations, and engineer assets.

SUPPORT TO SPECIAL OPERATIONS FORCES

Despite improvements noted during OIF and OEF, Special Operations Forces (SOF) and conventional forces must better integrate planning, employment, battlespace coordination, force tracking, logistics, communication, and targeting and fires.[88] During OEF, Army forces secured SOF bases and provided EOD support.[89] During OIF, conventional forces and SOF conducted integrated operations in western and northern Iraq.[90] SOF relies heavily on the Army for base operations, force protection, and common services.[91] A maneuver enhancement brigade might support a special operations group or Joint Special Operations Task Force with area/base security, air/missile defense, detainee processing, construction, or other capabilities. SOF units may work with a ME brigade during Sensitive Site Exploitation or post-hostilities reconstruction and stability operations.

THEATER SUPPORT AND COOPERATION

During OIF, the 32nd Army Air and Missile Defense Command, 416th Engineer Command, 52nd Ordnance Group, 352nd Civil Affairs Command, and other units provided theater level protection and related support.[92] Maneuver enhancement brigades will not replace specialized theater level engineer, military police, chemical, civil affairs, or air/missile defense brigades, particularly in a large theater. In a smaller theater, like Afghanistan, a maneuver enhancement brigade could oversee specialized battalion or separate company level organizations to perform duties including joint security coordination, air/missile defense, and small scale detainee operations. Maneuver enhancement brigades must interface with functional theater level headquarters for additional resources, unit capabilities, and reach back technical assistance.

MANEUVER ENHANCEMENT BRIGADE REQUIREMENTS AND RESOURCING

The Modular Support Force Analysis (MSFA) established a requirement for sixteen maneuver enhancement brigades (eleven to support Major Combat Operations, one for Homeland Defense, two in Strategic Reserve, and two for Forward Presence).[93] Clearly, there will not be a ME brigade for every UEx, not to mention joint force, special operations, other service, and multinational requirements. In November 2004, the MSFA recommended resourcing only twelve ME brigades (three Active Component (AC), six Army National Guard (ARNG), and three Army Reserve (USAR)).[94] In January 2005, the Vice Chief of Staff, Army approved sixteen ME brigades (three AC, ten ARNG, and three USAR).[95] Given the plethora of potential missions, having only three active ME brigades imposes a considerable limitation and places a large burden on reserve components to support upcoming missions. On 4 October 2004, U.S. Army Forces Command (FORSCOM) approved provisional designation of the 555th Engineer Group as a maneuver enhancement brigade.[96] In addition, it appears the Army will reorganize the 69th Air Defense Artillery and 8th Military Police Brigades as ME brigades.

MANEUVER ENHANCEMENT BRIGADE DEVELOPMENT ISSUES

A recurring theme in TRADOC discussions is the challenge of properly developing a maneuver enhancement brigade commander and staff.[97] Most ME brigade functional staff officers will be captains or majors. Leaders must encourage more senior UEx staff officers to provide guidance and mentorship. TRADOC proposed filling developmental ME brigade positions with air defense, military police, chemical, or engineer officers. With similar multifunctional experience in infantry or heavy BCTs, brigade special troops battalion commanders may develop into future ME brigade commanders.[98] Regardless, there is a real

challenge in developing, selecting, and assigning commanders and staff with the broad experience necessary to effectively lead these complex organizations.

Unless the organization is focused towards a more specific mission profile, maneuver enhancement brigade training and preparation will suffer. The wide range of potential missions requires the commander to set priorities and pare down the mission essential task list. The limited quantity of available ME brigades creates challenges in developing habitual relationships for training and staff coordination.

RECOMMENDATIONS

1. Continue the vigorous dialogue on maneuver enhancement brigade structure and employment between the Maneuver Support Battle Lab, TRADOC Futures Center, HQDA, various schools, the analytical community, and others. Define realistic capabilities and limitations to better frame employment concepts.

2. Continue to gather observations and lessons from the provisional ME brigade, operational assessments, and exercises. Use them to refine employment concepts.

3. Train joint and Army planners to understand ME brigade limitations along with their wide range of capabilities. In many operations, a functional brigade headquarters might be more suitable than a maneuver enhancement brigade.

4. Focus maneuver enhancement brigades on specific missions during pre-deployment training and preparation. If the unit prepares for a hundred missions, it prepares for none. Develop a core ME brigade mission essential task list. Identify other tasks to train prior to deployment. Affiliate reserve component brigades with active UEx headquarters for training.

5. Refine the recommended career pattern to develop future maneuver enhancement brigade commanders and critical staff officers.

6. Develop maneuver enhancement brigade concepts into interim doctrine and rewrite related doctrine (e.g. river crossing) to reflect modular force units and headquarters.

7. Train maneuver enhancement brigades with joint, other services, and SOF units at combat training centers and in-theater exercises to refine concepts and improve integration.

8. Continue to experiment with various mission sets during simulations, command post exercises, and combat training center rotations. Assess staff capabilities to establish cells and centers required for special missions in addition to normal planning and coordination functions. Determine modular augmentation packages required for special missions.

CONCLUSION

Maneuver enhancement brigades possess great potential to improve force protection and the ability to maneuver the joint force in the contemporary operating environment. These multifunctional headquarters will control essential capabilities, formerly resident at the division or corps level, to support maneuver brigade combat teams, the UEx, and other support brigades. They may also support special operations forces, other services, multinational forces, and work with other government agencies. For certain missions, the ME brigade may provide the ideal headquarters. In other cases, a functional engineer, military police, chemical, or air/missile defense headquarters might be a better choice. A properly task organized ME brigade could oversee sensitive site exploitation, limited critical infrastructure protection and repair, or provide joint security coordination. With many pertinent capabilities, it forms a partial solution to the Secretary of Defense's challenge to create modular units that support reconstruction and stability operations. The challenges, complexity, and vast array of potential missions, coupled with the limited number of active maneuver enhancement brigades, will constrain their effectiveness. This new organization will undoubtedly play a significant role in providing joint, expeditionary, and campaign capabilities to support the Army Campaign Plan, Joint Concepts, and the National Military Strategy.

WORD COUNT= 5923

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