

THE CASE FOR EMPLOYING THE MOBILE ASSAULT COMPANY
CONCEPT THROUGH THE SPECTRUM OF WARFARE

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ABSTRACT

THE CASE FOR EMPLOYING THE MOBILE ASSAULT COMPANY CONCEPT THROUGH THE SPECTRUM OF WARFARE, by MAJ Blair J. Sokol, USMC, 153 pages.

The Mobile Assault Company (MAC) concept--the technique of employing the Marine Infantry Battalion's Weapons Company as a fourth maneuver element--is currently being employed successfully during counterinsurgency and Stability Operations in Operation Iraqi Freedom. Employing the MAC concept, however, alters the doctrinal mission profile of the Weapons Company and strains its traditional supporting role to the Rifle Companies. On the other hand, the Infantry Battalion lacks a capable organic combined arms reconnaissance and security force for MIC-HIC operations, which the MAC can provide. Research consisting of survey data from Marine operating forces, Army and Marine doctrinal, historical, and comparative techniques will demonstrate that the Weapons Company needs to permanently modify its Table of Organization and Equipment to support the MAC concept. This thesis justifies two courses of actions to facilitate permanent future employment of the MAC concept through full spectrum operations.

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ACRONYMS

AAV	Amphibious Assault Vehicle
ACE	Aviation Combat Element
ALO	Artillery Liaison Officer
AO	Area of Operation
APC	Armored Personnel Carrier
ARG	Amphibious Ready Group
AT	Anti-Tank
ATGMs	Anti-Tank Guided Missiles
BCT	Brigade Combat Teams
BLT	Battalion Landing Teams
CAATs	Combined Antiarmor Teams
CAB	Combined Arms Battalion
CAS	Close Air Support
CAX	Combined Arms Training Exercise
CBRN	Chemical, Biological, Radiological, and Nuclear
CCIR	Commander's Critical Information Requirements
CLC	Combat Logistics Company
COA	Courses of Action
COE	Contemporary Operational Environment
COIN	Counterinsurgency
CP	Command Post
DoD	Department of Defense

DOTMLP	Doctrine, Organization, Training, Materiel, Leadership, and Personnel
DS	Direct Support
EFSS	Expeditionary Fire Support System
EFV	Expeditionary Fighting Vehicle
FAC	Forward Air Controller
FEBA	Forward Edge of the Battle Area
FiST	Fire Support Team
FOC	Full Operational Capability
FS	Fire Support
FSC	Fire Support Coordinator
FSCC	Fire Support Coordination Center
FSO	Fire Support Officer
F/W	Fixed Wing
GCC	Geographic Combatant Commander
GCE	Ground Combat Element
GS	General Support
GWOT	Global War On Terror
HAW	Heavy Anti-tank Weapons
HBCT	Heavy Brigade Combat Team
HHC	Headquarters and Headquarters Company
HIC	High-Intensity Combat
HMMWVs	High Mobility Multipurpose Wheeled Vehicles
H&S	Headquarters and Service
IBCT	Infantry Brigade Combat Team

IED	Improvised Explosive Device
ISR	Intelligence, Surveillance, Reconnaissance
JFIRE	Joint Applications of Firepower
JSTARS	Joint Surveillance and Target Attack Radar System
LAR	Light Armored Reconnaissance
LAWs	Light Antitank Weapons
LIC	Low-Intensity Combat
LOGPAC	Logistical Package
LRIP	Low Rate Initial Production
LRAS3s	Long Range Advanced Scout Surveillance Systems
MAC	Mobile Assault Company
MAGTF	Marine Air-Ground Task Force
MAP	Mobile Assault Platoon
MARSOC	United States Marine Corps Forces Special Operations Command
MEF	Marine Expeditionary Force
METT-T	Mission, Enemy, Terrain and weather, Troops and support available, and Time
MEU	Marine Expeditionary Unit
MIC	Mid-Intensity Combat
MTC	Movement to Contact
MOUT	Military Operation in Urban Terrain
MAWs	Medium Antitank Weapons
MRAP	Mine Resistant Ambush Protected
NAIs	Named Area of Interest
OIF	Operation Iraqi Freedom

PMESII-PT	Political, Military, Economic, Social, Information, Infrastructure, Physical Environment, and Time
QDR	Quadrennial Defense Review
RLT	Regimental Landing Team
RMA	Revolution in Military Affairs
RSO&I	Reception, Staging, Onward Movement, and Integration
R/W	Rotary Wing
SBCT	Stryker Brigade Combat Team
SC MAGTF	Security Cooperation Marine Air Ground Task Force
SMAW	Shoulder-Launched Multipurpose Assault Weapons, Mk-153
SNCO	Staff Non-Commissioned Officers
STOM	Ship to Objective
TBS	The Basic School
TIC	Troops-In-Contact
T/E	Table of Equipment
T/O	Table of Organization
TO&E	Table of Organization and Equipment
TOW	Tube Launched Optically Tracked Wire-Guided
TRAP	Tactical Recovery of Aircraft and Personnel

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CHAPTER 1

INTRODUCTION

After the National Security Act of 1947, the Marine Corps implemented and codified the way the Marine Air-Ground Task Force (MAGTF) task organized and fought in the future. The Marine Corps took advantage of the synergistic effect created by task organizing and employing ground, aviation, and logistic elements with an overarching command element. The emphasis was on producing a Marine Corps that was modular in size and scope to meet any particular threat. But, most importantly, the Marine Corps was to be a force in readiness, able to quickly respond while the rest of the Nation mobilized.¹ The mandate to provide the Nation a “tailorable,” expeditionary combined arms force became an ethos among Marines down to the lowest levels. As a result, Marine leaders are currently taught to show creativity, flexibility, and initiative when task organizing their forces for combat operations. This has been the case for the Weapons Company’s employment within the Marine Infantry Battalion (hereafter referred to as Weapons Company).

Since Operation Desert Storm, Battalion Commanders, armed with input from their staffs and Company Commanders, slowly adjusted the role of the Weapons Company. Changing the Weapons Company’s employment, as well as its organization, was a result of the ingenuity of Marine leadership in consonance with continued technological advances, an ever-changing operational environment, and the drive for mission accomplishment. The first modification to Weapons Company employment began with the successful creation of the Combined Antiarmor Teams (CAATs) during Operation Desert Storm. CAATs were a conglomeration of TOW (Tube Launched

Optically Tracked Wire-Guided) missile vehicles provided by the Infantry Regiment and heavy machinegun vehicles from Weapons Company creating a combined arms reconnaissance and security mission capability at the battalion level.

Once the TOW became a part of the Infantry Battalion Table of Equipment (T/E) after Operation Desert Storm, CAAT employment became standard for the Infantry Battalion. The CAATs provided general support (GS) to the Infantry Battalion for security and reconnaissance missions and-or direct support (DS) to the Rifle Company as required within METT-T (the mission variables of Mission, Enemy, Terrain and weather, Troops and support available, and Time). Utilizing the CAAT concept did not necessarily disrupt the role of the Weapons Company within the Infantry Battalion, because CAATs were still able to provide heavy weapons support to the Rifle Companies when needed. On the other hand, the CAAT employment in Operation Desert Storm displayed a critical task required at the battalion level: a combined arms reconnaissance and security mission capability, a requirement that went beyond the doctrinal mission profile of the Weapons Company.

In the mid-1990s, a new concept, known as the Mobile Assault Company (MAC), took the CAAT model a step further. The CAATs were combined under the leadership of the Weapons Company Commander and created a permanent fourth maneuver element² within the Infantry Battalion. In doing so, the function of the Weapons Company went beyond its doctrinal mission (to provide heavy weapons support to the battalion and Rifle Companies) and disrupted the doctrinal role of the Weapons Company Commander to serve as the Fire Support Coordinator (FSC). The MAC though, provided a robust raid force that made the battalion landing team (BLT) more capable when serving as the

ground combat element of a Marine Expeditionary Unit. The MAC also provided the Infantry Battalion a unit more capable of combined arms reconnaissance and security missions for mid- to high-intensity combat (MIC-HIC) operations than the CAAT concept. With the inception of the MAC, however, the doctrinal mission profile of the Weapons Company was officially altered, straining the relationship of the Weapons Company and its traditional role in relation to the rest of the Infantry Battalion.

Consequently, substantial challenges existed in employing the MAC (the same challenges that exist today). In order to employ the MAC effectively, there is a requirement to modify the Table of Organization and Equipment (TO&E) internally to the Infantry Battalion (notwithstanding the additional equipment that is provided to the Infantry Battalion when deployed to Iraq). In doing so, there is degraded efficiency in other areas in the battalion, as other elements are forced to relinquish personnel and equipment. Battalion Commanders must weigh these options carefully since the MAC concept has proven more effective in certain combat environments (e.g., the likely mission-sets of a Marine Expeditionary Unit (MEU) or during counterinsurgency [COIN] operations) than others. In MIC-HIC operations, the MAC concept can seriously hinder the antiarmor capability of Rifle Companies, as certain MAC organizations (none are identical) require all the battalion's key antiarmor assets to be consolidated in one maneuver element (i.e., all the TOWs and Javelin anti-tank missile systems) which violates the doctrinal function of the Weapons Company: to provide heavy weapons support to the Rifle Companies.

The question of whether the Weapons Company needs to permanently modify its TO&E to support the MAC concept through the spectrum of warfare requires a series of

sequential historical inquiries, as well as a doctrinal comparison between the Marine Corps and the Army. How was the Weapons Company employed in Operation Desert Shield-Desert Storm? How has the Weapons Company been employed from Operation Iraqi Freedom (OIF) I to the present day Stability-COIN operations in Iraq? How can the Weapons Company be task organized to maintain the flexibility to operate within full spectrum of operations in low- to high-intensity combat? Secondary questions include: what is the impact of modern technology and weapons systems on the Weapons Company task organization (e.g., the Expeditionary Fighting Vehicle)? How is the Weapons Company expected to be employed within the Marine Infantry Battalion (to include its relationship with the Scout/Sniper Platoon)? Lastly, what is the implication of Light Armored Reconnaissance (LAR) doctrine and antiarmor doctrine on the Weapons Company?

Beyond simply analyzing the Marine Corps' contemporary historical trends, the U.S. Army can also provide an opportunity to evaluate the principals of Weapons Company employment within an Infantry Battalion. The Army recently reorganized its Brigade Combat Teams (BCTs) to support full spectrum operations in the Contemporary Operational Environment (COE). A comparative analysis will provide theoretical parameters of antiarmor, screening, and reconnaissance capabilities needed to support an infantry unit, as well as other methods of task-organizing an Infantry Battalion. An analysis of how the Army employs its Weapons Companies and what units are responsible for combined arms reconnaissance and security missions can provide a foundation for determining the required task organization of the Marine Weapons Company and Infantry Battalion. Moreover, the doctrine will also provide an analysis of

the relative combat power required for an infantry force to be effective in different spectrums of warfare.

An analysis of Marine Corps doctrine will identify how the Weapons Company was intended to be employed within the Infantry Battalion, and antiarmor doctrine will expand on how the Weapons Company should be employed in different tactical situations. With the disbandment of the Regimental TOW Platoon in 1998, an assessment needs to be made if the doctrinal employment of LAR and other division-level reconnaissance assets provide the necessary antiarmor, screening, and reconnaissance capacity to support the needs of the Infantry Regiment and Battalion. Doctrinally, the Battalion Scout/Sniper Platoon is the only other reconnaissance asset available to the Battalion Commander, and an assessment of its mobility for full spectrum operations is required, as well.

Solutions for a MAC TO&E modification will more than likely require a near “neutral Table of Organization (T/O) change” (i.e., no new additional personnel added to the Infantry Battalion to support the MAC concept). Since potential personnel additions to the Weapons Company will need to come from within the Infantry Battalion, it will be necessary to determine whether the battalion can source the additional requirements without compromising requisite capabilities. An example of possible personnel sourcing is the 81mm Mortar Platoon. The 81mm Mortar Platoon can provide additional Marines to serve as scouts for the MAC concept if it is determined that the platoon is neither critical nor practical (i.e., its tactical employment on the modern battlefield is problematic within each spectrum of warfare). There are several key questions to be asked: Is the 81mm Mortar Platoon effective in a high tempo conventional combat environment? Does

the 81mm Mortar Platoon provide enough suppressive effects against an armored foe? Is its range limiting enough that it is more practical to use the ever increasing lethality of aviation and artillery? If it is still deemed necessary, can the 81mm Mortar Platoon be reduced to six vice eight tubes and still achieve mission accomplishment? Regarding the aforementioned questions, the planning assumption is that the Expeditionary Fire Support System (EFSS, 120mm mortars) addition to the Marine Artillery Regiment will be employed only with Marine Expeditionary Units and not be employed for MIC-HIC operations in support of the division.³

In conclusion, a determination must be made if the Weapons Company should permanently change its task organization and doctrinal mission to support the MAC concept. Is there a requirement to provide a combined arms reconnaissance and security mission capability at the battalion level with the MAC in order to assist the Battalion Commander's ability to shape the battlefield, receive information, provide reaction time and maneuver space, and preserve combat power? More importantly, is there a solution within the combined force structure of the Weapons Company and Headquarter and Service (H&S) Company for a tailorable reconnaissance capability that can function in the full spectrum of operations in HIC, MIC, or low-intensity combat (LIC) when the battalion is serving as a light infantry, helicopterborne, or mechanized force? On the other hand, all of these aforementioned requirements must potentially be accomplished without relinquishing the 81mm Mortar Platoon's general support (if deemed a requirement) or the medium and heavy antiarmor DS capability within the battalion or creating such doctrinal rigidity that the Battalion Commander lacks the flexibility to task organize the Weapons Company "traditionally" as required within METT-T.

Additionally, one of the most important considerations in determining if the Weapons Company TO&E should be modified to support the MAC concept is the visualization of how the Infantry Battalion fits into the COE. Only with valid planning assumptions can the justification for standardizing the MAC across the Marine Corps be legitimate.

Assumptions: The Role of the Marine Corps in the Contemporary Operational Environment

Even though al-Qaeda previously attacked U.S. sovereignty for more than a decade before 9-11, it was only the magnitude of 9-11 that provided the catalyst for the United States to depart from a bi-polar, Cold War mentality.⁴ In light of this new asymmetric threat and the challenges associated with combat operations in Iraq and Afghanistan, the Department of Defense (DoD) has shifted from a foremost focus on conventional warfare between nation-states to a more balanced approach of full-spectrum operations that includes confronting non-state actors. This shift is reflected by the United States' evolving national strategies, the DoD's changing doctrine, DoD-Department of State's engagement with Gap⁵ countries in the Arch of Instability, and DoDs's recognition of an overall changing combat environment. These shifts provide numerous planning assumptions for how the Marine Corps should task organize for future warfare and transition to its role in the Long War Concept.⁶

The U.S. Quadrennial Defense Review (QDR) illustrates a change in national strategy to meet the shifting nature of warfare. The QDR describes the need to balance warfighting capabilities to meet irregular, catastrophic, traditional, and disruptive challenges. Consequently, 9-11 broadened the focus on traditional challenges (i.e.,

conventional operations) to include: defeating terrorist networks, insurgencies or fighting guerrilla warfare; defending the homeland in depth (to include preventing the acquisition and use of Weapons of Mass Destruction); and shaping failed or failing countries through Theater Security Cooperation.⁷ While at the strategic level DoD is expanding its portfolio to meet the new challenges of U.S. National Security, the expansion from conventional to irregular challenges is relatively transparent to the Marines Corps. Notwithstanding the newly formed United States Marine Corps Forces Special Operations Command (MARSOC),⁸ the Marine Corps (unlike the Army's transformation into a modular force) has not needed to significantly transform to meet DoD's new strategy. The Marine Corps, as evident in its Small Wars Manual, has been a full-spectrum force executing conventional and irregular warfare throughout both the 20th and 21st centuries.

While it is extremely difficult to determine when, where, or what the future battlefield will look like, "we must maintain our ability to defeat conventional military threats and deter the emergences of near-peer competitors. The challenge is to find the balance [of force structure and training] without trying to attain competence in so many potential missions that we can't do any of them well."⁹ As an institution, the Marine Corps learned the inaccuracy of the long-standing adage: "if you can do MIC-HIC operations well, you can easily transition to low-intensity operations." To be successful in the LIC or Stability Operations, the Marine Corps needs additional training in language, culture, and history in its likely areas of operation. While the Marine Corps needs to expand its training in LIC, the MIC-HIC core-competencies required to win the nation's wars remain the foundation for COIN operations, particularly at the tactical level.

Although the Marine Corps has identified that irregular warfare is the most likely future operating environment,¹⁰ the combined arms techniques and associated collective MIC-HIC skill-sets are not only applicable, but required in the low-intensity COIN fight in Iraq and Afghanistan or any future COIN fight. The core skill-sets, from intelligence, surveillance, reconnaissance (ISR) employment to reporting procedures to the Marine Corps Planning Process, are required regardless of the spectrum of conflict. The ability of the squad leader, platoon commander, or company commander to direct suppressive fires (both direct and indirect), assess its effects, and maneuver his forces to kill the enemy is essentially a synopsis of the primary tactical-level skill-sets for MIC-HIC. And only with competence and confidence in MIC-HIC operations can proportional and discriminatory fires be employed in the complex COIN environment to prevent one of the greatest degradations of mission accomplishment: the accidental killing of innocent civilians. Irrespective of our current COIN fight, the key Marine Corps Title 10 responsibility is to insure that the U.S. has a force in readiness to respond to crisis situations while the U.S. defense system mobilizes.¹¹ Russia, Iran, and China are conventional threats and will only become more viable with time¹² and cannot be “wished-away.”

Although the National Security Strategy’s preemption strategy appears unlikely to be implemented again in the likes of OIF, Gap countries are now actively engaged by the United States to reduce terrorists’ sanctuaries. As a result, Stability Operations (synonymous with nation building during Phase 0 [Shape]), previously eschewed, are now seen as critical not only in the Global War on Terror (GWOT) but in all operational planning.

Stability Operations have now reached equality with offensive and defensive operations. FM-3 *Operations* now clearly displays a continuous balance between offense, defense, and stability within each phase of a campaign: Shape, Deter, Seize the Initiative, Dominate, Stabilize, and Enable Civil Authority.¹³ More important for the Marine Corps, the Long War Concept (the Marine Corps' vision for strategic forces employment in support of the steady state security posture after the Marine conventional forces depart Iraq) proposes creating a Security Cooperation Marine Air Ground Task Force (SC MAGTF) to support the theater security cooperation plans for the Geographic Combatant Commanders (GCC) in the Arch of Instability.¹⁴

The emphasis on Stability Operations has also been incorporated into the Army's concept of Battle Command. Battle Command is defined as "the art and science of understanding, visualizing, describing, directing, leading and assessing forces in operations against a hostile, thinking and adaptive enemy. Battle Command is the application of leadership to translate decisions into actions--by synchronizing forces and warfighting functions in time, space, and purpose--to accomplish the mission."¹⁵ Prior to the newly published FM 3-0, Battle Command's *Understanding* was not a part of the concept. *Understanding* is the practice of framing a problem in relationship to the end state, conditions, and objectives within the construct of PMESII-PT (political, military, economic, social, information, infrastructure, physical environment, and time).¹⁶ The U.S. military's need for planners and commanders alike to understand PMESII-PT in the context of our political endstate at conclusion of Phase III in future operations is critical. Inculcating PMESII-PT as an additional aspect of a commander's situational understanding and awareness in GWOT and future MIC-HIC while properly balancing

the different aspects of full spectrum operations should not impede how the Marine Corps task organizes for conventional warfare. Marines must be better educated to understand the inter-relationship of offensive, defensive, and stability elements within a campaign. In short, the current generation of Marine leaders will not forget the lessons of failed Stability Operations at the conclusion of conventional ground operations OIF I (March-April 2003). The warrior's mindset is now beyond Phase III operations.

Although stability and COIN operations are at the forefront of military journals and professional military education, the Information Age has also created a Revolution in Military Affairs (RMA) with cyber-warfare, information technology, and myriad other technological advancements that have permanently changed warfare. From al-Qaeda's Internet recruitment to China's attacks on nations' computer networks, cyberspace has added a new dimension to the nature of warfare. The GWOT is a war of ideology that requires incorporating strategic communications as weapons; the media, world opinion, and cyber-space are now battlefields.

The major increase in technology within the COE, though, has not necessarily changed the way an Infantry Battalion should fight. Technological additions like the Dragon Eye Unmanned Aerial Vehicle (UAV), for example, should merely augment a LAR platoon's execution of its security mission and improve the situational awareness for the commander and not replace the need for the LAR unit. Furthermore, the large shifts in the National Security Strategy emphasizing the need for DoD to face the asymmetric threat does not necessarily alter how the Marine Corps should engage in its traditional mission (notwithstanding the potential addition of the SC MAGTF), particularly at the battalion level.

One of the assumptions for the Marine Corps Long War Concept is “that the Marine Corps will remain a General Purpose Force capable of full spectrum operations with emphasis on irregular warfare”¹⁷ and that “the single most important assumption is that the purpose of our Corps will be to fight and win our nation’s battles across the full spectrum of combat operations. We will not seek to deviate from this formula that has served our nation so well.”¹⁸ To declare that the Marine Corps should focus on irregular warfare does not necessarily accurately depict the nature of the current or future environment. If the emphasis for the Marine Corps is on “hybrid wars” vice irregular war (which is arguably a more accurate description of the COE) the need to maintain a conventional task organization for the Infantry Battalion becomes a prerequisite.

The choice between an amphibious Marine Corps of the past and one devoted solely to the modern version of Kipling’s “savage wars of peace” is strategically flawed. We should not imagine that all future threats will be state-based and conventional. Nor should we assume that state-based conflict has passed into history’s dustbin. Tomorrow’s conflict will not be easily categorized into simple classifications of conventional or irregular. Future scenarios will more likely present unique combinations or hybrid threats. Conventional, Irregular, and Catastrophic terrorist challenges will not be distinct styles--they will all be present in some form. Opponents will be capable of what Marine Lieutenant General James Mattis has called “hybrid wars.”¹⁹

The war between Hezbollah and Israel in July of 2006 is an indicator of the “hybrid” fighting that can be expected in the future. To call this type of warfare “irregular” is to fail to appreciate the extreme kinetic-lethal nature of the future fight and the MIC-HIC prerequisites at the tactical level. Once again, the maxim “if you can do MIC-HIC operations well, you can easily transition to low-intensity operation” is not accurate. But the perceived panacea that Stability Operations can steady the Arch of Instability falters if, for example, the Battalion Landing Team (BLT) cannot win a tactical engagement

while conducting security cooperation in the Horn of Africa or if the Nation cannot win Phase III combat operations against Iran.

While DoD and the Marine Corps' struggle to find the right balance in capabilities and training between security cooperation and conventional capabilities, looking to the short-term combat environment in Iraq and Afghanistan is relatively easy. But visualizing exactly where the next MIC-HIC fight will be, however, is much more difficult. The key to effectively changing the doctrinal, technological, and equipment requirements of a warfighting organization (specifically modifying the Marine Infantry Battalion's TO&E in the case of this thesis) is the ability to correctly visualize the future operational environment. On the other hand, "the most successful organizations avoid wild leaps into the future; their innovations remain tied to past experience, derived from conceptually sophisticated and honestly assessed experiment, and depend on the ability to learn from both success and failure."²⁰ Striking a balance between visualizing the future and taking the lessons learned from OIF I to best employ the Weapons Company in full spectrum operations is the objective of this thesis.

The first need for balance can be observed in the Marine Corps' current TO&E augmentation in Iraq. While some short-term TO&E additions are clearly needed to support the current combat environment in Iraq and Afghanistan, permanent additions to the TO&E need to be scrutinized to ensure their viability for future full-spectrum operations (i.e., an unwieldy improvised explosive device (IED)-defeat item that does not have dual use in MIC-HIC should be closely examined before its permanent addition to the T/E). Only by anticipating the next adversary and the location and manner in which combat operations will unfold (balanced with recent historical trends from OIF) can the

Marine Corps adequately prepare to for the next war.

Marine Major Earl Hancock “Pete” Ellis’ “Tentative Manual for Landing Operations” doctrinal publication (utilized for amphibious operations in the Pacific during WWII) was an ideal example of first visualizing the future operational environments prior to developing doctrine and the requisite technology. Following this example, yet remaining grounded in contemporary history, the following assumptions are made for analyzing the MAC concept’s viability for full spectrum operations:

1. The Marine Corps should expect another mid- to high-intensity war in the future.
2. When the Marine Corps participates in the next mid- to high-intensity war, a large percentage of Infantry Battalions may be mechanized (either in the Amphibious Assault Vehicle [AAV] or the Expeditionary Fighting Vehicle [EFV]).
3. Marines will participate in low-intensity and irregular warfare for the foreseeable future.
4. Future warfare can expect to be “hybrid” in nature with adversaries combining irregular, catastrophic, traditional and disruptive methods.²¹ To declare that the Marine Corps should focus on irregular warfare does not necessarily accurately depict the kinetic-lethal nature of the current or future irregular warfare environment.
5. Infantry Battalions will continue to serve the core of the BLT on Marine Expeditionary Units and be constrained by weight and space limitation while embarked within the Amphibious Ready Group.
6. Once Marine Corps participation in OIF-OEF is completed, Infantry Battalions will also serve as BLTs within the SC MAGTF concept to support GCC’s Theater Security Cooperation Plans.²²

7. LIC-irregular warfare will continue to require MIC-HIC skill-sets for Infantry Battalions and below. In LIC, squad leaders, platoon commanders, and company commanders will need to have the ability to direct suppressive fires (both direct and indirect), assess their effects, and maneuver their forces to kill the enemy. In LIC, the Fire Support Coordinator (FSC) and commanders at all levels will need to be capable of deconflicting and safely employing direct fire and fire support in consonance with maneuver (i.e., a Fire Support Coordination Center will need HIC skill-sets).
8. The Infantry Battalion's employment to support the GWOT and SC MAGTF employment will require additional training above MIC-HIC core skill-sets (e.g., language, cultural awareness, Stability Operations etc.); a balance in training must be found.
9. Fighting in a HIC-MIC environment with a near competitor will disrupt our technological superiority; command and control will be disrupted. Reconnaissance assets will be disrupted (e.g., systems like Joint Surveillance and Target Attack Radar System [JSTARS] and UAVs).
10. While the focus of this thesis is on the need to modify the Weapons Company TO&E and make doctrinal changes to improve the Infantry Battalion's organic reconnaissance and security mission capability for MIC-HIC, any such modification provided in the recommended course of actions will only make the Infantry Battalion a more effective force in COIN, Stability Operations, Marine Expeditionary Unit (MEU), or SC MAGTF operations.

In summary, although 9-11 forced the military to acknowledge the changing nature of warfare in the Information Age (demonstrated by evolving national strategies, doctrinal changes, and growing engagement towards Gap countries) the existence of rogue-states, the emergence of China and re-emergence of Russia ensures the possibility

of nation-state versus nation-state warfare into the foreseeable future. Even though COIN operations are at the forefront due to the current combat operational environment in Iraq and Afghanistan, the Marine Corps (which by law is the Nation's force in readiness) must still assume mid- to high-intensity warfare in all aspects of its ethos. Furthermore, efficiency in MIC-HIC skill-sets directly correlates to a unit's ability to be effective in irregular warfare that will be "hybrid" in nature.²³ Therefore, any modification to the Weapons Company TO&E to support a future MAC concept must meet all aspects of full spectrum operations, to include integrating the lessons learned from OIF I and the likely employment of the Infantry Battalion in the COE. As the Commandant of the Marine Corps stated, "we do not know where we will fight next...we must be a 'two-fisted' force that can fight both traditional and irregular warfare."²⁴

¹U.S. Marine Corps, *MCDP 1-0, Marine Corps Operations* (Washington, DC: US Marine Corps, September 2001), 1-2, 1-12, 1-13, 1-14.

² The MAC, serving as the fourth maneuver element within the rifle battalion, has different task organization, capabilities and limitation than the three other identically organized rifle companies.

³ US Marine Corps Plans, Policies, and Operations, Message Traffic: "Outbrief from November 2006 Transition Task Force Meeting" (Washington, DC: Commandant of the Marine Corps, PPO POE (UC) 060925Z December 2006).

⁴ Thomas P.M. Barnett, "The Pentagon's New Map," (U.S. Naval War College, March 2003); reprinted in US Army Command and General Staff College, *C100 Readings Book and Advance Sheets*. (Fort Leavenworth, KS: USACGSC, August 2007), 123.

⁵ Ibid. Barnett describes Gap counties as the countries "plagued by politically repressive regimes, widespread poverty and disease, routine mass murder, and--most important--the chronic conflicts that incubate the next generation of global terrorists." 123

⁶ The Long War Concept is the Marine Corps' vision for strategic forces employment in support of the steady state security posture after the Marine conventional forces depart Iraq.

⁷ U.S. Department of Defense, *Quadrennial Defense Review Report*. (6 February 2006). 19.

⁸ MARSOC arguably falls outside of the Marine Corps' mandate of a "911" force.

⁹ LtGen Peter W. Chiarelli, USA and Major Stephen M. Smith, USA. "Learning From Our Modern Wars: The imperatives of Preparing for a Dangerous Future." *Military Review*. (Sep-Nov 2007): 6.

¹⁰ Marine Corps Plans, Policies, and Operations. "Long War Concept, The Marine Corps Vision for Strategic Force Employment ISO the Steady State Security Posture." Power Point Brief dated 21 February 2008.

¹¹ *Title 10, United States Code, Armed Forces Chapter 507, Section 5063* of Title 10 details the Marine Corps' composition and functions--

1. The Marine Corps shall be organized to include not less than three combat divisions and three aircraft wings, and other organic land combat forces, aviation, and services.
2. The Marine Corps shall be organized, trained, and equipped to provide Fleet Marine Forces of combined arms, together with supporting aviation forces, for service with the fleet in the seizure and defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign.
3. The Marine Corps shall provide detachments and organizations for service on armed vessels of the Navy, shall provide security detachments for the protection of naval property at naval stations and bases, and shall perform such other duties as the President may direct. These additional duties may not detract from or interfere with the operations for which the Marine Corps is primarily organized.
4. The Marine Corps shall develop, in coordination with the Army and Air Force, those phases of amphibious operations that pertain to the tactics, techniques, and equipment used by landing forces.
5. The Marine Corps is responsible, in accordance with integrated joint mobilization plans, for the expansion of the peacetime components of the Marine Corps to meet the needs of war.

¹² STRATFOR Strategic Forecasting, Inc. "Net Assessment: United States." (December 31, 2007). <http://www.stratfor.com> (private website accessed on 8 January 2008).

¹³ Department of the Army, *FM 3-0, Operations* (Washington, DC: Government Printing Office, February 2008), 3-20.

¹⁴ Marine Corps Plans, Policies, and Operations. "Long War Concept, The Marine Corps Vision for Strategic Force Employment ISO [in support of] the Steady State Security Posture." Plans, Policies, and Operations Power Point Brief dated 21 February 2008. 1, 6.

¹⁵ Department of the Army, *FM 3-0, Operations* (Washington, DC: Government Printing Office, February 2008), 5-2.

¹⁶ *Ibid.*, 5-3.

¹⁷ Marine Corps Plans, Policies, and Operations. “Long War Concept, The Marine Corps Vision for Strategic Force Employment ISO [in support of] the Steady State Security Posture.” Plans, Policies, and Operations Power Point Brief dated 21 February 2008. Slide 3.

¹⁸ *Ibid.*

¹⁹ Threat Open Source Intelligence Gateway. www.tosig.com. Warning Intelligence on the Internet Review (WIIR) No. 269, 5 March 2008. Executive summary of “How Marine Are Preparing for Hybrid Wars,” by Lieutenant Colonel Frank Hoffman, USMC (ret), *Armed Forces Journal*, January 2008. <http://www.armedforcesjournal.com/2006/03/1813952> (accessed 15 January 2008).

²⁰ MacGregor Knox and Williamson Murray. *The Dynamics of Military Revolution 1300-2050*. (USA: Cambridge University Press, 2001), 185.

²¹ U.S. Marine Corps, “The Long War Send in the Marines.” (Quantico, VA: Plans Policies, and Operations, 2008), 6. “The Long War Send in the Marines” describes the combination of tradition forms of warfare with irregular, catastrophic, and disruptive methods as “complex irregular warfare.”

²² Marine Corps Plans, Policies, and Operations. “Long War Concept, The Marine Corps Vision for Strategic Force Employment ISO [in support of] the Steady State Security Posture.” Plans, Policies, and Operations Power Point Brief dated 21 February 2008.

²³ On the other hand, there are numerous COIN and LIC skills that have improved the MIC-HIC skill-sets for the Marines. The emphasis on EPW handling and site exploitation in OIF, for example, is directly applicable to future HIC-MIC operations.

²⁴ General James T. Conway, “Message from the Commandant of the Marine Corps.” *Marine Corps Gazette* (August 2007): 13.

CHAPTER 2

LITERATURE REVIEW

The primary research question examined in this thesis is to determine if there a need to formally modify the Table of Organization and Equipment (TO&E) of a Marine Infantry Battalion's Weapons Company (hereafter referred to as the Weapons Company) to support the Mobile Assault Company (MAC) concept. The previous chapter provided an overview of the Weapons Company and the MAC concept from the early 1990s until present. This chapter reviews and discusses the existing professional writing and publications impacting the MAC concept. Furthermore, this chapter will discuss the author's credentials; identify the authoritative works and MAC concept subject matter experts; summarize the various MAC and Weapons Company employment options; display the patterns and the gaps of existent information; and describe a foundation for new research.

The author served as a Mobile Assault Platoon (MAP) Commander in one of the first MACs during the mid-1990s. During Operation Iraqi Freedom (OIF) I, the author served as a Mechanized Rifle Company Commander in the 1st Battalion, Fifth Marines (1/5) and was supported with Combined Antiarmor Teams (CAATs) during several battles and engagements. During 1/5's second deployment to Iraq during OIF II, the author was assigned as the Weapons Company Commander and created a new task organization and TO&E in order to employ the MAC concept because it had never been employed before in that particular battalion.

During OIF II, the author participated in the first Battle of Fallujah as the MAC

Commanding Officer and also the Fire Support Coordinator (FSC). At the outset of the Battle and throughout its duration, the author personally experienced the challenges of transitioning between the MAC Company Commander and the traditional role of Weapons Company Commander: the FSC. Following the mid-intensity fighting in Fallujah in April 2004, the author employed the MAC in low-intensity combat (LIC)-Counterinsurgency (COIN) operations (particularly in cordon and searches and raids). Towards the conclusion of OIF II, the author assumed the duties as the Battalion Operations Officer and employed the MAC from a battalion perspective during combat operations.

After departing 1/5, the author served as the Officer in Charge, Combined Arms Training for Tactical Training and Exercise Control Group, supporting Exercise Mojave Viper (formally known as CAX [Combined Arms Training Exercise]). During that time the author was responsible for training all Marine company commanders, platoon commanders, operations officers, and FSCs deploying to OIF from 2004-2007 in the core skill-sets of mid- to high-intensity combat (MIC-HIC) operations. This training included assessing the employment of MAC and Weapons Company elements during live-fire training exercises.

The author's first experience with the MAC was as a Marine in 2nd Battalion, Fourth Marines (2/4). The author became a MAP commander shortly after Colonel Paul J. Kennedy, then a newly promoted Major, departed the Marine Corps' first MAC to become the battalion's operations officer. The MAC concept came on the heels of CAATs becoming a relatively standardized employment technique for the Weapons Company. CAATs, the principle of permanently cross-attaching the Heavy Machine Gun

and Antiarmor Platoons into a balanced mutually supporting element within the Weapons Company, formed in the late 1980s and early 1990s where they were effectively employed during Operation Desert Storm.¹ Post-Desert Storm, Colonel Kennedy, as the Weapons Company Commander for 2/4, brought the CAAT concept to the next logical step. He organized the CAAT teams and unified them under a company commander. Colonel Kennedy's tenure with the Weapons Company in 2/4 was more of a proof of concept of the MAC and was not necessarily focused on attempting to formally modify the Weapons Company TO&E to support the MAC concept.² As a Battalion Commander, Colonel Kennedy again employed the MAC concept in combat operations in Ramadi, Iraq, and can be considered the duty expert for the Marine Corps on the MAC concept.

Since the MAC is not established in Marine Corps Doctrine, the only literature that exists on the subject was published in the *Marine Corps Gazette* (the professional journal for the U.S. Marine Corps). Two *Marine Corps Gazette* articles argue in support of the MAC concept as envisioned by Colonel Kennedy. The first article, written by Gunnery Sergeant Anil Lund and Corporal Jared Ogle (both subordinates of Colonel Kennedy) in April 1994, was entitled "Getting the Most of Out of Weapons Company." It was followed by "MAC II: The Improved Weapons Company" by Captain Paul J. Kennedy in November 1994. The first article describes the overall MAC concept, while the second article's purpose is to promulgate the validation of the concept, as well as to describe its pros and cons. The MAC concept was employed during several exercises and was evaluated (and in turn "validated") by training cadres outside of the battalion (e.g., Tactical Training and Exercise Control Group at CAX).³

Colonel Kennedy sees the roles and mission of the MAC as follows:

the primary reason for the creation of the MAC was to develop an organization that would provide a fourth maneuver company, while maintaining the capability to provide heavy weapons general support. Combining the organic assets of the Weapons Company into a comprehensive 'standing task organized force,' which takes advantage of firepower and mobility under a centralized command and control structure, is an adjustment that can enhance the battalion's operational capabilities across all levels of conflict and can be adopted in their normal or MEU (SOC) [Marine Expeditionary Unit (Special Operations Capable)] configuration. It provides the battalion with a fourth maneuver force that increases forward fire support and is capable of being the main effort and of conducting an attack, defense, reinforcement, pursuit, or exploitation. The MAC also is optimal for screening the battalion's movement to the front, the flanks, and to the rear. It is excellent for conducting route and zone reconnaissance and provides a responsive and reliable platform for scout/sniper team insertion. The MAC also provides the battalion with an outstanding security force for convoys, raids, and operations in urban terrain. It gives the Battalion Commander an improved capability to weigh the main effort and provide a mobile reserve. Whatever task is assigned, the standard structure of the MAC should maintain the flexibility to provide significant heavy weapons support, with an appropriate command and control element, to the battalion.⁴

The key capabilities that were validated with the MAC during Colonel Kennedy's tenure as the MAC commanding officer was its ability to scout, locate and report (i.e., reconnaissance), screen the front, flanks and rear of the battalion, deception operations, security missions, countermobility and counter-countermobility (due to assaultman's demolition training requisite within its military occupational specialty), surface TRAP (Tactical Recovery of Aircraft and Personnel), and scout sniper insertion or extraction. He believed additional capabilities were yet untested: pursuit or exploitation (at a tactical level), infiltration, security force in support of a raid, and a self-contained motorized raid.⁵

Some of the problems identified by Colonel Kennedy were the need to have the Headquarters and Service (H&S) Company Commander assume the duties of the FSC and the Weapons Company Executive Officer serve as the MAC's Fire Support Team

(FiST) Leader. When the H&S Company Commander serves as the FSC, certain duties need to be distributed to other staff members, thereby often straining unity of command and unity of effort for certain H&S Company functions. Furthermore, equipment shortages for the MAC concept were provided by H&S Company (particularly communications assets, vehicles, and crew-served weapons) to effectively implement the MAC vision.⁶

Other ideas during the mid-1990s dealt with the doctrinal gap in the Weapons Company TO&E as a result of the introduction of the TOW (Tube-launched Optically-tracked Wire-guided) missile system to the Infantry Battalion. Three *Marine Corps Gazette* articles, “CAAT employment: A MEU perspective,” by First Lieutenant Michael Cuccio (July 1994), “Employing TOWs in the Infantry Battalion,” by First Lieutenant Timothy E. Winand (February 1994) and “The Search for a new CAAT Table of Organization,” by First Lieutenant Jason Tanner (November 1994), all discuss recommended CAAT task organizations and the associated challenges resulting from personnel and equipment shortfalls of the new organization. None of these authors, however, looked to create an independent fourth maneuver element under a unifying company commander like Colonel Kennedy’s MAC concept.⁷

Another idea, suggested by First Lieutenant Michael Samarov, sought to tailor the CAATs to replicate the task organization of the former U.S. Army’s light infantry division’s reconnaissance squadron, particularly the motorized cavalry troop. The concept was to change the TO&E of the Heavy Machine Gun and Antiarmor Platoons to replicate this cavalry troop structure.

The purpose of this organization is to allow the commander to fight the reconnaissance and security battles for his light infantry division. Such a unit concentrates heavily on scouting techniques, supporting arms procedures, and constructing engagement areas, all done with full integration of the air cavalry. The troop avoids decisively engaging enemy units. Instead, they observe, report, strip away enemy reconnaissance and security, punish them with lightning fast rotary-wing close air support, and prepare them for the commander's decisive blow.⁸

Lieutenant Samarov's intent for the re-organization of the Weapons Company was to provide flexibility with the CAATs for combined arms integration, while retaining all of the traditional capabilities of the Weapons Company. Although his concept leaned towards a close relationship with the Marine Light Attack Helicopter Squadron (HMLA), his principle employment concept parallels Colonel Kennedy's, but without some of the Dragoons Platoon and 81mm Mortar Platoon integration into the Mobile Assault Platoons (i.e., the MAC's version of CAAT teams). Therefore, in Lieutenant Samarov's concept, the 81mm Mortar Platoon and the Dragons Anti-tank Platoon continue to serve in general support of the battalion, and the Weapons Company commander serves as the FSC. The CAAT platoons support the Infantry Battalion in the same capacity as the LAR Battalion serves the division:

Marine Corps light armored reconnaissance (LAR) units are thoroughly familiar with this motorized cavalry troop mission, but LAR units function at a higher level, responding to the needs of the Marine division commander. The Marine Corps' expeditionary nature often requires us to fight at the battalion level where integration of resources designed to multiply combat power is a key to survival.⁹

Although Colonel Kennedy's article never mentions the relationship with LAR, his MAC concept parallels Lieutenant Samarov's concept of employment. The most substantial difference between the two concepts is that Lieutenant Samarov envisions the platoon commanders controlling both the tactical employment of the CAAT team and the

fire support responsibilities (i.e., the platoon commanders assume the role of a company FiST leader along with the tactical responsibility of platoon commander).

One dissenting opinion concerning the MAC concept stood out on the pages of the *Marine Corps Gazette*, an opinion that most likely represented a portion of past and present Battalion Commanders. Lieutenant Colonel Estes, in his article “Putting the Team Together” (August 1994), is highly critical of the MAC concept and believes the traditional employment of the Weapons Company is to support the Rifle Company commander. The crux of his argument is that

There is little doubt that the main threat to the antiarmor weapons is infantry attack. Why does the battalion not organize its rifle companies to include a combination of assets that would better protect the infantry from armor and the antiarmor weapons from infantry? The tactical celerity this might produce for the Battalion Commander would warrant the effort. It seems clear that TOW systems nestled in or around a Rifle Company will gain the protection of the company from infantry attack, while giving the company a measure of defense against armor.¹⁰

With respect to force protection, there is substantial validity in Lieutenant Colonel Estes’ argument. The CAAT teams (or MAC) must have the requisite infantry force (i.e., scouts) similar to the LAR platoons to ensure self-protection, whether during a counter-reconnaissance mission or while executing an outer cordon during a cordon and search in OIF. A more challenging dilemma is how to facilitate the antiarmor needs of the Rifle Company since the antiarmor Marines are needed to support the CAATs or the MAC concept. When the Infantry Battalion is mechanized (i.e., similar to most battalions during OIF) in a MIC-HIC environment, the amphibious assault platoon’s 24 crew-served weapons supporting the Rifle Company make the attachment from the Heavy Machine Gun Platoon unnecessary. The addition of the Javelin Sections may not seem necessary when an M1 tank platoon is attached to a Rifle Company, particularly in the offense. The

FiST leader arguably brings to bear the majority of the antiarmor capability of the Marine Corps when integrating an ever-increasing lethal arsenal of close air support (CAS), artillery, rockets, and mortars. But supporting arms and elusive tank support may not always be available for the Rifle Company in the MIC-HIC environment.

While the Contemporary Operations Environment and the probability of employing the Javelin against an enemy Motorized Rifle Regiment in an antiarmor engagement area appears slim, the need for antiarmor killing capability at the company level can neither be neglected nor ignored. Whatever task organization that is created for the MAC concept must possess the flexibility to support antiarmor operations within the Infantry Battalion's TO&E across the full spectrum of operations.

For this thesis, most of the Marine Corps' doctrine that defines the roles of the Weapons Company and antiarmor doctrine is dated and may not accurately reflect contemporary considerations (although such doctrine will still need to be referenced). As Colonel Kennedy and many other commanders experimented with various task organizations of the Weapons Company (the integration of the TOW system being the catalyst) Marine Corps doctrine generally supported the MAC or CAAT concepts. Notwithstanding the aforementioned limitations of the MAC, the Battalion Commander is doctrinally given the latitude to task organize as he deems appropriate for the mission. The primary source documents for the employment of the Weapons Company and its relationship to other units in the infantry regiment and division are as follows:

1. FMFM 6-4, *Marine Rifle Company/Platoon*. 17 February 1978.
2. MCWP 3-1, *Ground Combat Operations*. 27 November 2002.
3. MCWP 3-11.5, (DRAFT) *Marine Infantry Battalion* (formerly FMFM 2-11) *Marine Infantry Battalion*. 27 November 2002.

4. MCRP 5-12D, *Organization of Marine Corps Forces*. 13 October 1998.
5. MCWP 3-14, (DRAFT) *Employment of the Light Armored Infantry Battalion*. 6 January 2000.
6. MCWP 3-15.5, *Antiarmor Operations*. 27 November 2002.

Although the U.S. Army does not employ the MAC concept and substantial task organization differences exist between the Army and the Marine Corps, comparing how reconnaissance and screening forces are task organized and employed in the Army will provide a useful comparison and contrast to the MAC concept. An analysis of Army doctrine will show a general increase in combined arms reconnaissance and security forces as the Army transitions to the Heavy, Light, and Stryker Brigade Combat Teams. The justification for the Army's transition from previous task organizations supports the argument for the MAC concept. The key source documents from Army doctrine are:

1. FM 3-20.96, *Reconnaissance Squadron*. September 2006.
2. FM 3-20.971, *Reconnaissance Troop Recce Troop and Brigade Reconnaissance Troop*. December 2002.
3. FM 3-21.20, *The Infantry Battalion*. December 2006.
4. FM 3-21.94, *The Stryker Brigade Combat Team Infantry Battalion Reconnaissance Platoon*. April 2003.
5. FM 3-90.6, *The Brigade Combat Team*. August 2006.
6. FM 7-20, *The Infantry Battalion*. December 2000.
7. FM 7-90, *Tactical Employment of Mortars*. 9 October 1992.
8. FM 7-91, *Tactical Employment of Antiarmor Platoons, Companies, and Battalions*. November 2002.
9. FM 7-92, *The Infantry Reconnaissance Platoon and Squad (Airborne, Air Assault, Light Infantry)*. 13 December 2001.
10. FM 17-95, *Cavalry Operations*. 24 December 1996.
11. FM 17-97, *Cavalry Troop*. October 1995

12. FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company/Team*. 30 September 1992.

The doctrinal gap discussed in the mid-1990s in the *Marine Corps Gazette*¹¹ continues today, and the concerns and challenges with the MAC at the time of OIF I are practically identical to those of a decade earlier: the personnel and equipments constraints continue to strain the concept for MIC-HIC operations. Currently, insufficient infantry is available within the Weapons Company Table of Organization (T/O) to provide a dismounted scout or security capability for the CAAT sections conducting independent operations, or to provide a robust assault force during company-level operations. To compensate, Marines need to be removed from the Rifle Companies, the 81mm Mortar Platoon, and-or the Antiarmor Platoon to provide scouts for the MAC. Also, the Weapons Company Table of Equipment (T/E) does not account for the company headquarters element required to support the MAC concept. Therefore, High Mobility Multipurpose Wheeled Vehicles (HMMWVs) and crew-served weapons are borrowed from other sections and platoons within the battalion (usually the H&S Company), consequently degrading other battalion core capabilities. In summary, in order to support the MAC concept, which has utility in certain circumstances, the formal task organization and original intent of the Weapons Company is not always followed resulting in a degraded capacity of not only the inherent conventional capabilities within the Weapons Company, but also within other units in the battalion. Ideally, the Weapons Company TO&E would account for this potential requirement, providing maximum flexibility to the Battalion Commander.

The author's position on the MAC concept is similar to Lieutenant Samarov's with respect to the role of the Weapons Company: the MAC should support the Infantry Battalion in a fashion similar to how LAR supports the Infantry Division. Therefore, the MAC concept should support a task organization that is able to conduct combined arms reconnaissance and security missions for the Infantry Battalion. I do not believe this mission can be accomplished with a single lieutenant platoon commander controlling both the maneuver and fire support integration for the CAATs. CAATs will be conducting independent operations and will require CAS and supporting arms to ensure an advantageous relative combat power ratio in MIC-HIC. It is unrealistic to have a platoon commander controlling the movement and direct fire control of multiple crew-served weapons and antiarmor weapons systems, while simultaneously deconflicting the combined arms integration of unmanned aerial vehicles (UAV), CAS, artillery, naval surface fires, and mortars. The complexity of combined arms integration on the modern battlefield requires a designated Marine at the point of integration of supporting arms. Colonel Kennedy's MAC concept ensures a FiST leader is provided for the company.¹²

The author generally agrees with Colonel Kennedy's MAC concept. The concept works particularly well for COIN, low-intensity combat (LIC) operations, and MEU operations. In these environments the role of the FSC, antiarmor operations, and 81mm Mortars Platoon are reduced and the responsibility can be assumed by the operations officer (in conjunction with his primary duties), Battle Captain, H&S Company Commander, or artillery liaison officer. Furthermore, providing additional weapons and equipment for H&S Company due to the COIN environment, as well as the extra equipment that is being afforded to the Infantry Battalion in Iraq for OIF, makes

resourcing the MAC concept easier than if constrained by a traditional TO&E during MIC-HIC (e.g., OIF I). Neither Lieutenant Samarov nor Colonel Kennedy's specific MAC T/Os described in their articles are valid today due to changed TO&Es for the Weapons Company since the MACs inception.

The author believes that none of the issues identified in the mid-1990s have been resolved and the need for resolution is paramount. The MAC concept remains valid for COIN, LIC and the MEU (SOC) operations; yet there is a need for the MAC in MIC-HIC operations. On the other hand, ever-present resource shortfalls greatly hinder its overall utility because it may not be acceptable to take equipment and personnel from other units within the battalion during MIC-HIC operations to support the MAC concept. More importantly, the Rifle Companies may require the Weapons Company's antiarmor assets, particularly the Javelin.

The author believes the Marine Corps' success during OIF I may have led to the perception that tactical level intelligence was acceptable; that the Infantry Battalion was properly supported with ground reconnaissance from higher and adjacent units. This lesson may not be valid against a more competent foe. The LAR Battalion, which "conducts reconnaissance, security and economy of force operations, and within its capabilities, limited offensive or delaying operations"¹³ in support of the ground combat element (GCE), may not always be able to provide support down to the Infantry Battalion level. Due to the existing gap between LAR's support to the division and the lack of reconnaissance assets at the regimental level, during MIC-HIC operations, the Weapons Company or MAC must be capable of performing combined arms reconnaissance and security missions in support of the Infantry Battalion. Due to the complexity of

battlespace geometry and the integration of numerous combined arms assets at the company level on the modern battlefield, a designated FiST leader is required. The MAC's task organization must facilitate its ability to shape the battlefield, provide information, provide reaction time and maneuver space, and preserve combat power to the Battalion Commander similarly to LAR's purpose in the Infantry Division.

The general trend of Weapons Company employment across the Marine Corps is not standardized. One of the greatest strengths of the Marine Corps, the ability of a commander to use his imagination and initiative to task organize as he sees fit for the mission, is currently a hindrance to forward progress in modifying the TO&E for the Weapons Company. The ability of the Battalion and Weapons Company Commanders to adapt and overcome the resource shortfalls needed for the MAC (and to achieve mission accomplishment in general, regardless of the resource shortfalls) have prevented any permanent change to the TO&E. In determining how the Weapons Company is being employed currently and in Operation Desert Storm and OIF I, the role and relationship of the Weapons Company within the battalion can be reviewed. If the Weapons Company is justifiably being employed beyond its original intention at the expense of H&S Company capabilities and loss of heavy weapons support to the Rifle Companies, an assessment is required to determine if the benefits to an increased capability through the MAC outweighs the degradation of H&S Company and the Rifle Companies. This thesis will determine a doctrinal and TO&E solution for the Weapons Company and Rifle Company in order to meet the needs of the Infantry Battalion in full spectrum operations.

This chapter has discussed the current literature and doctrine that relates to the MAC concept in professional journals, Marine doctrine, and Army doctrine. This chapter

has also established the patterns of existing knowledge on the MAC concept, from its inception to opposing viewpoints like those of Lieutenant Colonel Estes. A need exists to identify the current employment of the Weapons Company as well as the doctrinal gaps in its employment and TO&E shortfalls. The Infantry Battalion Commander needs to be afforded maximum flexibility and optimal employment opportunities for the Weapons Company. The next chapter will discuss the methodology of the thesis.

¹ Timothy E. Winard, "Employing TOWs in the Infantry Battalion." *Marine Corps Gazette* (February 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

² Paul J Kennedy, "MAC II: The Improved Weapons Company." *Marine Corps Gazette* (November 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

³ Paul J Kennedy, "MAC II: The Improved Weapons Company." *Marine Corps Gazette* (November 1994): 48; Anil Lund, "Getting the Most Out of Weapons Company." *The Marine Corps Gazette* (April 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁴ Anil Lund, "Getting the Most Out of Weapons Company." *Marine Corps Gazette* (April 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁵ Paul J Kennedy, "MAC II: The Improved Weapons Company." *Marine Corps Gazette* (November 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁶ Ibid.

⁷ Michael Cuccio "CAAT employment: A MEU perspective." *Marine Corps Gazette* (July 1994); Timothy E. Winand "Employing TOWs in the Infantry Battalion." *Marine Corps Gazette* (February 1994); and Jason Tanner "The Search for a new CAAT Table of Organization." *Marine Corps Gazette* (November 1994). *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁸ Michael V Samarov, "Integrating Weapons Company's New Assets." *Marine Corps Gazette* (July 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁹ Ibid.

¹⁰ Kenneth W. Estes, “Putting the Team Together.” *Marine Corps Gazette* (August 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

¹¹ Ibid.

¹² Paul J Kennedy, “MAC II: The Improved Weapons Company.” *Marine Corps Gazette* (November 1994): *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

¹³ U.S. Marine Corps, *MCWP 3-14 (Coordinating Draft), Employment of the Light Armored Reconnaissance Battalion* (Quantico, VA: Marine Corps Development Command, January 2000), 1-1.

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this chapter is to identify how the analysis utilized in this thesis will formulate a conclusion and recommendations for modifying the Table of Organization and Equipment (TO&E) of a Marine Rifle Battalion's Weapons Company (hereafter referred to as the Weapons Company) to support the Mobile Assault Company (MAC) concept. Research design uses a combination of survey research, doctrinal, historical, and comparative techniques.

Survey questionnaires were provided to all the Infantry Battalion Commanders, Weapons Company Commanders, and Operations Officers in the 1st Marine Division who participated in Operation Iraqi Freedom (OIF) I to present. A total of 65 Marine responded to the survey. At least one of the three members surveyed from each Infantry Battalion responded from the time period after OIF I (May 2003) to present. Eight of the nine Infantry Battalions that participated in OIF I responded to the survey; four respondents were Battalion Commanders. Responses were also received by units outside of 1st Marine Division that served in OIF during the time frame of 2007 to present: 3rd Battalion, Sixth Marines; 1st Battalion, Second Marines; 1st Battalion, Third Marines; and 3rd Battalion, Third Marines. Since all Weapons Company Commanders from Operation Desert Shield-Desert Storm have retired and are not readily available, all OIF Battalion Commanders surveyed had an additional question concerning how the Weapons Company was employed during Operation Desert Storm-Desert Shield (since some potentially served as platoon commanders during the war). Five Marines who responded to the survey served in Operation Desert Storm.

All surveys for the Weapons Company Commanders, Battalion Commanders and Battalion Operations Officers were presented the following questions via e-mail on 9 December 2007 (with the exception of question 21, which was added for Battalion Commanders only):¹

1. Full name and rank.
2. Billet description and unit during OIF I.
3. Briefly describe other combat experiences and the billet you held at the time.
4. Briefly describe any engagements or battles your battalion participated in during OIF I and the role of the Marine Corps Infantry Battalion Weapons Company (hereafter referred to as Weapons Company) in those actions.
5. Briefly describe any other assignments or schools that have assisted in your understanding of Weapons Company employment (e.g., student at the Fire Support Coordinators Course, instructor-observer controller at Tactical Training and Exercise Control Group, Expeditionary Warfare School instructor, etc.).
6. In your opinion, what is the current role of the Weapons Company within the Infantry Battalion?
7. How was your Weapons Company task organized and employed during OIF I (include the location of the Scout/Sniper Platoon)?
8. Do you believe there is any utility in having the Weapons Company serve as an independent maneuver company/element (aka Mobile Assault Company) for the Infantry Battalion for mid-to- high-intensity combat operations? If so, why?
9. Do you believe there is any utility in having the Weapons Company serve as an independent maneuver company/element (aka Mobile Assault Company) for the Infantry Battalion for low-intensity combat operations? If so, why?
10. Do you believe there is any utility in having the Weapons Company serve as an independent maneuver company/element (aka Mobile Assault Company) for a Battalion Landing Team for a Marine Expeditionary Unit? If so, why?
11. If your battalion was supported with the Expeditionary Fighting Vehicle vice Amphibious Assault Vehicles or 7 Ton Truck--increasing your firepower and mobility--

how would that change your answers for the previous five questions?

12. In your opinion, did regimental and division level reconnaissance assets provide satisfactory tactical level intelligence for your battalion? (Address the impact of the Light Armor Reconnaissance Battalion on your situational awareness, if able).

13. Was the Battalion Scout/Sniper Platoon able to provide timely and accurate intelligence in support of operations when Regimental and Division level assets were not able?

14. During movement to contacts, deliberate attacks, and defensive operations was the battalion able to source an effective screening force (i.e., CAAT teams, rifle platoon, etc.)?

15. Did the screening force have the requisite capability of a Company FiST team? Why or why not?

16. Do you believe the Rifle Company Table of Organization (T/O) and Table of Equipment (T/E) are currently satisfactory? Why or why not?

17. Based on your methods of employment are there any excess of personnel in any section/platoon of the Headquarters Company or Rifle Company? What are they?

18. If your battalion was employing the Mobile Assault Company concept during 24-hour operations, do you believe the Headquarters Company Commander could assume the responsibilities as the Fire Support Coordinator (i.e., as an additional duty) or would you recommend an addition to the T/O to support the requirement (any other personal ideas or concepts should be included)?

19. How effective and/or critical was your Battalion's 81mm mortar employment during combat operations?

20. In your opinion, is the 81mm Mortar Platoon relevant and needed within the Infantry Battalion (answer in relation to each spectrums of warfare: low-, mid-, and high-intensity combat operations)? Could it be reduced in size (e.g., reduced to a six gun platoon vice eight) and still be effective? What would be the impact? What is the impact, if any, of adding 120mm mortars to the Artillery Regiment TO&E?

21. Do you believe the current TO&E of the Weapons Company provides the flexibility to task organize for the likely mission profiles from low- to high-intensity combat

operations? And if not, what would be your recommended changes?

OIF Battalion Commanders had the following additional question on their surveys:

22. How was the Weapons Company employed for Desert Shield-Desert Storm (if applicable)? Please give unit.

The first four survey questions identify how the Weapons Company has been employed during OIF. Since there is a respondent from nearly every Infantry Battalion in 1st Marine Division, as well as surveys from four battalions outside 1st Marine Division, the results provide an accurate picture of the historical employment of the Weapons Company during OIF. Question five through ten are more subjective, however, in determining the capability--as well as pros and cons--of the MAC's ability to employ across the spectrum of warfare; the MAC was not employed during OIF I, only Combined Antiarmor Teams (CAAT). Responses to questions five through ten were correlated against the respondent's particular training experiences or biases--for or against--the MAC concept.

Questions eleven and 20 were designed to determine the impacts of the Expeditionary Fighting Vehicle (EFV) and the Expeditionary Fire Support Systems (EFSS) on the relationship between the Rifle Company and the Weapons Company--particularly if either of these two systems eliminate or reduce the need for the Weapons Company to provide heavy machinegun and antiarmor support to the Rifle Company in the mid- to high-intensity combat (MIC-HIC) environment. The near unanimous responses concerning the EFV and EFSS, coupled with empirical evidence produce conclusive findings on their specific relationship to the MAC TO&E.

Questions twelve through fifteen were intended to determine the effectiveness of tactical-level intelligence during OIF (particularly OIF I and the MIC-HIC environment) and attempt to identify if deficiencies exist in the combined arms reconnaissance capability at the battalion and regimental level. Questions 16 through 21 venture to identify if the current Infantry Battalion TO&E can be adjusted internally to support the MAC concept without the addition of personnel or equipment and are the least effective questions in the survey. Because there are myriad different employment techniques for the MAC concept, there is no way to establish a standard deviation within the results. Furthermore, the additional equipment provided to the Infantry Battalion participating in OIF makes identification of MAC TO&E shortfalls for full spectrum operations problematic, since in the MIC-HIC environment Infantry Battalions will, more than likely, be constrained to the doctrinal TO&E.

In addition to survey data, Marine doctrinal publications will identify the roles and missions of the Weapons Company. They will describe the previous and current intent for Heavy Machine Gun and Antiarmor Platoons serving as a direct support force to the Rifle Companies and-or general support to the Infantry Battalion, as well as general antiarmor employment principles. Marine Corps doctrine will also describe how Light Armored Reconnaissance (LAR) employment supports the Infantry Battalion and Infantry Regiment, and therefore identify any shortfalls in mission requirements between the Infantry Division (LAR being a general supporting force for the division) and the Infantry Battalions and Regiments (neither of which have an inherent LAR-type force). In summary, Marine doctrinal publications, although all dated or in draft form, will assist in determining if the Infantry Division and Regiment can provide forces capable of

requisite combined arms reconnaissance and security missions down to the battalion level.

Army doctrinal publications will provide another perspective on these same issues regarding how the Weapons Company supports the Rifle Companies while still needing to provide general heavy weapons support to the Infantry Battalion. This perspective will include the requirement to provide combined arms reconnaissance and security missions to the battalion. A comparative analysis will provide theoretical parameters of antiarmor, security, and combined armed reconnaissance capabilities needed to support an infantry brigade or regimental sized unit and other methods of task-organizing an Infantry Battalion. An analysis will be made of how and why the Army has recently modified its task organization to create the Stryker, Light, and Heavy Brigade Combat Teams. Moreover, a comparative analysis between the Marine Corps and the Army Brigade Combat Teams and its subordinate unit's execution of antiarmor, security, and armed reconnaissance missions will assist in determining the ability of the Rifle Company to execute combat operations without Weapons Company attachments from a relative combat power perspective.

With a compilation of survey data that describes the different Weapons Company-MAC employment options and commander's justifications over previous decades, the Marine Corps doctrinal specifications for Weapons Company employment, and a comparative model with the Army's changing doctrine, a qualitative and quantitative comparison is conducted between the different variables within the survey data and between Marine Corps and Army doctrine. The survey, for example, describes how and in what operational environment the MAC concept is--and theoretically could be--

employed (i.e., low-, mid-, or high-intensity combat operations). Also, a detailed intergroup comparison is made between the MAC and the Army's Weapons Company doctrinal employment. This information, coupled with recommended solutions for the Weapons Company employment from the operating forces, provides necessary input to a recommended solution for both a TO&E for an ideal Weapons Company (i.e., no fiscal, personnel, or equipment constraints and restraints) and one that is supportable within the current operational limitations.

¹ The survey was completed on 28 January 2008.

CHAPTER 4

ANALYSIS

The purpose of this chapter is to analyze the Mobile Assault Company (MAC) concept in a manner similar to the Military Decision Making Process or Marine Corps Planning Process in order to produce two recommended courses of action (COA). The chapter will commence with the roles and missions of the Weapons Company in relation to the Marine Infantry Battalion, the Rifle Company, and Marine antiarmor doctrine. The doctrinally specified tasks of the Weapons Company will then be compared to the actual tasks assigned to the Weapons Company during Operation Desert Shield-Desert Storm, the mid-1990s, Operation Iraqi Freedom (OIF) I, and current combat operations. This comparison will identify the implied tasks beyond the doctrinal mission profile for Weapons Company employment.

After the Weapons Company doctrinal analysis, this chapter will investigate the roles and missions of Light Armored Reconnaissance (LAR) and the relationship of LAR to the combined arms reconnaissance and security mission requirement from the division to battalion level. The capabilities and limitations of LAR and other reconnaissance forces within the division and battalion will further identify implied tasks for the Weapons Company and solidify the Weapons Company essential tasks throughout the spectrum of conflict.

After evaluating the current Weapons Company, Headquarters and Service (H&S) Company, and Rifle Company Table of Organization and Equipment (TO&Es), the resource shortfalls for the MAC concept will be identified. This will include an assessment of how the future introduction of the Expeditionary Fighting Vehicle (EFV)

to the operating forces and the recent introduction of the Expeditionary Fire Support System (EFSS; 120mm mortar) to the Artillery Regiment will impact the doctrinal role of the Weapons Company.

Lastly, a review will be conducted of the U.S. Army's doctrinal employment of Weapons Company and reconnaissance assets from battalion to brigade level. The review will cover current Weapons Company and reconnaissance employment of the Infantry Brigade Combat Team (IBCT), Stryker Brigade Combat Team (SBCT), and Heavy Brigade Combat Team (HBCT), as well as the maneuver battalions within the IBCT and HBCT. An analysis of the current Weapons Company and the reconnaissance elements at the Army's battalion and Brigade Combat Team (BCT) level will provide a comparison of combined arms reconnaissance and security mission requirements with Marine Corps Doctrine and Marine infantry task organization.

The Role of Marine Corps Doctrine on Weapons Company Employment and the Mobile Assault Company Concept.

The Marine Corps Warfighting Publication (MCWP) 3-11.5 (DRAFT) *Marine Infantry Battalion*,¹ MCWP 3-15.5 *MAGTF Antiarmor Operations*,² and FMFM 6-4 *Marine Rifle Company/Platoon*³ describe specific tasks and functions for the Weapons Company. These publications also define the roles and responsibilities of the Weapons Company Commander, 81mm Mortar Platoon Commander, Antiarmor Platoon Commander, and H&S Company Commander. While these publications provide specific doctrinal tasks, the current application of the Weapons Company to support the employment of either Combined Antiarmor Teams (CAATs) or the MAC concept has impacted the doctrinal role of the Weapons Company and the aforementioned billets. As

the Weapons Company takes on additional roles like combined arms reconnaissance and security mission during combat operations from Operation Desert Storm to present day operations in Iraq, the current Weapons Company TO&E no longer supports its contemporary demands and must be modified.

The role of the Weapons Company, as defined in MCWP 3-11.5 *Marine Infantry Battalion* is to provide

the Battalion Commander with the preponderance of organic firepower. It contains a Mortar Platoon, a Heavy Machine Gun Platoon, an Antiarmor Platoon, and the fire support coordination capability of the battalion. Assets from each platoon may be task organized into separate maneuver units under the direction of the Battalion Commander or supported company commander. Assets may also be attached to Rifle Companies to provide additional combat power directly to the Company Commander. However, Weapons Company assets are normally employed in direct support of subordinate companies or in general support of the battalion. The Weapons Company Commander is also the Battalion Fire Support Coordinator [FSCC]. In this capacity, he serves as a special staff officer, responsible to the S-3 for planning, integration, and coordination of fires for the battalion.⁴

Though not specified, normal employment of the Weapons Company is assumed to be the 81mm Mortar Platoon in general support (GS) while the Heavy Machine Gun Platoon and Antiarmor Platoon provide direct support (DS) to the Rifle Companies. While there is no mention of the MAC within MCWP 3-11.5 (Draft) *Marine Infantry Battalion*, within the roles and functions of the Antiarmor Platoon Commander there is a description that if “properly task organized, the Antiarmor Platoon can form the basis of a fourth maneuver unit.”⁵ Unfortunately, there is no further mention of the “fourth maneuver unit’s” concept of employment, task organization, command and control, etc., throughout the remainder of the publication.

Of the 65 respondents to the operating forces survey, 16 believed the role of the

Weapons Company is to serve as a MAC (or fourth maneuver element), eleven in a traditional capacity (i.e., 81mm Mortar Platoon in GS of the battalion, and CAATs and Javelins in DS to the Rifle Companies), and 28 as both traditional and the MAC. Ten respondents believed the role of Weapons Company is dependent on METT-T (Mission, Enemy, Terrain and weather, Troops and support available, and Time available). The table of organization diagram (see Figure 1) provided in MCWP 3-11.5 (Draft) *Marine Infantry Battalion* shows the company broken down by platoon (note: the diagram reflects Dragon Section which should read “Javelin Section”).

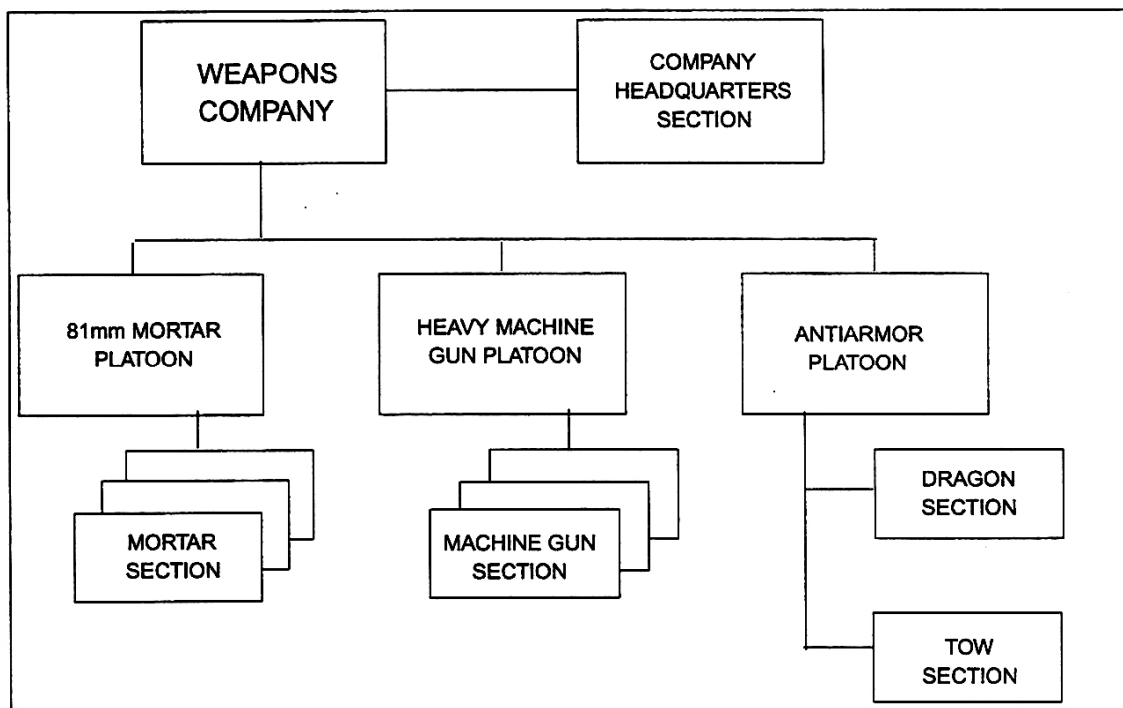


Figure 1. Marine Weapons Company

Source: U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Washington, DC: Government Printing Office, 27 November 2002), 1-3.

The MAC concept envisioned by Colonel Paul J. Kennedy requires a modification to the traditional roles and functions of the battalion staff. The H&S Company Commander becomes the Fire Support Coordinator so the Weapons Company Commander can lead the MAC.⁶ Therefore, the role and responsibilities of the Weapons Company Commander, 81mm Mortar Platoon Commander, Antiarmor Platoon Commander, H&S Platoon Commander, and the Artillery Liaison Officer (ALO) must be reviewed to determine the feasibility of assigning the Fire Support Coordinator (FSC) responsibilities to the H&S Company Commander or an individual other than the Weapons Company Commander during mid- to high-intensity combat (MIC-HIC) operations. Freeing the Weapons Company Commander of the FSC responsibilities to lead the MAC is one of the key challenges in facilitating an effective TO&E for the MAC concept.

The Weapons Company Commander is responsible for the training and administration of all sections and platoons within the company (see Figure 1); he also serves as the battalion's FSC. "The FSC is responsible for supervising the operation of the fire support coordination center [FSCC], developing fire support plans essential to the battalion's scheme of maneuver, and making recommendations for priority of fire support to subordinate units. He supervises the activities of the Mortar Platoon Commander, artillery liaison officer, naval gunfire liaison officer, and air officer within the FSCC."⁷

While the FSC plays a critical role in fire support planning, coordination, and deconfliction in MIC-HIC operations, the FSC does not exercise command. The FSC serves within the purview of the operations officer and exercises fire support coordination authority within the constraints and restraints placed upon the FSC by the Battalion

Commander.⁸ Within a properly constructed FSCC, the FSC should be co-located with the operations officer. In doing so, the operations officer can ensure that the development of the fire support plan and its execution are in consonance with the ground force's scheme of maneuver.

The FSC's planning responsibility to develop the Fire Support Plan for the battalion's operations order is a complex and time-intensive job. In a fluid combat environment where the ground scheme of maneuver is constantly changing, the fire support plan is often hastily constructed, incomplete, or not rehearsed to the level of granularity that occurs during the live-fire training portion of Exercise Mojave Viper (the formal Marine Corps training event that replaced the CAX [Combined Arms Exercise] program). The real importance of the FSC during combat operations is (1) to resource and integrate the battalion's main or supporting efforts (i.e., providing close air support (CAS), artillery fire, mortar fires, electronic warfare etc. to the Company Commander) and-or to execute targets in the commander's High Payoff Target List (as appropriate within the construct of the Attack Guidance Matrix) and (2) the safe deconfliction and risk mitigation to maneuvering ground forces and aircraft. While both tasks require mental agility and problem solving, a majority of the thought-process for constructing the fire support plan and resourcing is completed in close collaboration with the operations officer and the Battalion Commander prior to execution. While the FSC executes the administrative duties of the Fire Support Plan, the guidance, parameters, and onus of the document lie on the commander and the operations officer (although there may be heavy reliance on the FSC, depending on his capabilities and limitations).

The same is true with the deconfliction and risk mitigation within the FSC roles and responsibilities. With only two active-duty tank battalions in the Marine Corps and with Marine infantry currently mounted in amphibious assault vehicles that are treated as infantry fighting vehicles (vice armored personnel carriers), the key antiarmor killing power within the Marine Air-Ground Task Force (MAGTF) for MIC-HIC operations is the Aviation Combat Element (ACE). Safe integration of direct-fires, indirect-fire, Unmanned Aerial Vehicles (UAVs), and fixed/wing or rotary/wing (F/W or R/W) aircraft requires good presence of mind to prevent fratricide of both ground forces and aviation. The FSC must be able to solve complex battlespace geometry problems and provide recommendations in both fluid battlefield environments (when improvisation is required) and in deliberately planned operations. But once again, the established parameters of risk mitigation are the responsibility of the Battalion and Company Commander. The Battalion Commander, for example, may give guidance on what will or will not be authorized during troops-in-contact (TIC). With Joint Applications of Firepower (JFIRE) as a starting point for determining what range-to-troops each type of weapon and ordinance are authorized, there should be little room for creativity from the FSC when approving a fire mission in TIC situations.

More important, only the Company Commander in contact has the situational awareness, with respect to risk, to determine what course of action to take in a TIC situation. Only the Company Commander can best determine the risk of probability of incapacitation from supporting arms versus the casualties that will be incurred by the enemy if danger close supporting arms are not used. Notwithstanding the location of the Battalion Commander, only the Company Commander can assume the responsibility for

that type of decision, not the FSC who is confined to the FSCC. Therefore, the real role of the FSC (within the context of risk mitigation for deconfliction) is to prevent fratricide between companies or adjacent friendly units with direct fires, indirect fires, or CAS. While the Company Commander will more than likely have better situational awareness of the battle in front of him, the FSC will most likely have better situational awareness of the physical relationship of the adjacent companies and battalions and be able to prevent fratricide between those forces.

The conclusion is that although the FSC is critical in resourcing the companies as appropriate and deconflicting challenging and complex problems, the real experience applied to the planning and risk mitigation should be executed by the operations officer and the Battalion Commander. The FSC, who needs to have great presence of mind, does not necessarily need to be the senior and most experienced captain (the Weapons Company Commander is a major by the TO&E)⁹ in the battalion. The billet, however, must be filled by an officer who is able to devote time for self-study and to train the FSCC.

In garrison and during counterinsurgency (COIN) or low-intensity operations (LIC) it is plausible that the H&S Company Commander retains his traditional duties described above and assume the responsibility of the FSC to “organize, train, and supervise the personnel of the FSCC,”¹⁰ since COIN-LIC has a reduced burden on the FSC.¹¹ But during MIC-HIC, removing the H&S Company would require the Battalion Commander to have either the Combat or Field Trains led by the assistant logistics officer or another officer or staff non-commissioned officers (SNCOs) from H&S Company.

The ability of the H&S Company Commander, therefore, to assume the responsibilities of FSC during combat operations must be closely considered. Besides being responsible for a large administrative burden in garrison, during combat operations the H&S Company Commander is also the headquarters commandant. He is responsible for installation, movement, and security of the battalion headquarters. These duties are coordinated with principal staff and include

locating maintenance and refueling areas that support the H&S Company, locating local security posts and positions, coordinating reaction force actions in support of battalion headquarters security, locating mess and hygiene facilities, and organizing convoy operations for displacement of the main echelon. Normally, once the main echelon is established, the headquarters and service company executive officer will remain with the main echelon and the headquarters commandant will operate from the battalion trains. He may also be required to lead task organized units for other tactical missions.¹²

The locations of the battalion staff officers within the headquarters echelons are depicted in Figure 2. The H&S Company Commander is located in the Rear Echelon Command Post (CP). The Rear Echelon CP's

Primary mission is to support and sustain combat operations. The battalion rear echelon is normally located at the battalion Field Trains where it can fulfill its primary mission without engaging in close combat. The rear echelon must monitor the command and tactical nets, continuously assess the situation, anticipate the needs of the subordinate units, and prepare to push the necessary support forward.¹³

While "the S-4 will normally control the combat trains and designate the commander of the Field Trains,"¹⁴ the H&S Company Commander is responsible for security of the Field Trains.¹⁵

With the Rear Echelon CP and the Field Trains co-located, the following key staff personnel are also co-located: the S-4A, S-1, H&S Company Commander, Battalion Chaplain, Battalion Surgeons (with the Battalion Aid Station), and either the H&S 1st

Sergeant or Company Gunnery Sergeant. The issue remains: can the responsibilities of locating maintenance and refueling areas, mess and hygiene areas, as well as providing displacement operations and security for the trains be distributed among the remaining senior SNCOs and officers in the Field Trains, or is a Company Commander required? Since the S-4 is responsible for essentially the same tasks within the Combat Trains, it seems plausible that the S-4A should be able to do the same within the Field Trains with the Rear Echelon CP attached for movement. Since MCWP 3-11.5 (Draft) *Marine Infantry Battalion* includes a “‘be prepared to’ mission of the H&S Company Commander to lead ad hoc task organized units,”¹⁶ there appears to be some latitude for his placement on the battlefield.

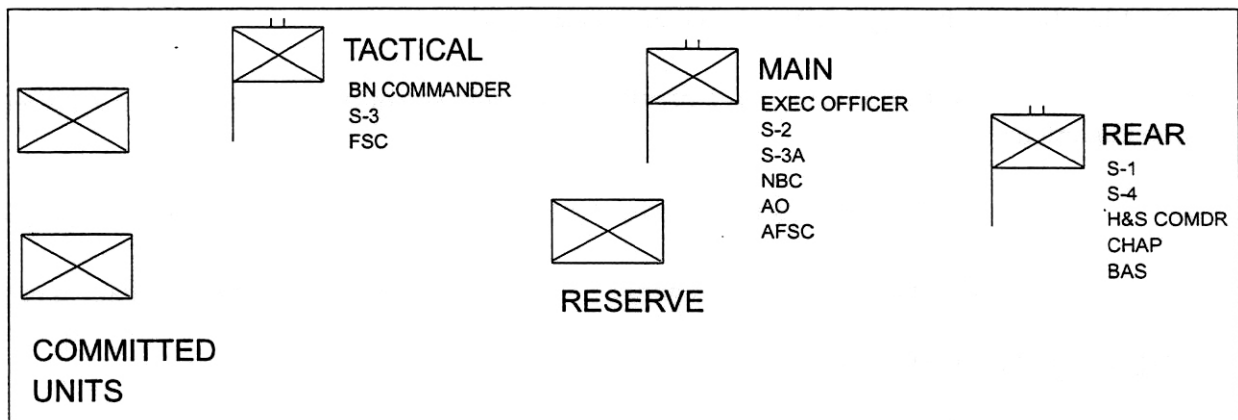


Figure 2. Infantry Battalion Command Posts

Source: U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Washington, DC: Government Printing Office, 27 November 2002), 2-1.

Currently, of all the OIF Infantry Battalions surveyed, only one is not utilizing the MAC concept in Iraq, and the H&S Company Commanders, ALO, Battle Captain, or a

member of the S-3 Shop are assuming the duties of the FSC. Furthermore, a majority of operating forces surveyed believe that the H&S Company Commander is capable of assuming the role of the FSC, as long as he is identified immediately in the training cycle and has the opportunity to prepare for the additional billet responsibilities.¹⁷ Fourteen respondents stated that their battalion used the H&S Company Commander as the FSC.¹⁸ The H&S Company Commander's headquarters commandant duties can arguably be assumed by other members of the staff during the specific execution of MIC-HIC operations (i.e., the H&S Company Commander would still conduct the traditional responsibilities of headquarter commandant during Reception, Staging, Onward Movement, and Integration [RSO&I]). There were major disagreements with the idea, though, by eleven respondents who felt that the headquarters commandant duties would not be covered effectively by other members of the staff.¹⁹ However, the changing doctrine of the Combat Support Battalion and the addition of the Combat Support Companies providing habitual DS to the Infantry Battalion may make the H&S Company Commander's ability to serve as the FSC even less contentious as additional leadership is provided in the Field Trains.²⁰ (This will be discussed in further detail below in Reconnaissance and Security Missions within the Army's new Modular Task Organization and its Relationship to the MAC.)

Another officer who has the ability to assume the duties as the FSC in conjunction with other staff duties is the ALO. Utilizing the ALO as the FSC is a technique used by the Army at the battalion level. The ALO, however, is not organic to the Marine Infantry Battalion Table of Organization (T/O), but is provided, as required, by an artillery battalion.²¹

Within the FSCC construct, it is theoretically possible for the ALO to assume both the FSC and ALO duties (particularly with a competent non-commissioned officer as a radio operator). The challenge though, is twofold: (1) the battalion is only provided one LNO, yet two would be required for an Alpha-Bravo command or 24 hour operations construct within the Tactical and Main CP command structure, and (2) the ALO is potentially not physically with the Infantry Battalion for a significant time of the work-up cycle, thereby reducing his ability to train the FSCC effectively. The ALO, as a senior lieutenant, should have the requisite training to handle constructing an effective fire support plan under the supervision of the operations officer and Battalion Commander and deconflict fires in complex and stressful situations, but substantial downfalls remain.

The Weapons Company Commander, unlike the LNO, is usually a captain (although the T/O calls for a major) and is organic to the battalion. The FSC routinely provides training to the Fire Support Teams (FiST) leaders during work-up cycles, yet the ALO will have never been a FiST leader. As the lead fire support trainer, the FSC can be a valuable asset to the Battalion Commander in training the battalion's FiST teams, but more important, there could be long-term consequences to the infantry community if the responsibility of the FSC fell completely to the artillery community. If infantry officers are not exposed to fire support coordination at the battalion level, the Marine Corps primary warfighting skill of combined arms could be significantly degraded. The infantry officer's exposure is critical to completing professional development as a MAGTF officer. Although some battalions of the Operating Forces are currently using the ALO as the FSC, due to the reduced complexity and operational tempo of the COIN environment,²² it is not necessarily a solution for the MIC-HIC environment. In

conclusion, until the artillery community forces the issue and provides the requisite pair of trained officers to the Infantry Battalion, the ALO serving as the FSC cannot come to fruition.²³

The Impact of MCWP 3-15.5 *MAGTF Antiarmor Operations* on the MAC

While the MCWP 3-11.5 *Marine Infantry Battalion* provides granularity on the specific roles and functions of the Weapons Company, MCWP 3-15.5 *MAGTF Antiarmor Operations* provides more general guidance and principles. Since the Weapons Company has the preponderance of the antiarmor capability in the Infantry Battalion and Regiments (AT-4s and Mk-153 Shoulder-Launched Multipurpose Assault Weapons [SMAWs] being the other antiarmor capability for the Rifle Company), it is paramount that the MAC concept support the specified tasks within antiarmor doctrine. The key areas within MCWP 3-15.5 *MAGTF Antiarmor Operations* that influence the MAC concept are: (1) considerations for weapons positioning, and (2) tank killer teams.

The introduction of MCWP 3-15.5 *MAGTF Antiarmor Operations* describes the Marine Corps as:

an expeditionary force that must be *light* enough to be strategically projected yet *heavy* enough to defeat potential adversaries possessing large armored formations. The expeditionary nature of the Marine Corps limits the number of armor assets available to the Marine Air-Ground Task Force (MAGTF), while many of our potential enemies continue to expand and upgrade their armor force. This dilemma requires that the MAGTF commander adapt a style of warfighting which allows him to win without armor parity. The MAGTF defeats enemy armor through the use of combined arms and the execution of maneuver warfare as prescribe in FMFM 1, *Warfighting*. (Italics in original)²⁴

Defeating enemy armor through combined arms and maneuver warfare without armor parity was clearly the case for the Marine Corps during OIF I. The First Marine

Expeditionary Force (MEF), reinforced with the entire Marine Corps' tank arsenal (two tank battalions) fought almost inversely proportional to the standard 3:1 ratio for offensive operations. Only through the synergistic effects of the ACE, well conceived and atypical economy of force missions, and fire support (to include Information Operations), were the odds made favorable at the decisive points on the battlefield. While MCWP 3-15.5 *MAGTF Antiarmor Operations* stresses that the "MAGTF should assume an antiarmor posture as a rule, not an exception"²⁵ and is primarily focused on operations against large armored forces,²⁶ the success of antiarmor employment against non-armor targets in the MOUT (Military Operation in Urban Terrain) environment,²⁷ for example, demonstrates that the role of antiarmor employment goes beyond current doctrine and requires innovation and adaptation down to the lowest tactical level. The Javelin system exists not just to kill a T-90 tank in MIC-HIC, but now also to kill a sniper in a minaret or destroy an improvised rocket launcher carried in a pick-up truck in a LIC-COIN environment.

Weapons positioning is the first principle that is applicable to the MAC concept. When employing antiarmor weapons systems, positioning "should provide protection...exploit[ing] the advantages of the weapons system while minimizing its vulnerabilities."²⁸ Furthermore, "antitank guided missiles (ATGMs) attached or co-located with a company team should position themselves near infantry for protection against dismounted assault."²⁹ This concept is directly related to Lieutenant Colonel Estes' argument concerning antiarmor employment at the battalion level (see Chap 2 page 26): only the infantry company can afford the appropriate protection for the battalion's

medium and heavy antiarmor weapons systems. Therefore, any MAC TO&E needs to account for the security requirements of the Weapons Company's antiarmor systems.

The next principle applicable to the MAC is the concept of the tank killer teams. Although this principle is moving into the realm of a specific technique, the principle has some conceptual similarities to the MAC.

The tank killer teams...are normally squad-sized, task-organized units with independent missions and armed with MAWs [Medium Antitank Weapons] and LAWs [Light Antitank Weapons]. Tank Killer teams destroy enemy armor without becoming decisively engaged. They are also used to call for and adjust indirect fires and to report on enemy movement. Tank killer teams may use helicopter or vehicles for mobility.³⁰

The Tank Killer teams are employed forward of the FEBA (forward edge of the battle area) and are focused on massed-surprise fires.³¹ The CAATs envisioned by Lieutenant Samarov (see Chapter 2 page 24) would support this principle within Marine antiarmor doctrine, but as discussed in Chapter 2, a FiST leader and forward air controller (FAC) are required to implement this antiarmor principle on a full-time basis. If the MAC is provided a FiST, the tank killer team principle can extend beyond mass surprised fires and could execute the HAW (Heavy Anti-tank Weapons)/MAW/ LAW³² principle, as well.

In summary, MCWP 3-15.5 MAGTF *Antiarmor Operations* provides no substantial assistance to the Battalion Commander on Weapons Company employment in relationship to current CAAT or MAC concepts; nothing is mentioned regarding CAAT employment. The principles, though, validate Lieutenant Samarov's concerns for the need of a FiST leader and FAC if antiarmor forces employ forward of the FEBA. It also validates Lieutenant Colonel Estes' concerns that antiarmor assets integrated into a

defense (whether static or mobile) need to consider protection against a dismounted infantry threat.

Weapons Company Employment from Operation Desert Storm to Present and the MAC's Ability to Fight Through the Spectrum of Warfare

During Operation Desert Storm the Weapons Company served in what is considered its “traditional role.” The 81mm Mortars Platoon provided GS medium mortar fires for the Infantry Battalion and the Antiarmor Platoon (equipped with the Dragon antiarmor system) reinforced the Rifle Companies to provide medium antiarmor capabilities. The Heavy Machine Gun Platoon provided security missions for the battalion or reinforced the Rifle Companies. In some cases, the Heavy Machine Gun Platoon was reinforced with TOW (Tube-Launched Optically-Tracked Wire-Guided) missiles from the Regimental TOW Platoon to form CAATs and either performed security mission for the battalion or reinforced the Rifle Companies.³³ Shortly after Operation Desert Storm, eight TOWs were permanently assigned to each Infantry Battalion and CAATs became standard across the Marine Corps continuing through OIF I. Additionally, the 1990s witnessed the inception of the Mobile Assault Company in 2nd Battalion, Fourth Marines (See Chapter 2 for the background of the MAC concept).

During OIF I, the Weapons Company was again used traditionally as it was in Operation Desert Storm. During the invasion, CAATs shifted between DS to the Rifle Companies and GS to the battalion, depending on the situation and mission. CAATs were employed extensively for battalion security mission as well as reconnaissance missions.³⁴ Due to the large area assigned to the Infantry Battalion during OIF II, Infantry Battalions began to use the Weapons Company as a fourth maneuver company to support the

massive troop-to-task requirement. By 2007 all battalions surveyed, except one, was employing the MAC concept.³⁵

All the MAC companies currently being employed are using the Weapons Company Commander as the maneuver commander with the H&S Company Commander, ALO, Battle Captain, or a member of the S-3 shop to take the responsibilities of the FSC. The task organization of the MAC and the Mobile Assault Platoon (MAP) differ substantially from battalion to battalion. There were myriad combinations between the 81mm Mortar, Antiarmor (Javelin), Heavy Machine Gun, and TOW elements to create anywhere from three to six MAPs (each combination provided different capabilities and limitations within the needs of the units specific area of operation [AO]). The varying number of major end-items available to the Infantry Battalions in theater also created significant variety in the table of equipment (T/E) available (e.g., some MACs added a 7 Ton or MRAP [Mine Resistant Ambush Protected] vehicle to each MAP). Moreover, the role and location of the Scout/Sniper Platoon also varied. Some MACs had the Scout/Sniper Platoon attached, while others were kept in H&S Company.³⁶

The Operating Forces survey unanimously agreed that the MAC concept has utility in the LIC-COIN environment. The MAC has proven extremely capable of not only owning battlespace, but also in conducting raids and cordons and searches. The mobility and dismounted capability of the MAC allows for excellent inner and outer cordons with mobile MAP-CAAT elements while the 81mm Mortar and Javelin Antiarmor Section³⁷ (that serve as TRAP elements [tactical recovery of aircraft and

personnel] or ‘trailer platoon’ for Marine Expeditionary Units [MEUs]) conducts the inner cordon and searches or direct action.

While the MAC was originally designed to support the multiple mission-sets required of the Battalion Landing Team (BLT) participating with the MEU, there was not unanimity regarding the MAC concept for employment on a MEU. The considerations for not using the MAC concept were METT-T dependent and did not necessarily debunk the notion of the MAC employment on the MEU. Depending on the likely mission sets, the MAC can be an option for the BLT commander.³⁸ The BLT and MEU commander must have a sound understanding of the operational environment and a vision of the Weapons Company tactical employment before configuring the BLT load-out within the amphibious ready group shipping.

Over half of the leadership surveyed feels that the MAC has utility in the MIC-HIC environment. The remainder believed that the additional benefits of the MAC could not compensate for the loss of the 81mm Mortar Platoon (see below, The Expeditionary Fire Support System’s Impact to the MAC’s Resource Shortfalls) or DS requirements of the Weapons Company (i.e., CAATs or Javelins). When faced with the survey question, “in your opinion, what is the current role of the Weapons Company within the Infantry Battalion?” the replies were as varied as the number of different TO&E of the MACs being employed in Iraq. Answers ranged from the extremes of “a fourth maneuver element” to “the traditional role of the Weapons Company”.³⁹

In order to validate the MAC concept through full spectrum operations though, the MAC must be capable of surviving and performing effectively in a lethal MIC-HIC environment. While the Marine Corps did not face a determined armored threat like the

Coalition faced in Operation Desert Storm or would potentially face against other potential MIC-HIC conflicts, the two Battles for Fallujah (Operations Al Fajr [November-December 2004] and Vigilant Resolve [April 2004]) and other MIC-like “named operations” during OIF have demonstrated that MACs, MAPs, and CAATs can successfully conduct combat operations in the complex and lethal MOUT environment. With prudent employment techniques, MACs, MAPs, and CAATs were able to conduct security mission (e.g., screen and guard battalion flanks), breach obstacles, provide antiarmor fires in a non-standard capacity (i.e., Javelin or TOW fires against hardened enemy positions), escort casualty evacuations, etc.⁴⁰ Attaching a tank platoon to MAPs proved an additional lethal combination for both 1st Battalion, Fifth Marines during Operation Vigilant Resolve and 3rd Battalion, First Marines in Operation Al Fajr.⁴¹

The conclusion from the Operating Forces survey is that the specified tasks assigned to the Weapons Company per MCWP 3-11.5 (Draft) *Marine Infantry Battalion* are not representative of the tasks assigned to the Weapons Company in current combat operations in Iraq or during OIF I (i.e., MIC-HIC operations). The operating forces are employing the Weapons Company beyond its intended role of GS and DS heavy weapons support revealing additional implied tasks: security and combined arms reconnaissance missions.⁴² By employing the CAATs to fill a “reconnaissance gap” at the battalion level there are possible second and third order consequences to the DS requirements that are specifically tasked to Weapons Company; however, more important, the addition of security and reconnaissance missions to Weapons Company reveals a faulty doctrinal and organizational relationship between the Weapons Company and the Scout/Sniper Platoon.

The specified tasks within the role of Weapons Company per MCWP 3-11.5

Marine Infantry Battalion are:

1. To provide the preponderance of organic firepower to the Battalion Commander.
2. To have the ability to task organize into separate maneuver elements to maneuver under the direction of the Battalion Commander (GS of the battalion) or supported Company Commanders (Note: the “separate maneuver elements” are never specifically mentioned throughout MCWP 3-11.5 (Draft) *Marine Infantry Battalion* to fill missions of screening or reconnaissance).
3. To attach elements directly to the Company Commander for additional combat power (however, normal employment with the Rifle Company should be in DS).
4. To assign the Weapons Company Commander to serve as the FSC.⁴³

While the roles and mission of the Weapons Company are vague (since the argument could be made that (2) [see above] provides the latitude to create the aforementioned security or reconnaissance force shortfall), the current employment of the MAC does not clearly fall within the established doctrinal parameters. While this is not necessarily significant, because the Battalion Commander can task organize as necessary to satisfy his visualization of the battalion’s employment within METT-T, the disconnect between employment (i.e., the implied tasks) of the Weapons Company in the MIC-HIC environment and doctrine needs to be addressed.

All Infantry Battalions surveyed during OIF I used the CAATs to conduct security missions in some capacity and a portion also used them for mobile reconnaissance missions. The relationship between the CAATs (or MAC) and the Scout/Sniper Platoon is an area where there seems to be the greatest challenges in the operating forces: How does the battalion maximize its limited GS assets towards a reconnaissance effort when the Scout/Sniper Platoon lacks mobility to be effective in an OIF I-type environment.

Since the operating force must utilize the Weapons Company in a non-doctrinal capacity (the CAAT concept in particular during OIF), the TO&E of the Weapons Company should facilitate the implied (and arguably essential) task of combined arms reconnaissance and security missions at the battalion level. Although a combined armed reconnaissance and security force is required at the battalion level, it must be generated without degrading the 81mm Mortar Platoon's GS capability or Javelin antiarmor capability for the Rifle Company (which is currently the case in OIF) in the MIC-HIC environment.

If the nature of combat for the Marine and Army Infantry Battalions in OIF I is any indicator of the future operational environment (i.e., tactical-level intelligence is limited and it is challenging to employ organic reconnaissance assets like Scout/Snipers), movement to contact (MTC) is an important form of offensive operation that must be reviewed in the context of the MAC concept. As demonstrated in OIF I, deliberate attacks closely resembled MTCs due to limited intelligence on the enemy.

MTC is defined in MCWP 3-11.5 (Draft) *Marine Infantry Battalion* as

An offensive operation conducted to develop the situation and to establish or regain contact with the enemy. A properly executed movement to contact allows the Battalion Commander to make initial contact with minimum forces and expedites the employment and concentration of the force. The commander must foresee his actions upon contact. He organizes his force to provide flexible and rapid exploitation of the contact gained.⁴⁴

MCWP 3-11.5 (Draft) *Marine Infantry Battalion* then goes on to describe the need to balance aggressiveness with caution. There is a desire to move aggressively, to prevent the enemy reaction time to counter the battalion's actions, yet simultaneously avoid being lured into a kill sack.⁴⁵

The recommendation for the commander is to utilize “aviation, security forces, and collection assets [to] reduce the chance of unexpected contact between the battalion and the enemy.”⁴⁶ While the ACE can be expected to support the battalion in MTC with aviation, for example (and the Dragon Eye UAV can augment this task), the recommendation by MCWP 3-11.5 (Draft) *Marine Infantry Battalion* to employ security forces begs the question by the Battalion Commander: “What security forces?” The Marine Infantry Battalion and Regiment, unlike the Army, have no dedicated organic motorized or mechanized combined arms reconnaissance force.⁴⁷

Figure 3 is an example of the Infantry’s Battalion’s MTC formation. (Note: although no sizes appear on the unit symbols, within the language of the text it is implied that the two artillery symbols are the two 81mm Mortar Sections.) Since there are numerous options for how the Battalion Commander may want his security forces to engage once in contact (observation only, destruction of the enemy security forces only, or full-fledged contact against the enemy main body), the task organization and the scheme of maneuver for the security force can change drastically.⁴⁸

In an Infantry Battalion MTC, antiarmor assets provide protection forward and to the flanks, and a portion of the 81mm Mortar Platoon should travel with the advanced guard or security element to provide fire support.⁴⁹ Security forces, not necessarily a part of the advanced guard, can provide reconnaissance or security missions forward of the advanced guard. “Once they locate the enemy, the security force remains oriented on him. The scout-sniper platoon and any other reconnaissance units attached are deployed forward. They reconnoiter routes and key terrain. When necessary, these units are augmented with vehicles or helicopter to increase mobility.”⁵⁰ This was not the case for

OIF I⁵¹ and it is doubtful that an Infantry Battalion would routinely be provided helicopters for Scout/Sniper insertion in a future MIC-HIC environment. Furthermore, the Scout/Sniper Platoon possesses neither the organic vehicles nor the manpower necessary for tactical mobile insertion.

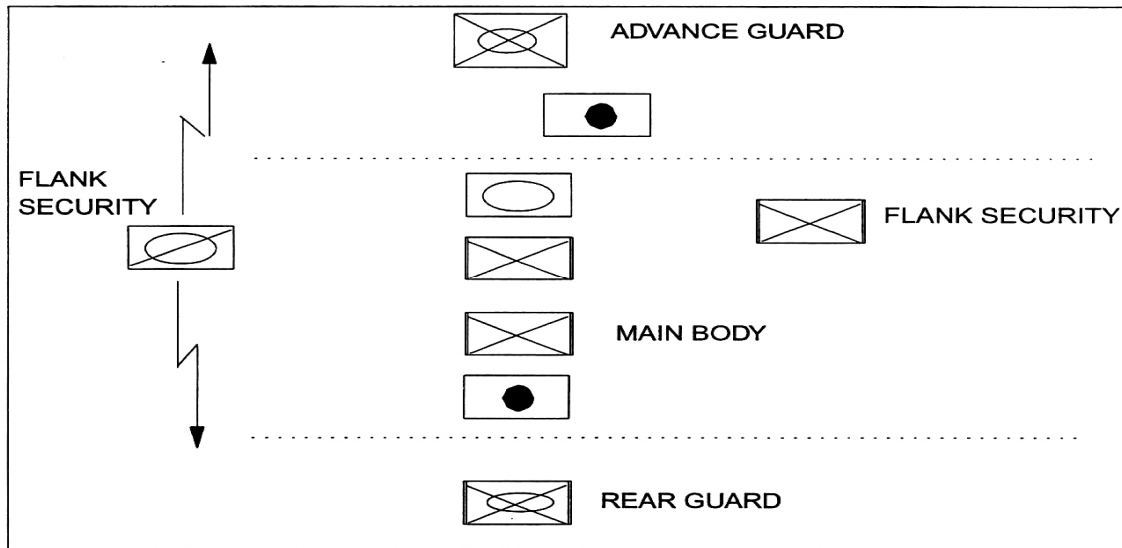


Figure 3. Infantry Battalion Movement to Contact

Source: U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 4-9.

In conclusion, the security force requirements laid out in MCWP 3-11.5 (Draft) Marine Infantry Battalion can be supported by the MAC concept with the following assets: antiarmor, 81mm mortars, scout/ snipers, FAC, and FiST to control the fires and F/W or R/W. MCWP 3-11.5 (Draft) Marine Infantry Battalion essentially describes the inherent MTC requirements in certain MAC concepts and organizations.⁵² While there is risk in utilizing the MAC in a MTC capacity, the more likely employment is mobile

combined arms reconnaissance or security missions for the Infantry Battalion mirroring the role of an LAR Company or Battalion in DS of an Infantry Regiment.

Reconnaissance and Security Missions at the Battalion Level: The Relationship Between LAR and the Scout/Sniper Platoon to the MAC Concept

In assessing the relationship between LAR and the MAC concept, the key question is: Can the division's LAR Battalion (two in the case of 1st Marine Division) adequately provide reconnaissance and security missions to each Infantry Battalion? The operating forces survey shows that LAR cannot adequately provide reconnaissance and security to each Infantry Battalion.⁵³ (When the Regimental TOW Platoon disbanded in 1998, there remained no designated combined arms reconnaissance force at either the battalion or regimental level.) The implication, therefore, is that the Infantry Battalion requires some level of organic combined arms reconnaissance capability. By analyzing how LAR organizes at the company level, the theoretical requirements of a reconnaissance unit capable of performing limited reconnaissance and security mission can be established for the Infantry Battalion. Doctrinally, the Scout/Sniper Platoon assumes the battalion's reconnaissance mission, yet it lacks the ground mobility for the MIC-HIC environment (further highlighting the reconnaissance gap at the battalion and regimental level). Therefore, a solution is required for a tailorable reconnaissance unit that can function in the full spectrum operations in HIC, MIC, or LIC when the battalion is serving as a light infantry, helicopterborne, or mechanized force.

The mission of the LAR Battalion is to "conduct reconnaissance, security and economy of force operations, and within its capabilities, limited offensive or delaying operations that exploit the unit's mobility and firepower."⁵⁴ In providing combined arms

reconnaissance and security mission for the ground combat element of the MAGTF, its role is to shape the battlefield, provide information to increase the commander's situational awareness, provide reaction time and maneuver space, and potentially preserve combat power by performing economy of force missions.⁵⁵ While MCWP 3-14 (Draft) *Employment of the Light Armored Reconnaissance Battalion* describes the LAR Battalion as normally operating as an independent maneuver element of its assigned division,⁵⁶ during OIF I a LAR Battalion was attached to each Regimental Combat Team (RCT). Additionally, MCWP 3-14 (Draft) *Employment of the Light Armored Reconnaissance Battalion* recommends that company size or larger LAR units are capable of conducting independent operations without "significantly degrading their tactical capability."⁵⁷

Since the LAR Company is capable of executing a majority of the LAR Battalion's missions, analyzing the composition of the LAR Company is a good starting point for determining the essential elements required of a unit to provide combined arms reconnaissance and security for an Infantry Battalion consisting of Weapons Company and-or Scout/Sniper Platoon elements. The LAR Company consists of a Company Headquarters, three LAR Platoons and a Weapons Platoon with an LAV-Anti-Tank (AT) section and LAV-Mortar Section (Figure 4). Each LAV-25 carries three scouts. The LAR scouts are seen as a part of a vehicle or scout team "with the vehicle and its scouts each dependent on the other for security, mobility and firepower."⁵⁸

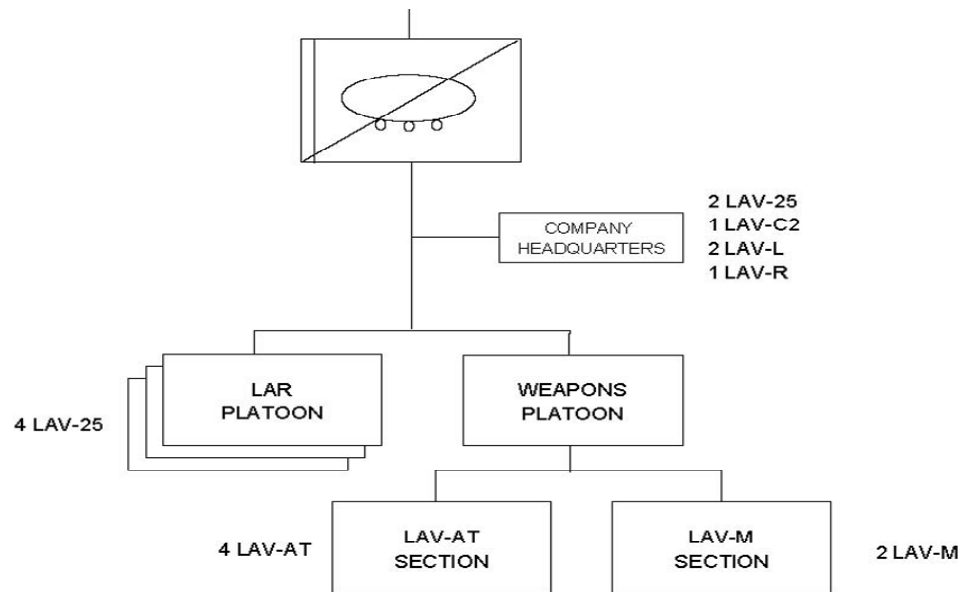


Figure 4. LAR Company Table of Organization

Source: U.S. Marine Corps, MCWP 3-14 (Coordinating Draft) *Employment of the Light Armored Reconnaissance Battalion* (Quantico, VA: U.S. Marine Corps, 6 Jan 2000). 2-2.

The lack of scouts is the greatest shortfall for the employment of the MAC concept.⁵⁹ The unarmored HMMWV, or even the M1114 armored HMMWV, clearly do not provide the same level of armored protection as an LAV, but the LAV also “cannot survive the fires of heavy machine guns, anitarmor weapons or direct hits from indirect fire weapons” and “relies on stealth, speed and agility for its survival rather than on its armor protection.”⁶⁰ Although both the LAV and the HMMWV can be destroyed by the same weapon systems, there is clearly a greater risk to the HMMWV, and its greater vulnerability should be considered in the commander’s visualization for employment in the MIC-HIC environment. The armor protection, communications capabilities, weapons

systems, and optics for the MAC (i.e., HMMWVs) can be seen as adequate for conducting the mission profiles of the LAR Company. Again, the resource shortfall that currently prevents the MAC from serving in a similar capacity as a LAR Company for the Infantry Battalion during MIC-HIC operations is scouts. (The assumption is that the 81mm Mortar Platoon and Javelin Antiarmor Section, serving in a GS and DS capacity, respectfully, would not be able to serve as scouts for the MAC, unlike their current employment in LIC environment in Iraq).

Per MCWP 3-11.5 (Draft) *Marine Infantry Battalion*, “the battalion has limited reconnaissance assets and primarily relies on the Scout/Sniper Platoon and subordinate rifle units to conduct reconnaissance for the battalion as a whole.”⁶¹ The results of OIF I proved otherwise. The CAATs provided route reconnaissance and assisted in answering the Battalion Commander’s information requirements. In most cases, the lack of mobility of the Scout/Sniper Platoon required them to ride with the Rifle Companies.⁶² Due to the mobile and high-tempo operational environment, Scout/Snipers were not able to answer Battalion Commanders’ information requirements or to conduct security missions effectively. With the exception of the CAATs, battalions were reliant on the regiment, MAGTF Command Element, and the ACE to answer Battalion Commanders’ CCIRs (commander’s critical information requirements).⁶³ The Division Reconnaissance Battalion was employed in a non-standard capacity as a conventional force to support the division’s ground scheme of maneuver because traditional employment was problematic due to the high-tempo mechanized environment,⁶⁴ and the Regiment’s ground reconnaissance was provided by a LAR Battalion attached from division.

In general, surveys from the operating forces that participated in OIF I concluded that tactical level intelligence for their respective battalions was not satisfactory; the reconnaissance resources for the Infantry Battalion (i.e., the Regiment, MAGTF Command Element, and ACE) did not provide acceptable tactical-level intelligence. Those battalions that were in close proximity to LAR units, though, felt that LAR was very helpful in providing tactical level intelligence, particularly route and zone reconnaissance.⁶⁵

Army units in OIF I also experienced the same challenges of poor tactical intelligence. Certain commanders felt that their deliberate attacks were in fact MTCs since operational intelligence assets could not keep pace with the actions of lead maneuver elements.⁶⁶ General Bernard Trainor and Michael Gordon conclude in *Cobra II* that the U.S. forces in OIF I relied too heavily on technology to compensate for low combat force ratios. While this assessment is directed particularly at insignificant forces available to successfully accomplish Phase IV tasks,⁶⁷ an argument can be made from the Battalion Commander's and Company Commander's perspectives that an overreliance on technology was the case with reconnaissance at the tactical level. The UAV, for example, is a technology that has the potential to be seen as a panacea for security and reconnaissance missions from platoon to division.

The UAV, though, needs to be seen as an augmentation to these forces and not a replacement to ground combined arms reconnaissance forces. The Dragon Eye UAV, at the Infantry Battalion, should be employed as an augmentation to the reconnaissance capability of the MAC (or whatever force is designated as the reconnaissance element) and not as a future replacement of a ground screening force. A UAV may be limited by

weather, on-station time, enemy integrated air defense, electronic warfare attack, etc., where the physical presence of a Marine unit will always provide some reaction time and maneuver space for the commander while serving in a security or combined arms reconnaissance mission.

OIF I demonstrated that technology has not eliminated the “fog of war” or “friction” on the modern battlefield. Operational reconnaissance assets were not effective at supporting the Battalion Commander in many cases, particularly after the Operation Opening Gambit in the Southern Ramalya Oil Fields. More importantly, the Iraqis did not have the ability to conduct cyber-warfare or anti-satellite warfare against the United States; the “fog of war” and “friction” that occurred in OIF I was purely internal (i.e., even with improved C4ISR [command and control systems and intelligence, surveillance and reconnaissance] that enhanced situational awareness, units experienced the same “fog of war” and “friction” seen through history). Moreover, a future enemy that is capable of electronic warfare or computer network attack may disrupt Joint Surveillance and Target Attack Radar System (JSTARS) and UAVs, likely neutralizing any technological advances attempting to improve a commander’s situational awareness in the first place.

In conclusion, the Battalion Commander needs an organic unit within the Infantry Battalion that can assist in shaping the battlefield. This unit needs to be able to conduct mobile combined arms reconnaissance and security missions to provide information to improve situational awareness and reduce the “fog of war”; it must provide reaction time and maneuver space to the battalion.⁶⁸ Within the MIC-HIC environment (similar to OIF I), the Infantry Battalion and Regiment are currently almost exclusively reliant on the division; the Scout/Sniper Platoon, as currently organized, is ineffective in the mobile and

fast paced warfare that will be faced in future MIC-HIC conflict. And “failure to conduct a thorough reconnaissance effort at best may cause the loss of initiative or failure to exploit fleeting opportunities and at worst can result in the destruction of the battalion.”⁶⁹

Can the Infantry Battalion TO&E Support the MAC?

Since the Weapons Company lacks scouts and certain equipment for its employment of the MAC in the MIC-HIC environment, the operating forces survey solicited input regarding the suitability of the H&S Company and Rifle Company TO&Es in order to identify any additional manpower or equipment available to support the MAC concept. The ability to identify resource shortfalls for the MAC, particularly in the MIC-HIC environment, was problematic since additional intra-theater equipment varied between battalions, a situation that prevented a standardization for comparison. The equipment set for a recommended TO&E for the MAC concept will therefore utilize the actual standing TO&E per the United States Marine Corps Total Force Structure Management System that can be expected for future MIC-HIC conflict (See Annex A).

The survey respondents almost unanimously declared that the current H&S and Rifle Companies TO&Es are suitable. There were comments, however, in regards to how the Rifle Company could be reorganized differently, (similar to how the Army organizes its rifle platoons and companies), and the need to increase the company headquarters platoon to improve the Rifle Company’s ability to conduct independent intelligence analysis. The only concern raised regarding the H&S Company was the potential need to re-assess the task organization of the communications platoon in order to properly balance the manpower resources between the wireman and the data systems Marines.⁷⁰

While the operating forces survey is conclusive that the Infantry Battalion has no additional resources within the H&S Company or Rifle Company to provide to the MAC concept, the Expeditionary Fighting Vehicle and the Expeditionary Fire Support Systems are two resource additions to the infantry division that have the potential to impact Weapons Company employment and assist the MAC concept.

The Expeditionary Fighting Vehicle: The Impact to the MAC's Resource Shortfalls

Although the Expeditionary Fighting Vehicle (EFV) is still in the System Development and Demonstration Phase and will not begin Low Rate Initial Production until FY10, Initial Operational Capability until 2013, and Full Operational Capability until 2023,⁷¹ the impact of the EFV on the Infantry Battalion is substantial. In relationship to its predecessor, the Assault Amphibious Vehicle (AAV) fielded in 1972, the EFV will have greatly increased firepower and mobility.⁷² Even so, the EFV will not assist in the employment of the MAC concept.

While the *United States Marine Corps Concepts and Programs* describes the EFV as an “armored amphibious vehicle” that has “the speed and maneuvering capabilities to operate with the main battle tank on land”⁷³ it is hard to visualize if the EFV has moved out of the category of armored personnel carrier (APC) like the AAV to an Infantry Fighting Vehicle (IFV) similar to the U.S. Army's Bradley fighting vehicle. The EFV has a stabilized 30mm cannon, but no anti-tank missile capability. “Additional firepower comes from the EFV's onboard Marines, which can include a full reinforced Marine rifle squad of 17 (13 Marines plus 4 additional or specialists, including Javelin anti-tank teams) in addition to the vehicle's crew of 3.”⁷⁴

The feedback from the Operating forces was nearly unanimous that the EFV would not alter the role of the Weapons Company within the Infantry Battalion through the spectrum of warfare. There was one exception. Two respondents felt that the mobility of the EFV would hinder the Weapons Company's ability to provide DS to the Rifle Companies, since the EFV will have significantly greater mobility.⁷⁵

The compatibility problem between the EFV and the HMMWV's mobility is significant because the antiarmor shortfall of the EFV requires the Rifle Company's continued reliance on Weapons Company for antiarmor augmentation. For heavy antiarmor capability, the HMMWV mounted TOW system will still be required, and for medium antiarmor capability, the dismounted Javelin antitank system will still be required to support the Rifle Company. If the EFV is not working in consonance with tanks, the EFV loses its greatly enhanced maneuverability and speed compared to the AAV to retain HMMWV mounted antiarmor capability (which arguably has marginal offensive antiarmor capability).

The Expeditionary Fire Support System's Impact to the MAC's Resource Shortfalls

Along with the EFV, the Expeditionary Fire Support System (EFSS) is another possible system that could potentially impact the MAC concept. The EFSS includes the 120mm mortar along with its prime mover, ammunition trailer, the ammunition prime mover, basic load of ammo, and crew.⁷⁶

As the direct support weapon system for the vertical assault element of the Ship to Objective (STOM) force, the EFSS will be employed within the GCE [Ground Combat Element] of the MAGTF and will be manned and supported by the artillery regiments and batteries within the division. The EFSS will be organized into firing batteries comprising of six individual mortar sections (...a "section" refers to a single EFSS). Eventually, the artillery battalion will operate the EFSS and be capable of supporting an RLT [Regimental Landing Team] in support of a

STOM-scenario. These same batteries and battalions will have the M777A1/2 [light-weight howitzer] as their primary weapons system and the EFSS will provide an additional benefit to the MAGTF and GCE commanders who will have the freedom to tailor their fire support assets to mission requirement. [The EFSS will initially] support a Marine Expeditionary Unit (MEU) as a means of integrating the system into the operating forces. [Once] at full operational capability (FOC), EFSS equipped units will provide direct supporting fires to the vertical assault elements of the STOM MAGTF.⁷⁷

While arguments have been made that the EFSS belongs with the infantry,⁷⁸ any manpower saved by replacing the 81mm mortars with the EFSS is offset by loss of mobility and an increased logistics tail at the battalion level. Even moving the EFSS to the Infantry Regiment (which may appear prudent if additional T/O was readily available) would still not necessarily impact or assist in resolving the resource shortfall for the MAC concept. As a comparison, the Army's Infantry Battalion is provided four 81mm mortars and four 120mm mortars, but is only provided enough manpower to man four tubes at any one time.⁷⁹

The survey results from the operating forces were conclusive: the 81mm Mortar Platoon is essential for the Infantry Battalion to provide GS fires to the Battalion Commander through the spectrum of warfare.⁸⁰ Even though there were examples of units that did not fire a round in OIF I due to rapid movement of the battalion,⁸¹ there were other examples of 81mm mortars being critical to the battalion while in contact.⁸² Additionally, the 81mm mortars proved effective during "named operations" during OIF II to present.⁸³

Although a handful of leaders surveyed believed the Mortar Platoon could be reduced to six tubes from eight, numerous reasons were identified as to why achieving "manpower savings" through this option were unjustified. The survey proved to be

inconclusive regarding the actual manpower saving of reducing the 81mm Mortar Platoon to a six-gun platoon. Furthermore, there were significant issues (i.e., multiple different positions) on how many Marines would be required to run two fire direction centers (FDCs) in a six-tube platoon. Others argued that since current staffing goals under the current TO&E only facilitate manning six tubes, reducing the TO&E to a six tube platoon would equate to an unacceptable four-tube platoon at current staffing levels.⁸⁴

In summary, the 81mm Mortar Platoon, due to its large size, provides great flexibility to the Battalion Commander in COIN and MEU operations and is needed through the full spectrum of warfare in the HIC, MIC, or LIC environment. The 81mm Mortar Platoon TO&E, therefore, should not be changed to support the MAC concept.

Reconnaissance and Security Missions Within the Army's New Modular Task Organization and its Relationship to the MAC

Although the Army does not use the MAC concept and there are substantial task organization differences between the Army and the Marine Corps, the Army's transition to the Heavy, Light Infantry, and Stryker Brigade Combat Teams (HBCT, IBCT, SBCT) demonstrate the requirement for some form of combined armed reconnaissance and screening forces at the brigade (regiment in the case of the Marine Corps) and battalion level. The Army's purpose in changing the TO&E of the brigade is to have the ability to fight through the full spectrum of operations in the contemporary operations environment (COE)⁸⁵ and therefore is directly applicable to the Marine Corps. An analysis of Army doctrine will reveal a shortfall of organic ground reconnaissance and antiarmor capability within the Marine Corps' TO&E at the regimental and battalion level.

Incorporating the lessons learned in OIF I and the evolving dynamics of the COE, the Army completely overhauled how it task organizes and fights⁸⁶ (See Annex B for Army BCTs' and maneuver battalions' TO&Es). The Brigade Combat Team (BCT) is now the primary fighting organization for the Army instead of the division. Although the new BCTs are smaller than previous Brigades, they are constructed to be "equally or more effective in major combat operations and stability operations, and are far better at interacting with other services' tactical elements of the Joint Forces."⁸⁷

When comparing the Army's new BCT construct with how the Marine Corps Regimental Combat Teams (RCTs) were task organized for OIF I, there are some similarities. Notwithstanding the fact that the RCT is substantially more robust with infantry, the critical similarity in analyzing the MAC concept is that both the BCT and OIF I-RCTs had a dedicated combined armed reconnaissance force. Irrespective of some composition differences between BCTs, each type of BCT has a dedicated reconnaissance squadron. The Marine Corps Infantry Regiment, on the other hand, has no dedicated combined arms reconnaissance assets and is reliant on LAR Battalions or Companies being attached from Division for their combined arms reconnaissance; the Regimental TOW platoon, which had limited combined arms reconnaissance capability, was disbanded in 1998.⁸⁸

Even though the LAR Battalion should still be retained at the Division-level, the Division should have the adequate number of LAR Battalions to resource to the Regiments in order to adhere to the T/O concept of the BCT. There are not enough LAR Battalions to support this concept if both the 1st and 2nd Marine Divisions were deployed for a HIC or MIC conflict. All three active duty LAR Battalions, for example, were a part

of 1st Marine Divisions for OIF I and subsequently attached to each RCT. While the new BCT construct demonstrated the need for a reconnaissance-type unit at the regimental or brigade level, each maneuver battalion within each type of BCT also has a reconnaissance unit.

Of the three types of BCTs, the Infantry Battalion within the IBCT most closely resembles the Marine Infantry Battalion in its roles and functions.

The mission of the [Army's] Infantry battalion is to close with the enemy by means of fire and maneuver. Its purpose is to destroy or capture him, to repel his assault by fire, close combat, and counterattack, or all of these. Infantry battalions can deploy rapidly and can be sustained by an austere support structure. They conduct operations against conventional and unconventional enemy forces in all types of terrain and climate conditions...In addition to its primary war-fighting mission, the Infantry battalion might be tasked to perform other types of operations, including stability operations and civil support operations, semi-independently or as an integral part of a larger force.⁸⁹

Similar to the Marine Infantry Battalion, the Army Infantry Battalion is a potential helicopterborne force or motorized (truck) force. Unlike the Marines, the Army's Infantry Battalion would not be mounted in an AAV or EFV (or a similar Army APC or IFV platform). But as previously discussed, the EFV or AAV does not change the antiarmor role of the Weapons Company within the Marine Infantry Battalion (i.e., the EFV and AAV have no antiarmor capability and the Weapons Company is still responsible to provide antiarmor assets to the Rifle Companies).

The IBCT's Infantry Battalion consists of a Headquarters and Headquarters Company (HHC), three Rifle Companies, and a Weapons Company. The HHC includes a Raven UAV section, a Battalion Scout Platoon, a Mortars Platoon, Battalion Snipers Platoon, Fires Support Platoon, Tactical Air Control Party (USAF), and a Medical

Platoon. The Rifle Company consists of three rifle platoons with the three 9-man squad, one weapons squad (M240G machine gun and Javelin), and one mortar squad (consisting of two 60mm mortars). Unlike the Marine Weapons Company, Javelins are organic to the Army's Rifle Companies (i.e., the Army has Javelins vice the SMAW). The Army's Rifle Companies have no weapons platoon; machine guns and Javelins are organic to the rifle platoon.⁹⁰

The Weapons Company consists of four Assault Platoons of two heavy machinegun HMMWV and two TOW HMMWVs each (See Figure 5). "The mission of the Weapons Company is to provide mobile heavy weapons and long range close combat missile fires to the Infantry Battalion."⁹¹ The Weapons Company is employed as a fourth maneuver element in nearly all examples in the offensive and defensive chapters of FM 3-21.20 *The Infantry Battalion*. In the offense, examples include attack by fire and support by fire positions. During mobile defensive operations, for example, the Weapons Company is employed on security missions and counterattacks (through the use of attack-by-fire positions).⁹² Unlike the Marine Weapons Company, the Army's Weapons Company has a dedicated commander and a FiST to lead the fourth maneuver element, and the FSC and mortars are found in the HHC.

The Mortars Platoon consists of four 120mm mortars and four 81mm mortars (although the platoon only has enough soldiers to man four total systems, either 81mm or 120mm mortars). The sniper section is also in the HHC. "The Sniper section has 10 enlisted personnel, 3 long range sniper rifle systems, and 3 standard sniper rifle systems....There are three sniper teams in the sniper section organized with a sniper, observer, and security. As a result, the sniper section can effectively employ up to five ad

hoc sniper teams for limited duration missions by employing two man teams.”⁹³ Their primary mission is to deliver “precision long-range fire on selected targets.”⁹⁴

In addition to the sniper section, the HHC also has a scout platoon.

The battalion scout platoon serves as the ‘eyes and ears’ for the Battalion Commander. The primary mission of the scout platoon is to conduct reconnaissance and security to answer CCIRs [commander’s critical information requirements], normally defined within the battalion’s ISR plan. The platoon can conduct route, zone, and area reconnaissance missions. The platoon can also conduct limited screening operations and can participate as part of a larger force in guard missions. The platoon has one officer and 21 enlisted personnel....In either offensive or defensive operations, the commander may deploy his scout platoon to conduct screening operations of the battalion’s front, flank, or rear. The scout platoon may also occupy outposts from which it can relay critical information to the TOC [Tactical Operations Center] concerning enemy composition, disposition, and activities.⁹⁵

Where the Army Infantry battalion has 21 scouts and ten snipers in two different elements, the Marine Infantry Battalion has only 15 Scout/Snipers⁹⁶ (not including the platoon commander and platoon sergeant) attempting to accomplish both tasks.

While the Army’s Infantry Battalion has twice the manpower as the Marine Corps to meet the scout/sniper needs of the battalion, it also has the benefit of a designated staff member to serve as a full time Fire Support Officer ([FSO] aka FSC to the Marine Corps).⁹⁷ The FSO’s responsibilities are nearly identical to that of the Marine Corps FSC: “he is the fire support coordinator for the maneuver battalion...The battalion FSO plans, coordinates, and executes FS [fire support] for the maneuver commander’s concept of the operation.”⁹⁸ The FSO, though attached full-time to the Infantry Battalion, is an artilleryman and is resourced through the Artillery Battalion within the IBCT.

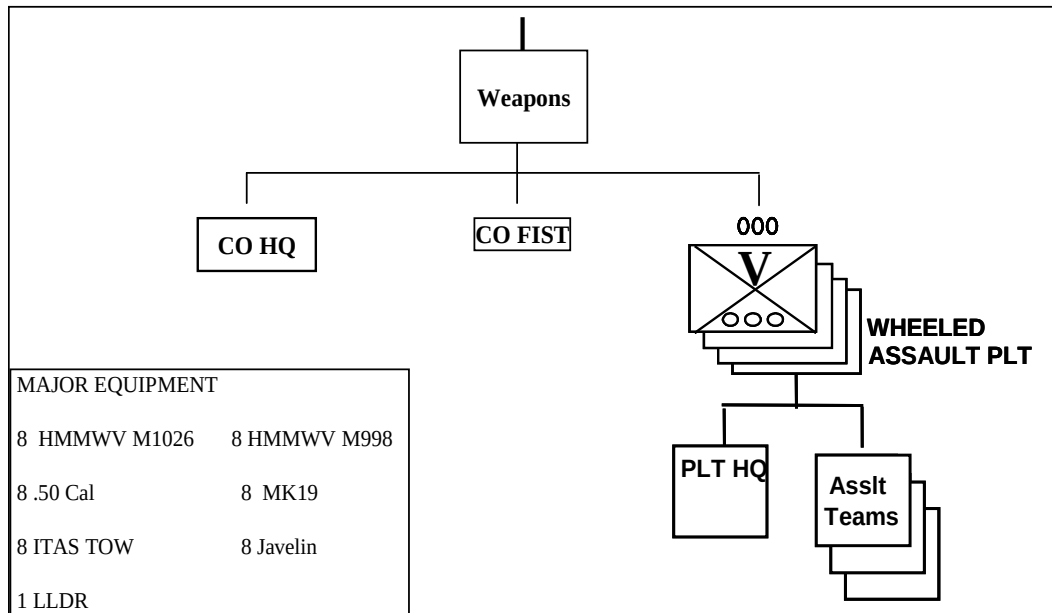


Figure 5. Weapons Company Task Organization in the Army Infantry Battalion.
Source: Department of the Army, *Student Text 100-3 Battle Book*. U.S. Army Command and General Staff College. December 2007. 2-35.

The HHC commander also has an expanded role compared to the Marine Corps
H&S Company Commander:

The headquarters company consists of the HHC headquarter and the battalion's scout, mortar and medical platoons, and the communications and sniper section. The HQ Company provides intelligence, fire support, protection, and very limited sustainment to the battalion through its specialty platoons and HQ section....The company headquarters section provides the immediate leadership, supply, and human resources support to all HHC personnel, including the battalion's command group, coordinating, special, and personal staff, and specialty platoons and squads...In a tactical environment, the HHC HQ section provides flexibility to the Battalion Commander. The HHC commander, [1st Sgt] and XO do not have a set location from where they conduct their duties and as such, can be placed where they can most effectively help the battalion to execute the mission....For example, the HHC commander might locate in the [Combat Operations Center] to oversee mortar, scout, and sniper operations, as well as to maintain CP security. The [1st Sgt] locates in the field trains as the noncommissioned officer in charge (NCOIC) and assists in logistical package (LOGPAC) operations. The XO locates with the [logistical element supporting the battalion] to provide tactical

requirements, advice, and assistance. The HHC HQs section might be used as a combat headquarters, for example, to lead a battalion reserve with task-organized elements from different companies.⁹⁹

The HHC commander is provided the autonomy and flexibility to move to different locations (particularly CPs) and lead battalion reserves because unit leaders in the Field Trains are assuming the roles and responsibilities that would be required of the Marine Corps H&S Company Commander.

The Forward Support Company Commander and XO join the S-4 and the S-4A in leading the Field Trains and the Combat Trains.¹⁰⁰ Unlike the Marine Corps, the Army does not designate a Rear Echelon CP, although all elements of the Rear Echelon CP are within the Marine Corps Field Trains. (The Army's Infantry Battalion maintains a Main, Tactical and Jump CP). The Forward Support Company Commander presumably assumes the leadership requirement of the Marine's H&S Company Commander for the Field Trains/Rear Echelon CP. With the Marine Corps' move to create the habitual relationships between Combat Logistics Companies and Infantry Battalions (very similar to the FSC's habitual relationship to the Army's Infantry Battalion) it is likely that this additional leadership would alleviate angst among the Marine Corps leaders surveyed who were concerned about the need for a Company Commander or captain in the Marine Battalion Field Trains/Rear Echelon CP.

While the Infantry Battalion of the IBCT is the most similar to the Marine Infantry Battalion, due to its similar mission as light infantry or as a helicopterborne force, the SBCT and HBCT provide a comparison for the Marine Infantry Battalion and Regiment in mobile warfare in the MIC-HIC environment. While looking at the maneuver battalions that are a part of the other two BCTs (the SBCT and the HBCT), the

key consideration for analysis is that each BCT has a recon squadron. And at the battalion level, like the IBC, each has a recon platoon; but in this case the recon platoon is mounted in order to keep pace in the mechanized environment. If the assumption made in Chapter 1 is correct that the majority of Marine Infantry Battalion will fight with the AAV or the EFV in a future MIC-HIC war like OIF I, the mobility provided for the HBCT and the SBCT reconnaissance elements is a logical requirement for the Marine Infantry Battalion. Unlike the Infantry Battalion in the IBC, the Marine Infantry Battalion must be prepared to fight mechanized, not just as dismounted or helicopterborne infantry.

The Combined Arms Battalion (CAB) is the maneuver combat battalion of the HBCT. The CAB consists of two rifle companies, two tank companies, an engineer company, a headquarters and headquarters company, and a forward support company. The Scout Platoon resides in the HHC. The Scout Platoon within the CAB consists of three Bradley Fighting Vehicles, five HMMWVs, five Long Range Advanced Scout Surveillance Systems (LRAS3s) with 29 enlisted and one officer.

The scout platoon conducts reconnaissance and security in support for the battalion mission. The scout platoon leader advises the commander, S2 and S3 on employing the scout platoon...often the scout platoon receives augmentation to perform specialized reconnaissance. This may include engineer teams...chemical, biological, radiological, and nuclear (CBRN) teams...and sniper teams for extended surveillance missions.¹⁰¹

The addition of snipers to the Scout Platoon brings up an important organizational concept for the Marine Battalion. If the Scout/Sniper Platoon lacks mobility in the mechanized environment and the CAATs (or MAPs) of the Weapons Company lack scouts, there is a logical mutually supporting role between the two elements. Not only can

MAPs provide mobility for the Scout/Sniper Platoon, but if the MAP or MAC provides a combined arms reconnaissance function for the Marine Infantry Battalion (which was the case for some battalions in OIF I) as well as security mission, the two units share a part of the same mission.

As soon as sniper teams are attached to the Rifle Companies (for whatever reason), the sniper teams no longer serve their primary mission to observe Named Areas of Interest (NAIs) for the Battalion Commander and answer his CCIRs or dominate (i.e., screen) an exposed flank. By integrating the MAC with the Scout/Sniper Platoon to complement the respective strengths and weaknesses of each unit, the potential exists to improve the reconnaissance available for the Battalion Commanders.

Army versus Marine: Conclusion.

If the Army has correctly re-task organized its entire Service to meet the anticipated Contemporary Operation Environment and future Operational Environment for MIC-HIC, the lessons learned are applicable for Marine Corps task organization requirements in the MIC-HIC environment.

First, the Army brigade has a requirement for organic reconnaissance and security. To meet that need, the BCT has an organic battalion-sized reconnaissance unit. A Marine regiment has the same requirement for reconnaissance and security missions, but it can only meet this need by receiving an LAR Battalion from division. The Marine Corps met this requirement in OIF I by using all active duty LAR Battalions to resource 1st Marine Division. The Marine Corps is unable to provide a LAR Battalion to each Regiment if 1st and 2nd Marine Division were employed similarly to Operation Desert

Storm. If the Marine Corps is employed as America's "911" force for a large scale MIC-HIC operation, it is short three LAR Battalions.¹⁰²

Second, in similar fashion, the Infantry Battalion should have a dedicated unit capable of executing security and reconnaissance missions. The Marine Corps Infantry Battalion has the burden of fighting as a light, helicopterborne, or mechanized force; therefore, it needs to have the capabilities of the IBCT's Infantry Battalion, as well as the HBCT's Combined Arms Battalion. If the Army's Infantry Battalion's scouts and snipers of the IBCT are correctly task organized, the Marine Corps Infantry Battalion Scout/Sniper Platoon is half its needed size. Additionally, the current Marine Scout/Sniper Platoon lacks mobility when in a mechanized environment. A balance needs to be found within the Scout/Sniper Platoon and the Weapons Company to meet the reconnaissance and security mission requirements of the Infantry Battalion when foot-mobile, helicopterborne, or mechanized. The current task organization does not support full spectrum operations.

Third, following the Army's Infantry Battalion example, the Marine Corps' H&S Company Commander can relinquish the requirement to lead the Field Trains/Rear Echelon CP when additional leadership is provided by the Combat Logistics Company. Therefore, the H&S Company Commander is freed to serve as the FSC as an additional duty during MIC-HIC operations.

The Combined Armor Battalion within the HBCT exemplifies the ability of motorized or mechanized forces to be able to provide Scout/Snipers mobility in a mechanized environment. If the MAC is employed in future MIC-HIC operations and conducts security and combined arms reconnaissance missions like CAATs performed in

OIF I, the deduction is the MAC and the Scout/Sniper Platoon should have a symbiotic relationship. By placing the Scout/Sniper Platoon within Weapons Company, the Scout/Sniper Platoon can provide mobility when needed, and the MAC can provide scouts when needed. By creating a habitual relationship and maintaining the Marine Corps ethos to task organize for the mission and situation, this task organization can greatly increase the flexibility and capability of reconnaissance for the Battalion Commander.

The argument that the Scout/Sniper Platoon needs to be within H&S Company under S-2 cognizant is incoherent. The fact that the S-2 assigns Scout/Sniper Teams as a part of his reconnaissance collection plan does not necessarily require him to have administrative control of the unit. The S-2 may assign other assets or units within the battalion to support the reconnaissance plan (i.e., a CAAT or a MAP) and the S-2 does not have administrative oversight of the assets. The argument that the S-2 is the only Marine in the battalion to have the subject matter expertise to employ sniper teams is shortsighted and parochial. An infantry officer assigned as the Weapons Company Commander should be able to oversee the training of the unit. In addition to the leadership benefit of having the Scout/Sniper Platoon outside the H&S Company, the Weapons Company Commander is forced to understand the correct employment considerations, as well as the capabilities and limitations of the Scout/Sniper Platoon.

Lastly, the Army's Weapons Company is able to provide heavy weapons support as an independent fourth maneuver element because the Rifle Companies have Javelin medium antiarmor capability organic at the company level. The Army's Infantry Battalion has 28 Javelins versus the Marines' eight. Marine Infantry Battalions are

seriously deficient in medium antiarmor capability; and therefore, heavily reliant on only two active tank battalions and the ACE for reinforcing antiarmor fires. The requirement to attach Weapons Company's Javelins to the Marine Rifle Companies in an OIF I-type environment is essential. The Marine Rifle Company's SMAW, which has a 31% hit rate at 150-250m on R400 during Exercise Mojave Viper¹⁰³ display a serious critical vulnerability for the Marine battalion and cannot compare with the Javelin's over 90% accuracy at ranges beyond 2000m.¹⁰⁴

The Marine Corps' lack of Javelins creates a tactical critical vulnerability for the Marine Infantry Battalion. During planning for the Operation Opening Gambit for OIF I, RCT-5 was considering consolidating the entire RCT's Javelins (24 systems) to reinforce a Company (reinforced) to Battalion (minus) sized helicopterborne force to secure key terrain in order to block an enemy armored counterattack avenue of approach.¹⁰⁵ Fortunately, the mission was cancelled, and the battalions in the regiment retained their Javelins, because 1/5, the lead battalion into Iraq for the Coalition, encountered a T-55 platoon which was destroyed by the battalion's DS Javelins. Furthermore, it was also fortunate that an enemy counterattack of 25 T-72 into the flank of 1/5 never materialized.¹⁰⁶ All the battalion's antiarmor assets (excluding SMAWs and AT-4s) were equally distributed over many kilometers that would have been problematic to effectively engage an enemy tank battalion. Rotary Wing (R/W) aviation, an important part of the combined arms synergistic effect produced by the MAGTF, was not able to operate due to atmospheric conditions.

These examples reinforce the need for the Marine Infantry Battalion to have a more robust inherent antiarmor combat power similar to the IBCT's Infantry Battalion. A

Marine RCT Commander should not have to risk consolidating Javelins from the entire regiment to provide what is already an organic capability to an Army Infantry Battalion.

Ironically, the lack of inherent Javelin capability at the Rifle Company level hinders the Weapons Company's ability to execute the MAC concept. If each Rifle Company had Javelins to either replace or augment the SMAW, the Javelin Section in the Weapons Company would be available to serve a collateral function as scouts for the MAPs.

¹ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002).

² U.S. Marine Corps, MCWP 3-15.5 *MAGTF Antiarmor Operations* (Quantico, VA: U.S. Marine Corps, 27 November 2002).

³ U.S. Marine Corps, FMFM 6-4 *Marine Rifle Company/Platoon*. (Quantico, VA: U.S. Marine Corps, 17 February 1978).

⁴ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 1-3.

⁵ *Ibid.*, 2-6.

⁶ Paul J Kennedy, "MAC II: The Improved Weapons Company." *The Marine Corps Gazette* (November 1994): *Marine Corps Gazette Archive*. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁷ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 2-6.

⁸ *Ibid.*, 3-17.

⁹ United States Marine Corps Total Force Structure Management System. Unit TO&E Report for Weapons Company 1/1 1st Marine Division. Date: March 16, 2007.

¹⁰ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 9-5.

¹¹ Survey of the operating forces. Although fourteen respondents stated their battalions employed the H&S Company Commander as the FSC during OIF--to include MIC-like

named operations--this does not validate its use in a MIC/HIC environment. No H&S Company Commander served as the FSC during OIF I from the survey results (the exception is 2/23, which is unknown due to no survey data) and any conclusion that the H&S Company Commander can assume the role of FSC during conventional MIC/HIC operations is theoretical. However, 66% of respondents believed it possible.

¹² U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 2-6.

¹³ Ibid., 2-10.

¹⁴ Ibid., 10-9.

¹⁵ Ibid., 10-10.

¹⁶ Ibid., 2-6.

¹⁷ Survey of the operating forces. 61 of the 65 respondents answered the question concerning the H&S Company Commander's ability to serving as the FSC. Forty (40) believed that the H&S Company Commander can serve as the FSC. Eleven said that the H&S Company Commander was not able to assume the additional duties as the FSC.

¹⁸ Ibid. Although there are numerous units employing the H&S Company Commander as the FSC--to include MIC-like named operations--this does not validate its use in a MIC/HIC environment. No H&S Company Commander served as an FSC during OIF I from the survey results and any conclusion to do so is theoretical. However, 66% of respondents believe it possible.

¹⁹ Ibid. Five respondents believed that there should be an addition to the T/O to assume the duty of the FSC to support the MAC concept.

²⁰ If the H&S Company Commander and H&S XO assume the role of FSC and assistant FSC, due to staffing goals there will be a requirement to ensure the H&S XO billet is always filled, potentially forcing a staff non-commissioned officer to be a platoon commander in one of the Rifle Companies.

²¹ When the ALO is attached to the infantry battalion his duties include:

- "Monitoring the artillery Conduct of Fire (COF) net and providing clearance on requests for fire.
- "Passing requirements for support to the appropriate FDC for action.
- "Coordinating artillery unit requirements, such as approval for displacement and resupply routes with the artillery and infantry battalion commander, and with the commander in whose zone of action the movement will occur, if outside the battalion's zone of action.
- "Remaining abreast of and keeping the FSC informed of the current operations and logistic status of artillery units.

- “Keeping the battalion S-2 and FSC advised of all target information received through artillery channels.
- “Keeping the artillery unit advised on the plans and tactical situation of the supported unit. Target information, fire support coordinating measures, time checks, the location of friendly units, the location of minefields and lanes through them, obstacles, and route precedence are examples of information passed to the artillery unit.” U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 9-5.

²² Survey of the operating forces.

²³ For more on the subject of ALOs serving as the FSC see Capt Christopher B. McArthur, “Staffing of Fire Support Billets, Artillerymen are the fires support experts,” *Marine Corps Gazette* (January 2008): 50.

²⁴ U.S. Marine Corps, MCWP 3-15.5 *MAGTF Antiarmor Operations* (Quantico, VA: U.S. Marine Corps, 27 November 2002). 1-1.

²⁵ *Ibid.*, 1-1.

²⁶ *Ibid.*

²⁷ Survey of operating forces; Major R.H. Belknap II, “After Action Report for Fallujah” for Weapons Company, 3rd Battalion, 1st Marines submitted to the commanding officer of 3rd Battalion, 1st Marines, 15 December 2004; Lieutenant Colonel D.J. Furness, “TF 1/1 After Action Review of Combat Operations ISO [in support of] OIF 05-07.1” submitted to the Commanding Officer of Task Force 2/8, 1 August 2006. Both after action reports provided to the author through the operating forces survey.

²⁸ U.S. Marine Corps, MCWP 3-15.5 *MAGTF Antiarmor Operations* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 3-16.

²⁹ *Ibid.*, 4-16.

³⁰ *Ibid.*, 3-29.

³¹ *Ibid.*

³² HAW/MAW/LAW is the concept in which friendly antiarmor weapons engage enemy targets at their maximum effective ranges in order to slowly attrite the approaching enemy.

³³ Survey of the operating forces.

³⁴ *Ibid.*

³⁵ *Ibid.*

³⁶ Ibid.

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid. Of the 65 respondents to the operating forces survey, 16 believed the role of the Weapons Company is to serve as a MAC (or fourth maneuver element), eleven in a traditional capacity (i.e., 81mm Mortar Platoon in GS of the battalion, and CAATs and Javelins in DS to the rifle companies), and 28 as both traditional and the MAC roles. Ten respondents believed the role of Weapons Company is dependent on METT-T.

⁴⁰ Major R.H. Belknap II, “After Action Report for Fallujah” for Weapons Company, 3rd Battalion, 1st Marines submitted to the commanding officer of 3rd Battalion, 1st Marines, 15 December 2004; Lieutenant Colonel D.J. Furness, “TF 1/1 After Action Review of Combat Operations ISO [in support of] OIF 05-07.1” submitted to the Commanding Officer of Task Force 2/8, 1 August 2006. Both after action reports provided to the author through the operating forces survey.

⁴¹ Survey of Operating Forces; Major R.H. Belknap II, “After Action Report for Fallujah” for Weapons Company, 3rd Battalion, 1st Marines submitted to the commanding officer of 3rd Battalion, 1st Marines, 15 December 2004. After action report provided to the author through the operating forces survey.

⁴² Survey of the operating forces.

⁴³ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 1-3.

⁴⁴ Ibid., 4-8.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ US Army doctrine does state that any unit can execute security missions. Department of the Army, FM 3-90 *Tactics* (Washington, DC: Government Printing Office, July 2001), 12-1. However, the preferable task organization is to have a designated organic combined arms reconnaissance capability.

⁴⁸ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 4-9.

⁴⁹ Ibid., 4-10.

⁵⁰ Ibid., 4-11.

⁵¹ Survey of operating forces. One Marine infantry battalion visualized the challenge of employing Scout/Snipers in the OIF I environment and provided them their own vehicles and/or moved with CAATs. The respondent provided no elaboration on what type or where the vehicles came from to support the technique.

⁵² FMFM 6-4 *Marine Rifle Company/Platoon* brings little to the discussion of Weapons Company employment during MTC or any implications--for or against--the MAC concept, possibly because the publication is nearly three decades old. Consequently, the MTC advanced guard examples display Weapons Company elements attached to the Rifle Companies in a “traditional” capacity. On the other hand, additional MTC examples within FMFM 6-4 *Marine Rifle Company/Platoon* show no Weapons Company CAAT integration whatsoever. Although FMFM 6-4 *Marine Rifle Company/Platoon* does not discuss the role of the Weapons Company for attachment and augmentation, the antiarmor security concerns raised by Lieutenant Colonel Estes (see chapter 2) are still valid and must be considered for any MAC concept TO&E. U.S. Marine Corps, FMFM 6-4 *Marine Rifle Company/Platoon* (Quantico, VA: U.S. Marine Corps, 17 February 1978), 16, 118.

⁵³ Survey of the operating forces.

⁵⁴ U.S. Marine Corps, MCWP 3-14 (Coordinating Draft) *Employment of the Light Armored Reconnaissance Battalion* (Quantico, VA: U.S. Marine Corps, 6 Jan 2000), 1-1.

⁵⁵ Ibid., 1-1, 1-2.

⁵⁶ Ibid., 1-3.

⁵⁷ Ibid., 3-1.

⁵⁸ Ibid., 2-3.

⁵⁹ The LAR scouts perform the following tasks:

- “Providing local security for the LAV
- “Manning observation posts (OPs)
- “Conducting dismounted reconnaissance of close terrain which cannot be bypassed
- “Providing dismounted security at danger areas
- “Performing obstacle reconnaissance
- “Performing NBC monitor/survey tasks
- “Marking contaminated areas and bypasses
- “Performing limited countermobility tasks and employing demolitions
- “Conducting bridge/ford/route/area reconnaissance and evaluation
- “Control supporting arms.” U.S. Marine Corps, MCWP 3-14 (Coordinating Draft) *Employment of the Light Armored Reconnaissance Battalion* (Washington, DC: Government Printing Office, 6 Jan 2000), 2-3.

⁶⁰ Ibid., 2-6.

⁶¹ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 7-1.

⁶² Survey of the operating forces.

⁶³ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 7-1.

⁶⁴ Stephen A. Ferrando, "Ground Reconnaissance During OIF: A perspective from within 1st MarDiv." *Marine Corps Gazette*. (July 2003). *Marine Corps Gazette* Archive. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁶⁵ Survey of the operating forces.

⁶⁶ Michael R. Gordon and General Bernard E. Trainor, *Cobra II The Inside Story of the Invasion and Occupation of Iraq*. (New York: Pantheon Book, 2006), 423.

⁶⁷ Ibid., 499,500.

⁶⁸ U.S. Marine Corps, MCWP 3-14 (Coordinating Draft) *Employment of the Light Armored Reconnaissance Battalion* (Quantico, VA: U.S. Marine Corps, 6 Jan 2000), 1-1, 1-2.

⁶⁹ U.S. Marine Corps, MCWP 3-11.5 (Draft) *Marine Infantry Battalion* (Quantico, VA: U.S. Marine Corps, 27 November 2002), 7-1.

⁷⁰ Survey of the operating forces.

⁷¹ U.S. Marine Corps, *USMC Concepts and Programs 2007*. (Quantico, VA: Plans, Policies, and Operations, 2007), 153.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ *Defense Industry Daily*. <http://www.defenseindustrydaily.com/the-usmcs-expeditionary-fighting-vehicle-sdd-phase-updated-02302/#capabilities> (accessed on 25 January 2008).

⁷⁵ Operating Force Survey.

⁷⁶ U.S. Marine Corps, "Capability Development Document for The Expeditionary Fire Support System (EFSS)" Change 1. Enclose 1, (5 Oct 06), 3.

⁷⁷ Ibid., 1.

⁷⁸ Captain R.C. Mitchell, “Employment of the EFSS.” *Marine Corps Gazette*. (December 2007); *Marine Corps Gazette* Archive. <http://www.mca-Marines.org/gazette/archives.asp> (accessed on 15 January 2008).

⁷⁹ Department of the Army, FM 3-21.20 *The Infantry Battalion* (Quantico, VA: U.S. Marine Corps, December 2006), 1-9.

⁸⁰ Survey of the operating force.

⁸¹ Ibid. 1/5, for example, did not employ their 81mm mortars during OIF I even though they experience several significant engagements.

⁸² Ibid.

⁸³ Major R.H. Belknap II, “After Action Report for Fallujah” for Weapons Company, 3rd Battalion, 1st Marines submitted to the commanding officer of 3rd Battalion, 1st Marines, 15 December 2004; LtCol D.J. Furness, “TF 1/1 After Action Review of Combat Operations ISO OIF 05-07.1” submitted to the Commanding Officer of Task Force 2/8, 1 August 2006. Both after action reports provided to the author through the operating forces survey.

⁸⁴ Survey of the operating force.

⁸⁵ Department of the Army, FMI 3-91 (DRAG Edition) *Division Operations* (Washington, DC: Government Printing Office, 1 Feb 2006), vii, vii.

⁸⁶ Department of the Army, FM 3-90.6 *The Brigade Combat Team* (Washington, DC: Government Printing Office, August 2006), xviii.

⁸⁷ Ibid. xvi.

⁸⁸ Commanding General, Marine Corps Combat Development Command, “Message traffic: Reorganization of Headquarter Company, Infantry Regiments, 1st, 2D and 3D Marine Division (MARDIVS)” 201130Z January 1998. “The active regimental antitank platoons will be eliminated. This will decrease the personnel structure by one Marine officer and 81 enlisted Marines. Three enlisted Marine Billets from the Platoon will be reassigned within the Headquarters Company.”

⁸⁹ Department of the Army, FM 3-21.20 *The Infantry Battalion* (Washington, DC: Government Printing Office, December 2006), 1-1.

⁹⁰ Department of the Army, *Student Text 100-3 Battle Book*. U.S. Army Command and General Staff College. Academic Year 07/08. 2-36. The rifle company has a mortar section of two 60mm mortars vice the Marine Corps’ three 60mm mortars section. Furthermore, the infantry squad is a 9-man squad vice the Marines 13-man squad.

⁹¹ Department of the Army, FM 3-21.20 *The Infantry Battalion* (Washington, DC: Government Printing Office, December 2006), 1-11

⁹² Ibid., Figure 4-2. Envelopment, 4-10; Figure 4-3. Penetration, 4-11; Figure 4-4. Turning Movement, 4-12; Figure 4-6. Frontal attack against a moving enemy, 4-15; Figure 4-7, Battalion in column formation, 4-16; Figure 4-8, Battalion in wedge formation, 4-17; Figure 4-9. Battalion in vee formation, 4-18; Figure 4-10. Battalion in echelon left formation, 4-19; Figure 4-11. Battalion in line formation, 4-20; Figure 4-12. Battalion in movement to contact, 4-21; Figure 4-17. Planning the attack, 4-49; Figure 4-18. Example of a battalion flank attack, 4-55; Figure 4-19. Terrain oriented attack, 4-55; Figure 5-4. Defense in depth, 5-5-14; Figure 5-6. Delay from alternate positions, 5-25; Figure 5-7. Delay from subsequent positions, 5-26; Figure 5-8. Methods for organizing the detachment left in contact, 5-31; Figure 5-9. Defense of an AO, 5-41; Figure 5-10. Disposition of forces in and about a BP, 5-43; Figure 5-11. Organization of the reverse slope defense, 5-46; Figure 5-12. Examples of strongpoints, 5-49; Figure 5-14. Strongpoint fire support plan, 5-53; Figure 5-15. Perimeter defense, 5-55.

⁹³ Ibid., 1-10.

⁹⁴ Ibid.

⁹⁵ Ibid., 1-8, 1-9.

⁹⁶ United States Marine Corps Total Force Structure Management System Unit TO&E Report for H&S Company 1/1, First Marine Division, 15 Mar 2007.

⁹⁷ Department of the Army, FM 3-21.20 *The Infantry Battalion* (Washington, DC: Government Printing Office, December 2006), 1-5.

⁹⁸ Ibid., 10-4.

⁹⁹ Ibid., 1-9.

¹⁰⁰ Ibid., 10-43. Figure 10-9 LOGPAC Deliveries shows how the Forward Support Company integrates with the field trains.

¹⁰¹ Department of the Army, FM 3-90.5 (Initial Draft) *The Combined Arms Battalion* (Washington, DC: Government Printing Office, March 2007), 2-3.

¹⁰² If the LAR reserves were activated, 1st and 2nd Marine Divisions would be short six LAR companies.

¹⁰³ The Mk-153 SMAW averaged a 31% hit rate (74 out of 241 shots) on R400 by the last 16 Infantry Battalion participating in Exercise MOJAVE VIPER. The average range of the shots was 150-250m against an approximate 2m by 2m tire-stack target. Statistics

provided by e-mail from Maj Dan Wittnam, OIC of the live-fire portion of Exercise MOJAVE VIPER on 26 April 2008.

¹⁰⁴ The accepted unclassified hit percentage for the Javelin in the operating forces is 90%.

¹⁰⁵ Author participated in the Regimental operational planning teams for OPENING GAMBIT and was with the lead Rifle Company entering Iraq with 1/5; the author directed Javelin employment when attached tank platoon was disoriented and incapable of engaging the enemy T-55 tank platoon.

¹⁰⁶ The false report may have been a JSTARs anomaly.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

The purpose of Chapter 5 is to synthesize the findings of Chapter 4 and to provide two recommended Courses of Actions (COA) to facilitate permanent future employment of the Mobile Assault Company (MAC) concept across the full spectrum of warfare. The first COA is a recommended MAC Table of Organization and Equipment (TO&E) and concept of employment within the resource shortfalls, constraints, and restraints of the current Weapons Company and Headquarters and Service Company (H&S) TO&Es. This COA is also based on the assumptions established in Chapter 1 regarding the future Contemporary Operational Environment's (COE) impact on the Marine Corps. The second COA is an unconstrained (or ideal) Weapons Company TO&E and a MAC concept of employment that supports utilization of the MAC across the full spectrum of operations. Lastly, this chapter proposes recommendations and advocates areas of study beyond the MAC concept that were identified during thesis research.

The widespread employment of the MAC concept currently seen in Iraq¹ is in many ways indicative of the colossal troop requirement for counterinsurgency (COIN) and Stability Operations. While the Combined Antiarmor Teams (CAATs), Mobile Assault Platoons (MAPs), and MACs were employed successfully in mid-intensity combat operations during Operations Al Fajr, Vigilant Resolve (both Battles of Fallujah),² and Rivergate (combined combat operation in Haditha, Haqlaniya, and Barwana, Iraq) the Weapons Company's nontraditional assumption of battlespace under the leadership of its Company Commander has proven to be an essential technique to assist the overburdened Infantry Battalion in COIN operations. The particular

circumstances of the Iraq Stability Operations-COIN environment allows the 81mm Mortar Platoon and Javelin Section to temporarily put aside their conventional warfighting role and to integrate as provisional infantry with the rest of Weapons Company, thus creating a capable fourth maneuver element with capabilities similar to a Rifle Company.

The Department of Defense describes stability operations as “comparable to combat operations”³ and FM 3-0 *Operations* describes full spectrum operations as a balance between the elements of stability, offensive, and defensive operations within each phase of a campaign.⁴ The Marine Infantry Battalion, therefore, should now be inherently prepared to transition rapidly into Phase IV (Stability), or to deploy into a Phase IV or a Phase 0 (Shape) environment, indefinitely. In essence, as Stability Operations attain equality with offensive and defensive operations in full spectrum operations, the MAC should be expected to be employed consistently in the future. Ideally, the MAC would be a standing organization during Phase III operations in order to provide an efficient and effective transition to Stability Operations or deployment directly into Phase 0 as part of a Security Cooperation Marine Air Ground Task Force (SC MAGTF).⁵ A doctrinally implemented MAC will prevent cumbersome reorganization during the critical early stages of Phase IV and numerous training inefficiencies during battalion work-up cycles.⁶

When the Weapons Company Commander assumes the role of MAC Company Commander, a requirement still exists for a battalion Fire Support Coordinator (FSC), regardless of which phase of an operation the MAC is employed. The FSC’s deconfliction skills, although potentially in low demand during COIN operations, still

require the entire foundation of mid- to high- intensity combat (MIC-HIC) fire support coordination proficiencies. Serving as an FSC requires extensive training and preparation well before commencement of Phase IV in a campaign, a deployment to Iraq, or a deployment to Africa as a part of a SC MAGTF.⁷ Consequently, a suitable doctrinal FSC replacement for the Weapons Company Commander must be identified to support the MAC concept.

Although several FSC options have been employed in Iraq (e.g., artillery liaison officers [ALO], S-3As, H&S Company Commanders, Battle Captains, etc.),⁸ the H&S Company Commander appears to be the best permanent FSC solution for full spectrum operations without necessitating additions to the Battalion Table of Organization (T/O). Three justifications exist for the H&S Company Commander to assume the doctrinal FSC responsibility: first, units already successfully used the H&S Company Commander as the FSC;⁹ secondly, a shortfall exists of two qualified company grade ALOs to serve as the FSC and assistant FSC that would theoretically be sourced by the Artillery Regiment;¹⁰ and lastly, the emerging doctrine of the Combat Logistics Companies (CLC) may change the doctrinal requirements of the H&S Company Commander during execution of MIC-HIC operations.¹¹ In the future, the CLC will provide a habitual direct support relationship to each Infantry Battalion¹² similarly to how the Army's Forward Support Company habitually supports the Infantry Battalion. The Forward Support Company (which replicates the CLC) allows the Army's Headquarters and Headquarters Company Commander (i.e., H&S Company Commander) freedom of movement in MIC-HIC and alleviates the requirement to lead and-or co-locate with the Field Trains/Rear Command Post or Combat Trains.¹³ Even if the Battalion Commander is not constrained

doctrinally as to who serves as the FSC, the essential requirement for an effective FSC is an early decision in the training cycle that allows the assigned FSC the opportunity to train himself, the Fire Support Coordination Center (FSCC), and the battalion Fire Support Teams (FiSTs).¹⁴

Although the MAC is currently the preferred choice for Weapons Company employment in the Iraq COIN environment,¹⁵ its ability to be employed in a mechanized MIC-HIC environment is currently problematic. Unfortunately, the Weapons Company requirement to provide heavy weapons and antiarmor support to the Rifle Companies and medium mortar support to the battalion cannot necessarily be disregarded in order to execute the MAC concept in all environments of full spectrum operation.¹⁶ On the other hand, reviewing and synthesizing the current Marine doctrine, Army doctrine, and operating force surveys reveal a need for a mobile combined arms reconnaissance and security force at the regimental and battalion level.¹⁷ The MAC is the unit best suited to accomplish this essential task at the battalion level. The need to afford the Battalion Commander a unit capable of combined arms reconnaissance and security missions is the primary justification for adjusting the battalion task organization (and subsequent TO&E) in order to employ the MAC through the full spectrum of operations, particularly in the MIC-HIC environment.

Notwithstanding the early days of OIF I during Operation Opening Gambit, suitable tactical intelligence was not provided consistently at the Infantry Battalion level.¹⁸ The reason Joint Surveillance and Target Attack Radar System (JSTARS), Unmanned Aerial Vehicles (UAVs), other-governmental organizations, the division, the Marine Expeditionary Force, theater, and national level intelligence assets did not

provide suitable tactical level intelligence for battalions and below during OIF I are beyond the scope of this paper. The lesson learned, however, is that shortcomings in tactical level intelligence should be expected in the future, and action is required to mitigate this problem for the Infantry Battalion to prevent possible exploitation by a more competent enemy.

The new modular U.S. Army, incorporating OIF lessons learned and anticipating the future combat environment, has determined that Brigade Combat Teams (BCTs; i.e., Marine regiments) require an organic battalion-sized reconnaissance force.¹⁹ Additionally, the Army has deemed another essential requirement for each maneuver battalion within each type of Army BCT: an organic company- to platoon-sized reconnaissance element.

The Marine Corps, on the other hand, has made no major infantry task organization changes since OIF I beyond the creation of United States Marine Corps Forces Special Operations Command (MARSOC).²⁰ The Marine Corps met the Army's "battalion-level reconnaissance requirement" for the infantry regiment in OIF I by using all active duty LAR Battalions to resource 1st Marine Division. 1st Marine Division then attached an LAR Battalion to each Regimental Combat Team (RCT). However, the Marine Corps is unable to provide an LAR Battalion to each Regiment should the 1st and 2nd Marine Division simultaneously deploy in a manner similar to Operation Desert Storm. In short, the Marine Corps lacks three active duty LAR Battalions to task organize in the same fashion as each RCT did in OIF I for a large scale MIC-HIC operation²¹ or to task organize as the Army has deemed indispensable at the regimental level for full spectrum operations. Additionally, when an LAR Battalion is attached to an RCT, it

cannot be expected to provide reconnaissance and security missions for each Infantry Battalion in the RCT.²² The lack of an organic reconnaissance element at the regimental level²³ and the lack of a dedicated motorized reconnaissance element at the Infantry Battalion cannot necessarily be overcome by U.S. technological dominance.

While superior U.S. technology and intelligence resources may or may not have produced high situational awareness at upper command echelons during OIF I, the “digital divide” or “fog of war” prevented suitable tactical-level intelligence for the battalion and company (a problem also experienced by the U.S. Army).²⁴ The most disconcerting aspect of this shortfall during OIF I was that the Marine Corps faced an enemy, unlike potential future adversaries, who was unable to conduct effective electronic warfare, computer network attack, psychological operation, etc., to degrade U.S. command and control and intelligence collection systems. Even with U.S. technological superiority, the “fog of war” could not be overcome. The assumption that fighting in a future MIC-HIC environment with a near competitor will disrupt our technological superiority, i.e., reconnaissance assets like JSTARS and UAVs, will only make situational awareness more challenging for the Infantry Battalion and Rifle Company.

Future challenges for changing the Marine Infantry Battalion TO&E to support the MAC concept is the potential for the UAV and other technological advancements to be seen as a panacea for security and reconnaissance missions from platoon to division, as well as the appearance that there is no real reconnaissance problem at the battalion level due to the decisive victory in OIF I, Phase III operations. (Due to the current status in Iraq and Afghanistan, there is heavy focus on Phase IV-COIN lessons learned rather

than Phase III operations potentially impacting the Marine Corps' MIC-HIC capabilities in a future conventional war).²⁵ The UAV, for example, needs to be seen as an augmentation to these missions and not as a replacement to ground combined arms reconnaissance forces. Moreover, a UAV, which may be limited by such factors as weather, on-station time, enemy integrated air defense, and electronic warfare attack, cannot replace the physical presence of a security or reconnaissance unit to provide reaction time and maneuver space for the commander.²⁶ The Dragon Eye UAV provided to Infantry Battalions, therefore, should be employed as an augmentation to the reconnaissance capability of the MAC, or whatever force is designated as the reconnaissance element, and not as an economy of force to replace a security or combined arms reconnaissance unit at the battalion level.

In addition to expecting limited tactical intelligence on the next MIC-HIC battlefield, the Marine Infantry Battalion must also expect to fight a more competent enemy than it did in OIF I, an enemy that may exploit the vulnerability of a unit with marginal security or ground reconnaissance capability. If the UAV and higher-level intelligence cannot be relied on to provide an adequate common operational picture of both friendly and enemy forces, the Marine Infantry Battalion during offensive and defensive operations requires a designated security force for a physical buffer in order to provide reaction time and maneuver space to compensate for this limitation. Moreover, during offensive operations, the Infantry Battalion needs to be able to conduct its own limited motorized combined arms reconnaissance to provide information to improve situational awareness and reduce the "fog of war".

Conceptually, the MAC concept should be able to support this requirement for the Infantry Battalion similarly to how LAR supports the infantry division. The LAR Battalion “conducts reconnaissance, security and economy of force operations, and within its capabilities, limited offensive or delaying operations”²⁷ in support of the ground combat element (GCE). Therefore, the MAC concept requires a task organization that is capable of conducting limited reconnaissance, to include integration and cooperation of the Scout/Sniper Platoon, as well as security missions for the battalion.

The MAC, as a combined arms reconnaissance unit, cannot be effectively employed with two MAP platoon commanders controlling both the maneuver and fire support integration. It can be expected that the MAC will conduct independent operations requiring close air support (CAS) and supporting arms to ensure an advantageous relative combat power ratio in the MIC-HIC environment. It is unrealistic to have a platoon commander controlling the movement and direct fire control of numerous crew-served weapons and antiarmor weapons systems while simultaneously deconflicting the combined arms integration of UAVs, CAS, naval surface fire support, artillery, and mortars. The complexity of combined arms integration on the modern battlefield requires a designated Marine at the point of integration with supporting arms. If a Rifle Company Commander requires a FiST leader, the MAC should as well. The Army’s Weapons Company within its Infantry Battalion also has a designated FiST.

The need for a Company Commander to lead a large motorized formation with a designated FiST leader to integrate and deconflict fire support is the primary justification for expanding the CAAT concept to the MAC. Only with the addition of a Company Commander, FiST leader, and scouts, can the MAC significantly improve the Weapons

Company's ability to support security and combined arms reconnaissance missions beyond CAATs.²⁸ Unfortunately, one of the greatest strengths of the Marine Corps, the ability of a commander to use his imagination and initiative to task organize as he sees fit for the mission, is currently another hindrance to forward progress in modifying the Weapons Company TO&E to support the MAC. The ability of the Battalion and Weapons Company Commanders to adapt and overcome the resource shortfalls needed for the MAC (and to achieve mission accomplishment in general, regardless of the resource shortfalls and risk taken) have prevented any permanent change to the TO&E.

The Army's Infantry Battalion allows its Weapons Company to be a fourth maneuver element partially because Javelins are organic to the Rifle Companies and mortars are a part of the HCC. If the Marine Corps operating force correctly concluded in the survey that the Rifle Companies need the Javelin Section attached to the Rifle Companies in an OIF I-type environment,²⁹ permanently augmenting six Javelins to each Rifle Company is a solution for implementing the MAC concept for two reasons: first, the Marine Infantry Battalion, as a whole, is already seriously deficient in medium antiarmor capability; and second, within the Weapons Company, the Javelin Section can then provide the necessary scouts to the MAC concept without increasing the T/O of the Infantry Battalion yet still be available to properly weight a main effort Rifle Company or provide medium antiarmor support to the MAC within mission variables of METT-T (Mission, Enemy, Terrain and weather, Troops and support available, and Time available).

With eight Javelins in the Marine Infantry Battalion compared to 28 Javelins in the Army's Infantry Battalion, meeting the doctrinal principle that the "MAGTF should

assume an antiarmor posture as a rule, not an exception”³⁰ is problematic for the Marine Infantry Battalion. In the MIC-HIC environment, Marine Corps infantry is arguably over-reliant for reinforcing antiarmor fires from the Aviation Combat Element (ACE) and a mere two active duty tank battalions, support that is not always assured. The short range (and marginal accuracy) of the Shoulder Launched Multipurpose Assault Weapon (SMAW)³¹ limits its ability to provide standoff in the mechanized battlefield, potentially jeopardizing the Amphibious Assault Vehicle (AAV) or Rifle Company engaging an armor threat. Even wishful-thinking proponents who believe the Marine Corps will never again engage an enemy armored formation in the COE, the Javelin has proved effective beyond just destroying armored vehicles. For example, during the Battles of Fallujah Javelins effectively destroyed snipers in minarets and dismounted positions.³² Providing Javelins to the Assault Section of the Rifle Company (either as a replacement or augmentation to the SMAW) will rectify a critical vulnerability of the Marine Corps Infantry Battalion in the MIC-HIC environment.

Even with the addition of Javelins to the Rifle Company, which mitigates the shortfall of scouts for the Weapons Company and improves the battalion’s lethality in a MIC-HIC environment, the Weapons Company is not sufficiently resourced to execute the specified and implied tasks required of the MAC during MIC-HIC combat operations (i.e., combined arms reconnaissance and security missions). The Weapons Company is deficient in vehicles, crew-served weapons, and communication equipment.

Unfortunately, no relief for the MAC concept is provided by either the future Expeditionary Fighting Vehicle (EFV) or the Expeditionary Fire Support System (EFSS).

The EFV lacks an anti-tank missile capability, and irrespective of the incompatible mobility between the EFV and the Weapons Company HMMWV, the Rifle Company will still rely on the Javelin for medium antiarmor augmentation or on the Weapons Company TOW (Tube Launched, Optically-Tracked Wire-guided) missiles for heavy anti-tank augmentation if tanks are not supporting the unit.³³ (Note: the EFV's lack of an anti-tank missile capability is further justification for the need to add Javelins to the Rifle Company T/E).³⁴ And the EFSS, even if moved from the artillery regiment to the infantry, provides no additional manpower savings to provide permanent scouts to the CAATs or MAPs to facilitate a more autonomous Weapons Company.³⁵ The only way to support the needed combined arms reconnaissance capability required at the battalion level during OIF I or future MIC-HIC environment without increasing the T/O of the Infantry Battalion (and notwithstanding the use of Javelins as scouts) is to look closely at the specified missions of the Scout/Sniper Platoon and its overlap with the implied security missions executed by CAATs during OIF I and Operation Desert Storm.

The Scout/Sniper Platoon, which is normally seen as an autonomous unit employed by the Battalion Commander via the battalion intelligence officer, is actually closely integrated with the MAC's reconnaissance and security missions when employed in a MIC-HIC environment. Because the Scout/Snipers Platoon is not motorized, the battalion lacks a designated combined arms reconnaissance or security force for a mechanized environment (CAAT teams filled this gap during OIF I).³⁶ The Combined Arms Battalion within the Army's Heavy BCT exemplifies the ability of a mechanized reconnaissance unit to provide the Scout/Snipers Platoon mobility in a mechanized environment.³⁷ If CAAT teams conducted security and combined arms reconnaissance

missions and the Scout/Snipers struggled to be employed due to mobility issues (which was the case in OIF I),³⁸ the deduction is the MAC and the Scout/Sniper Platoon should have a symbiotic relationship in some capacity. By placing the Scout/Sniper Platoon within Weapons Company, Scout/Snipers can be provided mobility when needed, and the MAC can be provided scouts when needed. By creating a habitual relationship and maintaining the Marine Corps ethos to task organize for each particular mission and situation, this relationship can greatly increase the reconnaissance flexibility and capability for the Battalion Commander and increase the Scout/Sniper Platoon's effectiveness and relevance in an OIF I-type environment.³⁹

A paradigm shift must be made regarding the movement of the Scout/Sniper Platoon to Weapons Company (although this is already done in several battalions).⁴⁰ An infantry officer assigned as the Weapons Company Commander is capable (with the Battalion intelligence officer's assistance if necessary) to oversee the training of the Scout/Sniper Platoon. Placing the Scout/Sniper Platoon in the Weapons Company offers significant leadership benefits like closer supervision and mentorship of the Scout/Sniper Platoon. By understanding the capabilities, limitations, and employment considerations of Scout/Snipers, the Weapons Company Commander (and therefore the infantry community) will grow professionally, enabling future Battalion Commanders to employ Scout/Snipers more effectively.⁴¹

In conclusion, the MAC's task organization must facilitate the MAC's ability to shape the battlefield, provide information, provide reaction time and maneuver space, and preserve combat power for the Battalion Commander. A solution must be found within the combined force structure of the Weapons Company and the Scout/Sniper Platoon for

a tailorable reconnaissance unit that can function in the full spectrum of operations in HIC, MIC, or LIC when the battalion is serving as a light infantry, helicopterborne, or mechanized force. Since the current Marine Scout/Sniper Platoon lacks mobility when in a mechanized environment and the Weapons Company lacks the requisite scouts of a reconnaissance unit, the current task organization does not meet the battalion's requirements for full spectrum operations and needs to be modified. On the other hand, all of these aforementioned requirements must be accomplished without relinquishing the 81mm mortar's general support capability for the battalion or without creating such doctrinal rigidity that the Battalion Commander lacks the flexibility to task organize the Weapons Company "traditionally" as required within METT-T.⁴²

Course of Action 1: MAC Employment for Full Spectrum Operations without a T/O Addition or Impacting the Weight and Space Constraints of the Amphibious Ready Group

Concept:

1. Six Javelin Systems are added to the T/E of each Rifle Company Assault Section for a total of 26 Javelins in the Infantry Battalion; SMAWs may or may not be dropped from the section.⁴³
2. The Weapons Company's doctrinal role and mission are expanded beyond general heavy weapons support for the Infantry Battalion to include security and reconnaissance missions similar to an LAR Company. In the MIC-HIC environment, the 81mm Mortar Platoon serves in a GS role; therefore, the MAC will not have a robust dismount capability like some MACs currently employed in OIF.
3. The MAC is organized into two equally sized MAPs (See Annex C): The MAP consists of four TOWS and four heavy machinegun vehicles (each platoon is broken down into two sections of two TOW vehicles and two heavy machinegun vehicles); the Company Commander and FiST have their own vehicles. The Javelin Section can provide medium antiarmor capability and-or serve as scouts for the MAPs because COA 1 provides Javelins for each Rifle Company and the Javelin Section providing

reinforcement to the Rifle Companies is not as critical. The Scout/Sniper Platoon becomes organic to the Weapons Company and not H&S Company. The Scout/Sniper Platoon is provided mobility and security through the MAPs (as required) as well as from their own organic vehicles from H&S (which are added to the T/E of the Weapons Company).⁴⁴ The Battalion's UAV system (Dragon Eye or future UAV system) is assigned to the Weapons Company in order to expand the UAVs range when the MAC is conducting security and reconnaissance missions. During Phase IV operations and-or a COIN environment, the UAV system would more than likely move into a GS role of the battalion.

4. The Mobile Assault Company is defined as the maneuver element of the Weapons Company functioning under the Weapons Company Commander; the Weapons Company Executive Officer serves as the Company FiST Leader. Depending on the mission, the 81mm Mortar Platoon or Section, may be attached or in DS to the MAC depending on METT-T. The expectation is that during MIC-HIC, the 81mm Mortar Platoon will remain in GS of the battalion and potentially a section in DS of the MAC in certain situations.
5. The H&S Company Commander and H&S XO assume the role of FSC and AFSC, respectively, to support an FSCC in both the Tactical and Main Command Posts in addition to assigned administrative duties and command authority as the H&S Company Commander in garrison. During the execution of MIC-HIC operations only, the H&S Company Commander's headquarter commandant responsibilities are distributed between the H&S staff non-commissioned officers and officers and potentially the Combat Logistics Company (CLC) Commander (or potentially completely by the CLC Commander). The H&S Company Commander maintains the traditional responsibilities of the headquarters commandant during Reception, Staging, Onward Movement and Integration (RSO&I), for example.
6. Five HMMWVs and requisite crew-served weapons are provided to the Weapons Company from H&S Company to fill the vehicle requirements of the MAC concept.
7. The recommended new doctrinal mission statement for the Weapons Company: The Weapons Company of the Infantry Battalion provides the Battalion Commander with the preponderance of organic firepower. It contains an 81mm Mortar Platoon, a Heavy Machine Gun Platoon, an Antiarmor Platoon, Scout/Sniper Platoon and provides the fire support

coordination capability of the battalion to the FSC [the H&S Company Commander]. Assets from each platoon may be task organized into a Mobile Assault Company under the direction of the Weapons Company Commander. The Mobile Assault Company may provide combined arms reconnaissance or security missions for the battalion, or elements of the Mobile Assault Company may also be attached to Rifle Companies to provide additional combat power directly to the Rifle Company Commanders. However, Weapons Company assets are normally employed in direct support of subordinate companies or in general support of the battalion (See Figure 6 and 7).

Suitability: The MAC concept comes to fruition while addressing the primary concern of the Operating Forces against the acceptability of the MAC in the MIC-HIC environment: the 81mm Mortar Platoon remains in GS of the battalion; no members of the 81mm Mortar Platoon are used as scouts and the entire combat power of the 81mm Mortar Platoon is retained. Furthermore, Javelin antiarmor capabilities are now organic to the Rifle Company. MAPs or MAP Sections, as well as Javelins Teams, can still provide DS to the Rifle Companies as required within METT-T. Scouts are provided to the CAATs (now called MAPs) to make them a viable reconnaissance unit modeling similar task organization principles of an LAR unit.

Feasibility: With respect to amphibious ready group (ARG) shipping, the increase in weight or space by adding the 18 Javelins to the battalion T/E is negligible. Furthermore, there are no weight or space additions to the battalion, since the equipment added to the MAC is merely moved internally within the battalion's TO&E.

Acceptability:

1. The H&S Co 1st Sgt, H&S Company Gunnery Sergeant, S-4A, and-or possibly the Combat Logistic Company Commander will need to assume tactical responsibilities for the Field Trains (the S-4 doctrinally leads the Combat Trains).

2. If the H&S Company Commander and H&S XO assume the role of FSC and assistant FSC, due to staffing goals there will be a requirement to ensure the H&S XO billet is always filled, potentially forcing a staff non-commissioned officer to be a platoon commander in one of the Rifle Companies.
3. There is increased security risk to the combat trains and field trains as H&S Company vehicles and crew-served weapons are provided to the MAC concept.
4. The traditional role and training of the Scout/Sniper Platoon does not change; when the environment does not facilitate traditional employment of the Scout/Sniper Platoon (e.g., OIF I), they work in conjunction with the MAPs to provide mobility to support the battalion reconnaissance plan. When the Scout/Sniper Platoon is not conducting reconnaissance traditionally, they can assist as scouts for the MAPs.
5. Justification: The MAC concept has proven an effective force for COIN-Phase IV and Marine Expeditionary Unit (MEU) operations and will have applicability in the Phase 0 (Shape) environment with the SC MAGTF, as well (particularly if the SC MAGTF is consolidated for a larger humanitarian assistance crisis, for example). By having the MAC concept in place for Phase III operation and the H&S Company Commander established as the FSC in conjunction with its traditional duties, the Infantry Battalion effectively executes full spectrum operations by efficiently transitioning from Phase III to Phase IV operations (or directly into Phase 0 or Phase IV). The future employment of the Infantry Battalion in the COE is only going to become more decentralized, as evident in the SC MAGTF, requiring the Infantry Battalion as the core of the Battalion Landing Team (BLT) and command element of the SC MAGTF to provide more of its own security and combined arms reconnaissance.

MISSION	TYPE	MAC Company
RECON	Route	X
	Zone	X
	Area	X
	Recon-in-Force	0
	Screen	X
	Guard	0
	Cover	0
SECURITY	Area	X
	Route	X
	Convoy	X
	Hasty Attack	X
ECONOMY OF FORCE	Deliberate Attack	*
	Movement to Contact	X
	Def end from BPs	X
	Defend in Sector	X
	Delay	X
OOTW	COIN	**
	Stability Operations	**
X =	Capable	
* =	Capable with augmentation	
**=	Capable when the entire Weapons Company is consolidated	
0 =	Not independently capable	

Figure 6. MAC Mission Profiles

To be an effective combined arms reconnaissance and security-mission-force for the battalion, the MAC must be led by a Company Commander, supported by a FiST Leader, and have enough scouts per vehicle to support reconnaissance missions, which means a Heavy Machine Gun vehicle, for example, can fight as a crew similarly to an

LAV-25 crew. Though the Weapons Company Platoon Commanders are generally the most seasoned and competent lieutenants in the battalion, the complexity of direct fire control and maneuvering eight vehicles is a full-time job. Trying to simultaneously serve as a FiST Leader deconflicting and integrating 81mm mortars, artillery, R/W, F/W, Scout/Sniper, and UAVs means some critical aspect of the command and control is being neglected.

By retaining the 81mm Mortars Platoon in GS to the battalion and providing inherent medium antitank capability to the Rifle Company and not making them a part of the MAC meets the concerns of the operating forces. (Note: adding Javelins to the Rifle Company is also justified because the EFV has no antitank capability and a future mechanized Rifle Company will still require Javelins to independently defeat an armor threat). Furthermore, the H&S Company Commander, an assignment generally eschewed by an incoming infantry officer, now has a more substantial warfighting role within the battalion, thus maximizing the employment of all the battalion's infantry officers.

Most importantly, this recommendation provides the Battalion Commander additional flexibility to task organize through the full spectrum of operations. Since there is no organic reconnaissance capability at the regimental level and the quality of future tactical-level intelligence will be similar to the OIF I experience, the MAC concept also provides the Battalion Commander with a more effective battalion-level combined arms reconnaissance and security capability with the Weapon Company in the MIC-HIC environment.

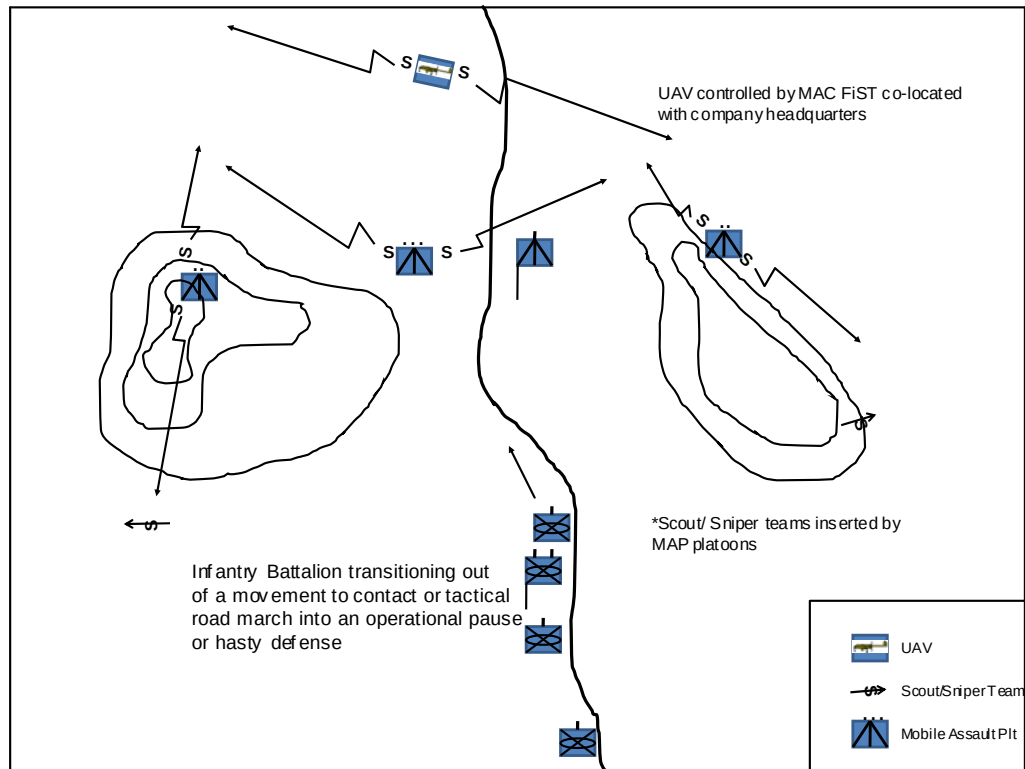


Figure 7. Notional MAC Employment

Course of Action 2: An Ideal Solution With No Constraints or Restraints

Concept: The concept of employment for COA 2 is similar to COA 1: six Javelins are added to the T/E of the Rifle Company, and the doctrinal role and organization of the Weapons Company are modified to support the MAC concept. The exceptions are (1) HMMWVs, crew-served weapons, and communication equipment needed to support the MAC concept are added to the Weapons Company T/E and not taken from the H&S Company T/E; (2) the scouts required for the MAC concept are added to the MAC T/O so there is no reliance on the Scout/Sniper Platoon; and (3) the Scout/Sniper Platoon is increased by 100% to match the Scout Platoon in the Army's Infantry Battalion in order

to provide a capable security-mission-force (i.e., capable of functioning as an independent maneuver platoon if required in a light infantry environment, as well as increasing the number of teams available to observe NAIs [Named Areas of Interest] in the intelligence collection plan). Several small, light vehicles are provided to the Scout/Sniper Platoon to facilitate mobility in a mechanized environment. Furthermore, a Marine is added to the battalion TO&E to assume the role of FSC if it is determined that the H&S Company Commander is not able to assume the role of FSC.⁴⁵

Suitability, Feasible, Acceptability: COA 2 increases the suitability of the MAC concept and reduces the risk to H&S Company, since H&S Company retains its crew-served weapons, vehicles, and communication equipment. COA 2's feasibility is reduced due to the additional weight and space added to the Battalion Landing Teams, possibly making ARG configuration for MEU deployments problematic. Furthermore, since additional personnel for the Marine Corps to reach 202,000 Marines by 2011⁴⁶ have already been identified, additions for the MAC would require additional adjustments to doctrine, organization, training, materiel, leadership, and personnel (DOTMLP) that may be problematic.

Recommendation: COA 1 with as many additions from COA 2 as possible within fiscal and personnel constraints and restraints. The Marine Corps Infantry Battalion has a critical vulnerability in its marginal organic antiarmor capability and limited combined arms reconnaissance in the MIC-HIC environment. Providing Javelins at the company level while adjusting the relationship of the Scout/Sniper Platoon and the roles of the FSC can greatly improve the efficiency and versatility of the battalion to task-organize through the full spectrum of operations. Removing vehicles, communications equipment, and

crew-served weapons from the H&S Company increases the security risk to the combat trains in future non-linear battlefields. Every effort should be made, for example, to equip each TOW HMMWV with a 240G machinegun at no expense to another unit in the Weapons Company or H&S Company.

Other Recommendations

Assign assistant-gunners to each vehicle in the Antitank (TOW) Section. Currently, all eight TOW vehicles of the Antitank (TOW) Section have the driver also serving as the assistant-gunner. This is ineffective and unsafe. It is problematic for the driver to accomplish the myriad tasks of a vehicle crew: moving the vehicle in and out of a firing position, provide local security, assisting in reloading the TOW system, etc., let alone executing a maintenance and rest plan.

Update and publish the following Marine Corps Warfighting Publication:

1. FMFM 6-4 *Marine Rifle Company/Platoon*. 17 February 1978.
2. MCWP 3-11.5 (DRAFT) *Marine Infantry Battalion*. 27 November 2002.
3. MCRP 5-12D *Organization of Marine Corps Forces*. 13 October 1998
4. MCWP 3-15.5 *Antiarmor Operations*. 27 November 2002.

Update and complete the aforementioned Marine Corps Warfighting Publication to include the recommendations and doctrinal implications if any portion of the MAC concept recommendation is adopted in the Ground Board process.

Provide an antiarmor capability on the EFV. The Marine Corps replacement to the AAV should not rely on a mounted Javelin gunner to defeat an enemy armor threat in the COE.

Areas For Further Study

While conducting research for the MAC, there was a clear distinction in the quality and currency of doctrinal material between the Marine Corps and Army. Inaccurate and outdated Marine Corps Warfighting Publications are a disservice to students and instructors in the training and education continuum; the growing gap between doctrinal and operational reality prevents a common reference point for the infantry community through doctrine. Although the Marine Corps needs to maintain flexibility and creativity to improvise and task organize, and must not be constrained in doctrinal rigidity, the Marine Corps is obligated to provide a doctrinal framework for fighting in the COE and into the future. FMFM 6-4 *Marine Rifle Company/Platoon*, for example, is a disappointing 30 years old.

The decentralized process currently used by the Marine Corps Combat Development Center (MCCDC) Doctrine Section, clearly does not facilitate the most effective method for updating and creating doctrine. The Basic School (TBS) staff, for example, must focus on training Second Lieutenants, not updating MCWP 3-15.1 *Machine Guns and Machine Gun Gunnery*, for which it is responsible.⁴⁷ A study must determine a remedy to the current doctrinal process in order to provide not only the appropriate resources to ensure accurate and timely changes to Marine Corps doctrine with input from operating forces, but also Marines dedicated to contemplating the implications of the future operation environment on doctrine. Writing doctrine should not be a collateral duty for an officer at TBS, for example, it should be a full-time billet.

The recommended COA for this study is generic in nature and focuses on major end items. A study is required to determine the specific T/E requirement to support the

MAC (particularly communication assets for the MAC Company Commander and FiST Leader), as well as further implications to DOTMLP and amphibious shipping.

Furthermore, both COA 1 and COA 2 recommend adding six Javelins to the Rifle Company Assault Section. Further study is required to determine if the Javelin should replace or augment the MK-153 SMAW.

If the assumption is made that the Army has correctly re-task-organized its entire Service to meet the anticipated COE and future Operational Environment for MIC-HIC, the lessons learned are applicable for Marine Corps task organization requirements in the MIC-HIC environment at the regimental level. Each Army Brigade has an organic battalion sized reconnaissance force capable of conducting security and reconnaissance missions. The Marine Corps is short three LAR Battalions if the 1st and 2nd Marine Division were to be employed as they were in Operation Desert Storm.⁴⁸ A study should be conducted to determine how the Marine Corps will address this challenge in case of a major conventional war.

¹ Survey of the operating forces.

² Survey of the operating forces; Major R.H. Belknap II, “After Action Report for Fallujah” for Weapons Company, 3rd Battalion, 1st Marines submitted to the commanding officer of 3rd Battalion, 1st Marines, 15 December 2004; Lieutenant Colonel D.J. Furness, “TF 1/1 After Action Review of Combat Operations ISO [in support of] OIF 05-07.1” submitted to the Commanding Officer of Task Force 2/8, 1 August 2006. Both after action reports provided to the author through the operating forces survey.

³ *DOD Directive 3000.05: Military Support for Stability, Security, Transition, and Reconstruction (SSTR) Operations*, 28 November 2005.

⁴ Department of the Army, *FM 3-0 Operations* (Washington, DC: Government Printing Office, 27 February 2008), 3-20, 3-21.

⁵ SC MAGTF: the Marine Corps vision for strategic forces employment in support of the steady state security posture after the Marine conventional forces depart Iraq. See *The Long War, Send in the Marines. A Marine Corps Operational Employment Concept to meet and Uncertain Security Environment*. (Quantico, VA: Plans, Policies, and Operations, January 2008), 16-17.

⁶ Many units that participated in Exercise Mojave Viper did not task organize into the MAC for the exercise although they planned to employ it in Iraq. In some cases, they maintained traditional Weapons Company task organization merely to support the scheme of maneuver for the live-fire portion of Exercise Mojave Viper. Doing so limited the Weapons Company Commander's opportunity to train as a MAC and may have hindered identification or training of the staff member or commander that would assume responsibility for the FSC during the unit's upcoming deployment to OIF.

⁷ The vignette in *The Long War Send in the Marine* gives an example of the Weapons Company deploying independently. The example of a humanitarian disaster in Africa that would require the entire SC MAGTF to reconsolidate validates the need for a permanent MAC. Historical examples like the U.S. involvement in Somalia or future environments with a militia-type threat like Darfur exemplify the utility of the MAC and the requirement for a pre-trained FSC. See *The Long War Send In the Marines* (Quantico, VA: Plans, Policies, and Operations, January 2008). 22,23.

⁸ Survey of the operating forces.

⁹ Ibid. Although fourteen respondents stated their battalions employed the H&S Company Commander as the FSC during OIF--to include MIC-like named operations--this does not validate its use in a MIC-HIC environment. No H&S Company Commander served as the FSC during OIF I from the survey results (the exception is 2/23, which is unknown due to no survey data) and any conclusion that the H&S Company Commander can assume the role of FSC during conventional MIC/HIC operations is theoretical. However, 66% of respondents believed it possible.

¹⁰ Numerous ideas have been suggested in the *Marine Corps Gazette* over the years on whether the artillery community or infantry community should fill the role of the battalion fire support coordinator. For more on the subject, see the latest article on the FSC by Capt Christopher B. McArthur, "Staffing of Fire Support Billets, Artillerymen are the Fires Support Experts." *Marine Corps Gazette* (January 2008), 50.

¹¹ Irrespective of the possible CLC doctrinal change--which not was mentioned in the operating forces survey--only eleven of 65 Marines thought the H&S Company Commander was overburdened and could not assume the collateral duty of FSC.

¹² E-mail and phone correspondence with Captain Sean Mullen USMC, 5 February 2008; Captain Mullen is the lead logistics trainer for Tactical Training Exercise Control Group supporting Exercise Mojave Viper.

¹³ Department of the Army, FM 3-21.20 *The Infantry Battalion* (Washington, DC: Government Printing Office, December 2006), 10-43.

¹⁴ Survey of the operating forces.

¹⁵ Survey of the operating forces.

¹⁶ 41 of the 65 respondents believed that the MAC concept has utility in the MIC-HIC environment. The other 23 (two did not answer) stated that the MAC did not have utility in the MIC-HIC environment because the Weapons Company was required to provide CAATs for security missions (actually not a doctrinal mission for the Weapons Company), heavy weapons support, support to the main and-or supporting efforts, and FSC-FSCC requirements.

¹⁷ During OIF I, 1st Reconnaissance Battalion, 1st Marine Division was used nontraditionally due to its inability to support in the high-tempo mechanized environment. See Stephen A. Ferrando, "Ground Reconnaissance during OIF: A Perspective from within 1st MarDiv." *Marine Corps Gazette*. (July 2003). *Marine Corps Gazette* Archives. <http://www.mca-marines.org/gazette/archives.asp> (accessed on 15 January 2008).

¹⁸ Ibid. The Army experienced the same intelligence challenges at the tactical level during OIF I. See Michael R. Gordon and General Bernard E. Trainor. *Cobra II The Inside Story of the Invasion and Occupation of Iraq*. (New York: Pantheon Books, 2006), 423.

¹⁹ Department of the Army, FMI 3-91 (DRAG Edition) *Division Operations* (Washington, DC: Government Printing Office, 1 Feb 2006), vii, vii.

²⁰ MARSOC does not impact the infantry MIC-HIC employment and arguably goes outside the mandate of the Marine Corps.

²¹ If the LAR reserves were activated, 1st and 2nd Marine Divisions would be short six LAR companies.

²² Survey of the operating forces. LAR did improve the situational awareness and route reconnaissance needs of the Infantry Battalion at times during OIF I

²³ In 1998, the Regimental TOW Platoon was disbanded, which had the ability to perform limited combined arms reconnaissance and security missions. Commanding General, Marine Corps Combat Development Command, "Message traffic: Reorganization of Headquarter Company, Infantry Regiments, 1st, 2D and 3D Marine Division (MARDIVS)" 201130Z January 1998. "The active regimental antitank platoons will be eliminated. This will decrease the personnel structure by one Marine officer and 81 enlisted Marines. Three enlisted Marine Billets from the Platoon will be reassigned within the Headquarters Company."

²⁴ Michael R. Gordon and General Bernard E. Trainor. *Cobra II The Inside Story of the Invasion and Occupation of Iraq*. (New York: Pantheon Books, 2006), 423.

²⁵ The United States faces challenges similar to the Israelis prior to the 1973 Arab-Israeli War: an expectation by the public for swift victory with low casualties. Furthermore, the 1973 Arab-Israeli War revealed the highly lethal nature of the modern battlefield which led to rapid doctrinal change in the U.S. Army and Marine Corps focusing on combined arms to deal with improved antiarmor and integrated air defenses. Unfortunately, many of the OIF I Phase III shortcomings--a lack of combined arms reconnaissance capability at the battalion and regiment level in the case of this thesis--have been overlooked due to the low casualties and heavy focus on failures in Phase IV. For more on these parallels with the 1973 Arab-Israeli war see Dr. George W. Gawrych, *The 1973 Arab-Israeli War: The Albatross of Decisive Victory*, Leavenworth Papers No. 21. (Fort Leavenworth, KS: Combat Studies Institute, 1996) and Paul H. Herbert, *Deciding What Has to Be Done: General William DuPuy and the 1976 Edition of FM 100-5, Operation*, Leavenworth Papers No. 16. (Fort Leavenworth, KS: Combat Studies Institute, 1988).

²⁶ The Army's Future Combat System (FCS) is on track to reduce infantry at the expense of technology. The FCS increases the number of Unmanned Aerial Systems (UAS) to 200 within a Brigade Combat Team (BCT), as well as providing hundreds of additional Unattended Ground Systems (UGS) and Unmanned Ground Vehicles (UGV). The FCS is attempting to create a combat multiplier with technology and to provide a synergistic effect at the lowest level by providing unprecedented situational awareness and unfettered access to precision firepower. The FCS may face challenges in the Stability and COIN environment as the large number of infantry that are required to interact with the local population are reduced. Decreasing the number of infantry available to the BCT --for any reason--is contrary to the needs of low-intensity warfare. These problems will only be exacerbated in the MOUT environment, where command and control and situational awareness are already extremely challenging and technology has limited affect. Advocates of heavy--or exclusive--use of technology in the Marine Corps to reduce infantry within a unit's TO&E must determine the maximum amount of information a small unit leader (through UGV, UAS, and UGSs) can actually process and still be effective. A platoon commander's five senses provide an incredible amount of information and should be his primary tool to maintain situational awareness--particularly in the MOUT environment. At a certain point, the focus on UGV, UAV, and UGS information will actually detract from the basic senses. These challenges are directly related to the Marine Corps potentially diminishing the need for ground reconnaissance at the battalion regimental level in lieu of technology.

²⁷ U.S. Marine Corps, MCWP 3-14 (Draft) *Employment of the Light Armored Reconnaissance Battalion* (Quantico, VA: US Marine Corps, January 2000), 1-1.

²⁸ The MAC concept does not exclude the ability for MAPs, however, to act independently or provide direct support (DS) to a Rifle Company within METT-T (Mission, Enemy, Terrain and weather, Troops and support available, and Time available).

²⁹ Survey of the operating forces.

³⁰ U.S. Marine Corps, MCWP 3-15.5 *MAGTF Antiarmor Operations* (Washington, DC: Government Printing Office, 27 November 2002), 1-1.

³¹ The Mk-153 SMAW averaged a 31% hit rate (74 out of 241 shots) on R400 by the last 16 infantry battalion participating in Exercise MOJAVE VIPER. The average range of the shots was 150-250m against an approximate 2m by 2m tire-stack target. Statistics provided by e-mail correspondence with Major Dan Wittnam, OIC of the live-fire portion of Exercise Mojave Viper on 26 April 2008.

³² Survey of the operating forces; Major R.H. Belknap II, "After Action Report for Fallujah" for Weapons Company, 3rd Battalion, 1st Marines submitted to the Commanding Officer of 3rd Battalion, 1st Marines, 15 December 2004; Lieutenant Colonel D.J. Furness, "TF 1/1 After Action Review of Combat Operations ISO OIF 05-07.1" submitted to the Commanding Officer of Task Force 2/8, 1 August 2006. Both after action reports provided to the author through the operating forces survey.

³³ *Defense Industry Daily*. <http://www.defenseindustrydaily.com/the-usmcs-expeditionary-fighting-vehicle-sdd-phase-updated-02302/#capabilities> (accessed on 25 January 2008).

³⁴ The compatibility problem between the EFV and the HMMWV's mobility is significant because the antiarmor shortfall of the EFV requires the Rifle Company's continued reliance on Weapons Company for antiarmor augmentation. For heavy antiarmor capability, the HMMWV mounted TOW system will still be required, and for medium antiarmor capability, the dismounted Javelin antitank system is still required to support the Rifle Company. If the EFV is not working in consonance with tanks, the EFV loses its greatly enhanced maneuverability and speed compared to the AAV to retain HMMWV mounted antiarmor capability--which has marginal offensive antiarmor capability.

³⁵ The results of the operating force survey showed a majority did not believe the 81mm Mortar Platoon should be decreased to six tubes vice eight to provide additional scouts for the CAATs/MAPs; 81mm mortars were deemed indispensable for full spectrum operations.

³⁶ Survey of the operating forces.

³⁷ Department of the Army, FM 3-90.5 30 (Initial Draft) *The Combined Arms Battalion* (Washington, DC: Government Printing Office, March 2007), 2-3.

³⁸ Survey of the operating forces. 3rd Battalion, Seventh Marines was an exception to this during OIF I. They effectively employed their Scout/Snipers by providing them mobility through CAATs providing acceptable intelligence for the Battalion.

³⁹ 3rd Battalion, Seventh Marines' success with this concept during OIF I arguably takes the MAC concept beyond the realm of theory.

⁴⁰ Ibid. Of the 65 total respondents, 49 responded to the question concerning the location of the Scout/Sniper Platoon in their particular battalion. 31 stated that the Scout/Sniper Platoon was located in the H&S Company, twelve in the Weapons Company, and six permanently attached to the rifle company for combat operations.

⁴¹ One respondent stated, "snipers were in H&S [Company] during deployment but we moved them to [Weapons] Company after deployment [because] it was believed they did not receive enough oversight and training management within H&S [Company]"; on the other hand, one battalion intelligence officer added: "[In] my opinion-[the Scout/Sniper Platoon] is usually assigned to Weapons [Company] because 1) they are not provided proper leadership within H&S [Company], or 2) the S-2 officer does not know how to recommend proper balanced employment in support of Battalion R&S [reconnaissance and security missions], as well as precision fires. The Scout/Sniper Platoon Marines appear unmanageable and the [battalion] CO/XO, in frustration, puts them in an organization when they can be supervised, mentored, and handled. This results in mis-employment as precision fires in support of maneuver, checkpoint-overwatch, guardian angel, etc. Understandable that the [battalion commander] reverts to this, and it is the S-2 community's burden to fix this."

⁴² Of the 65 respondents to the operating forces survey, 16 believed the role of the Weapons Company is to serve as a MAC (or fourth maneuver element), eleven in a traditional capacity (i.e., 81mm Mortar Platoon in GS of the battalion, and CAATs and Javelins in DS to the Rifle Companies), and 28 as both traditional and the MAC roles. Ten respondents believed the role of Weapons Company is dependent on METT-T.

⁴³ The decision for the Javelin to replace or augment the SMAW requires additional study.

⁴⁴ If Weapons Company is staffed at 100%, there are not enough seats to provide mobility for the entire Scout/Sniper Platoon and the Javelin Section. The assumption is that (1) some portion of the Javelin Section will be DS to a Rifle Company (2) some portion of the Scout/Sniper Platoon will be employed traditionally and-or (3) that some portion of the Scout/Sniper Platoon will be provided mobility through H&S HMMWVs that will become a part of the T/E of the Weapons Company per COA 1.

⁴⁵ Five respondents to the survey of the operating forces recommended this course of action.

⁴⁶ U.S. Marine Corps, "*USMC Concepts and Programs 2008*." (Quantico, VA: Plans, Policies, and Operations, 2008), 2.

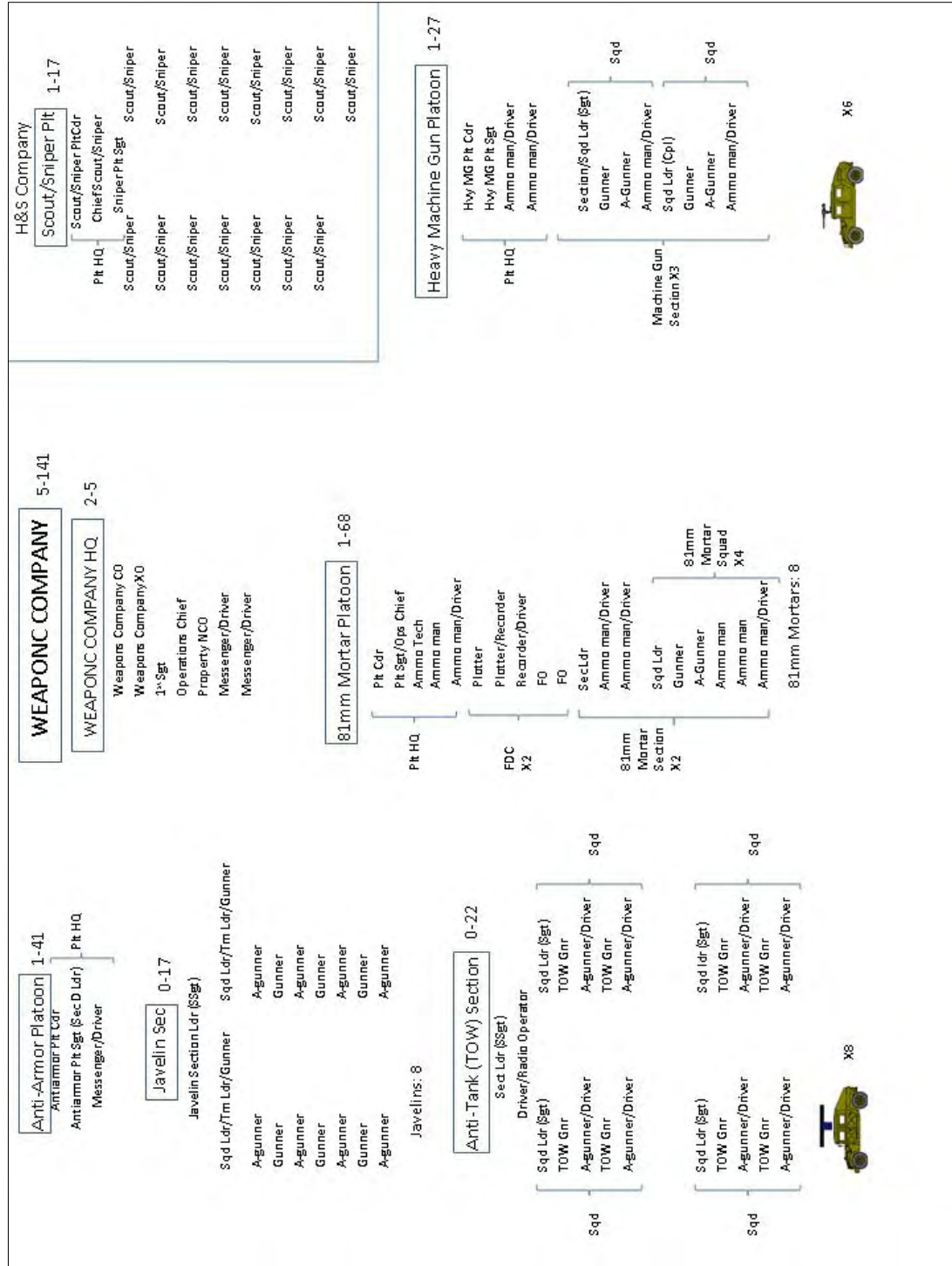
⁴⁷ TBS is responsible for the following publications: MCWP 3-11.1 *Marine Rifle Company/Platoon* to become *Marine Infantry*, MCRP 3-11.1A *Commander's Tactical*

Handbook, MCWP 3-11.2 Marine Rifle Squad, MCRP 3-11.2A Marine Troop Leader's Guide, MCWP 3-11.3 Scouting and Patrolling, MCWP 3-11.4 Helicopterborne Operations, MCRP 3-11.4A Helicopter Rope Suspension Techniques (HRST) Operations, MCWP 3-15.1 Machine Guns and Machine Gun Gunnery, MCRP 3-15.1A Machinegun Training and Employment, MCWP 3-15.2 Tactical Employment of Mortars, MCWP 3-15.5 Antiarmor Operations.

⁴⁸ If the LAR reserves were activated, 1st and 2nd Marine Divisions would be short six LAR companies.

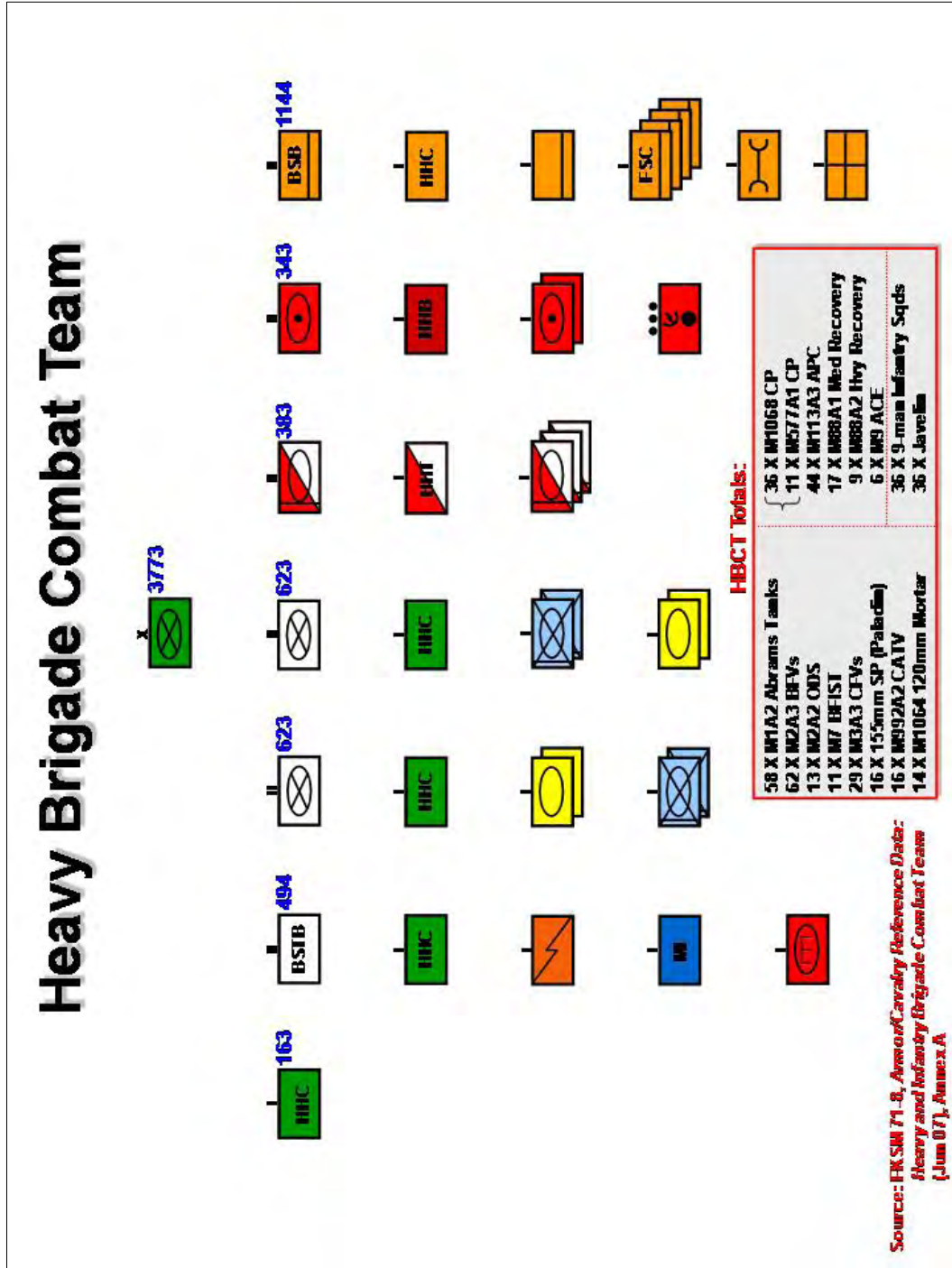
APPENDIX A

WEAPONS COMPANY AND SCOUT/SNIPER PLATOON TO&E



APPENDIX B

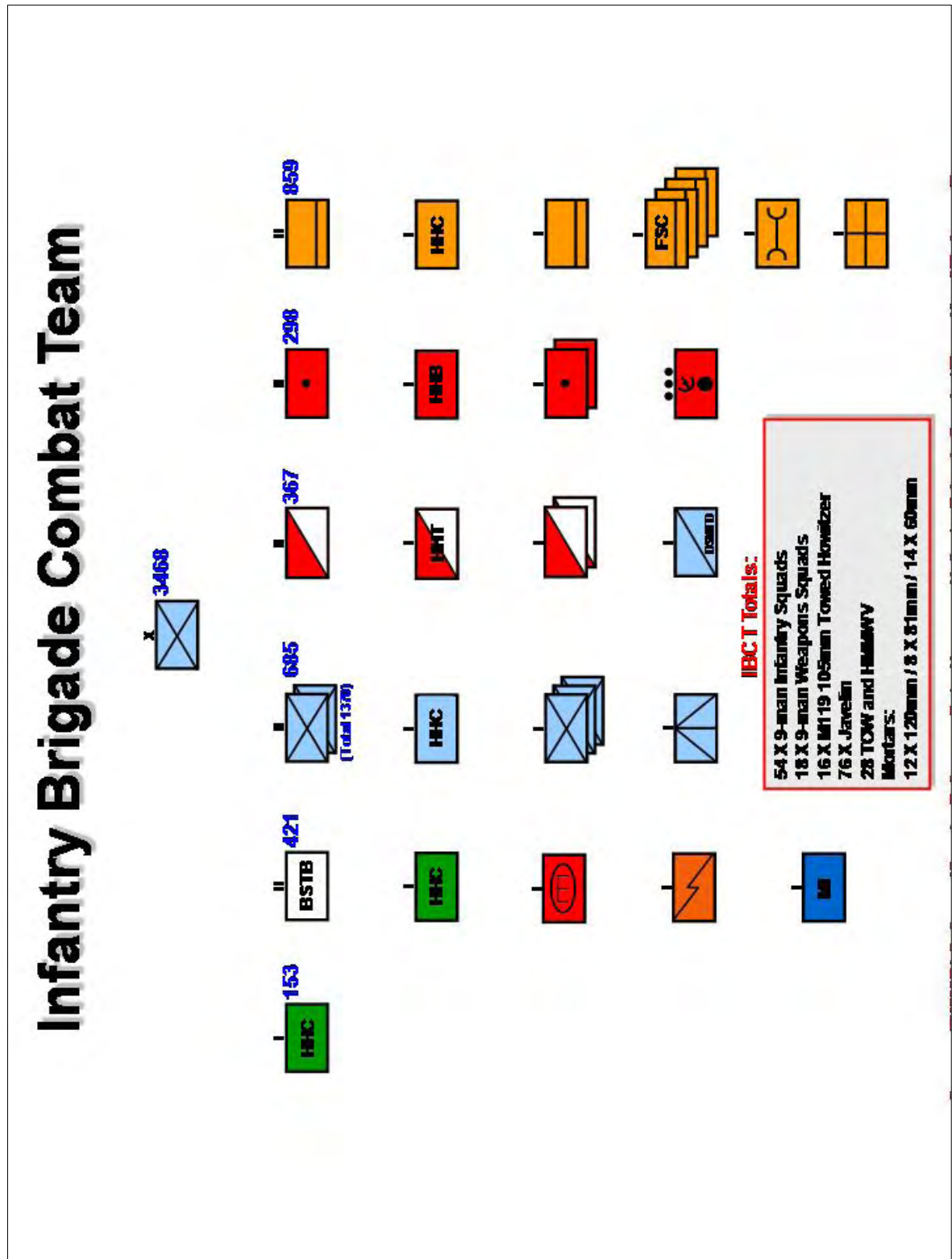
U.S. ARMY BCT AND MANEUVER BATTALION TO&Es



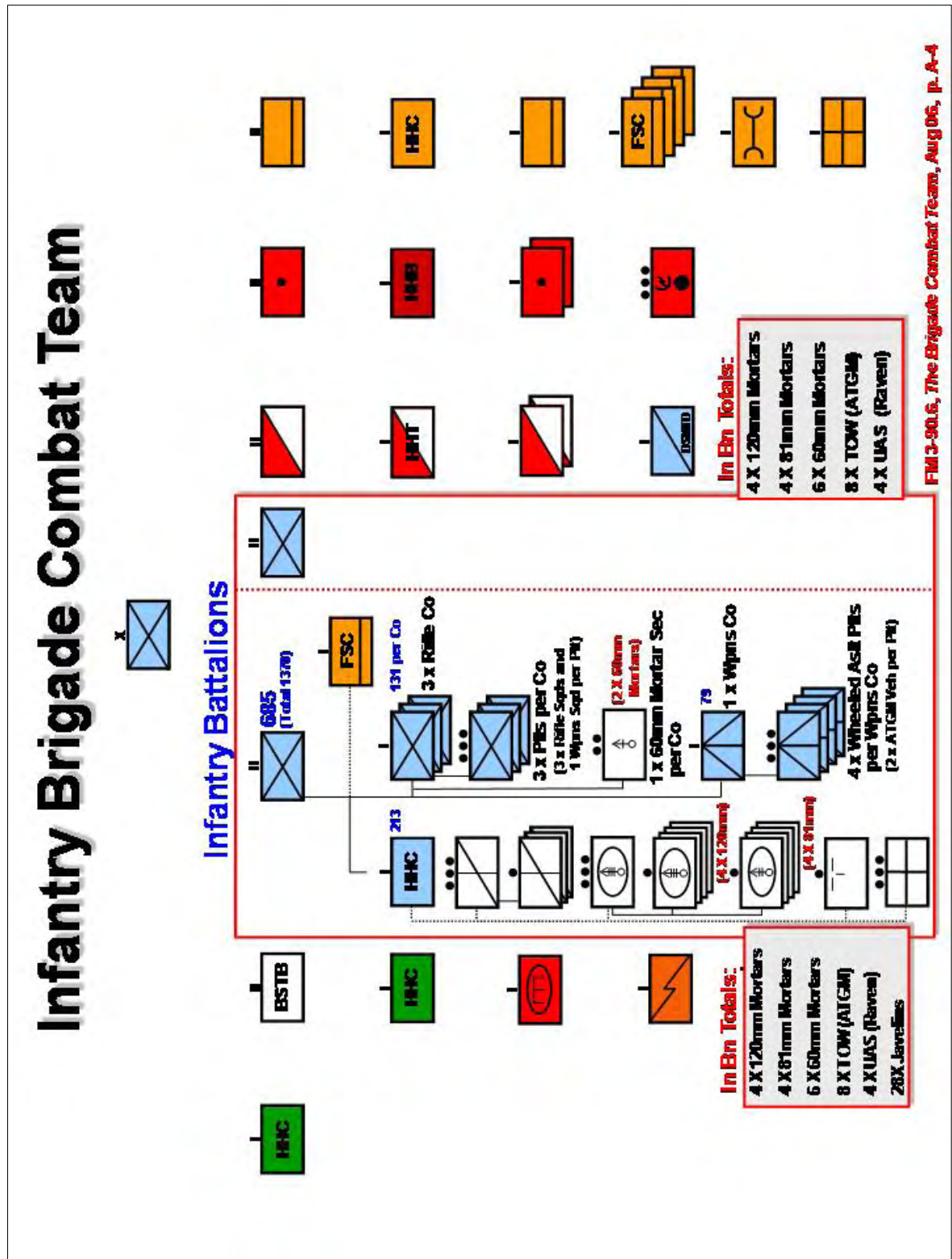


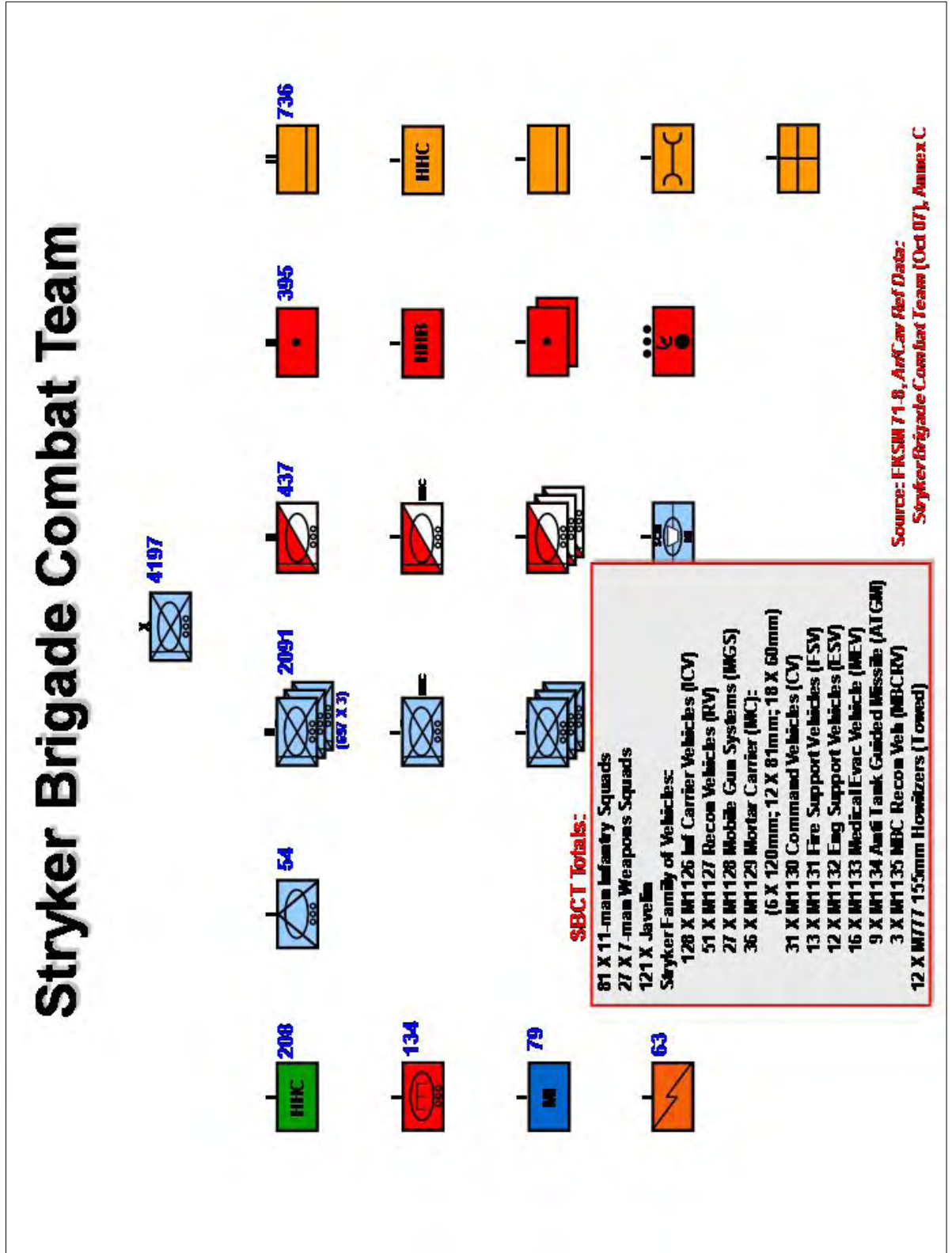
Heavy Brigade Combat Team

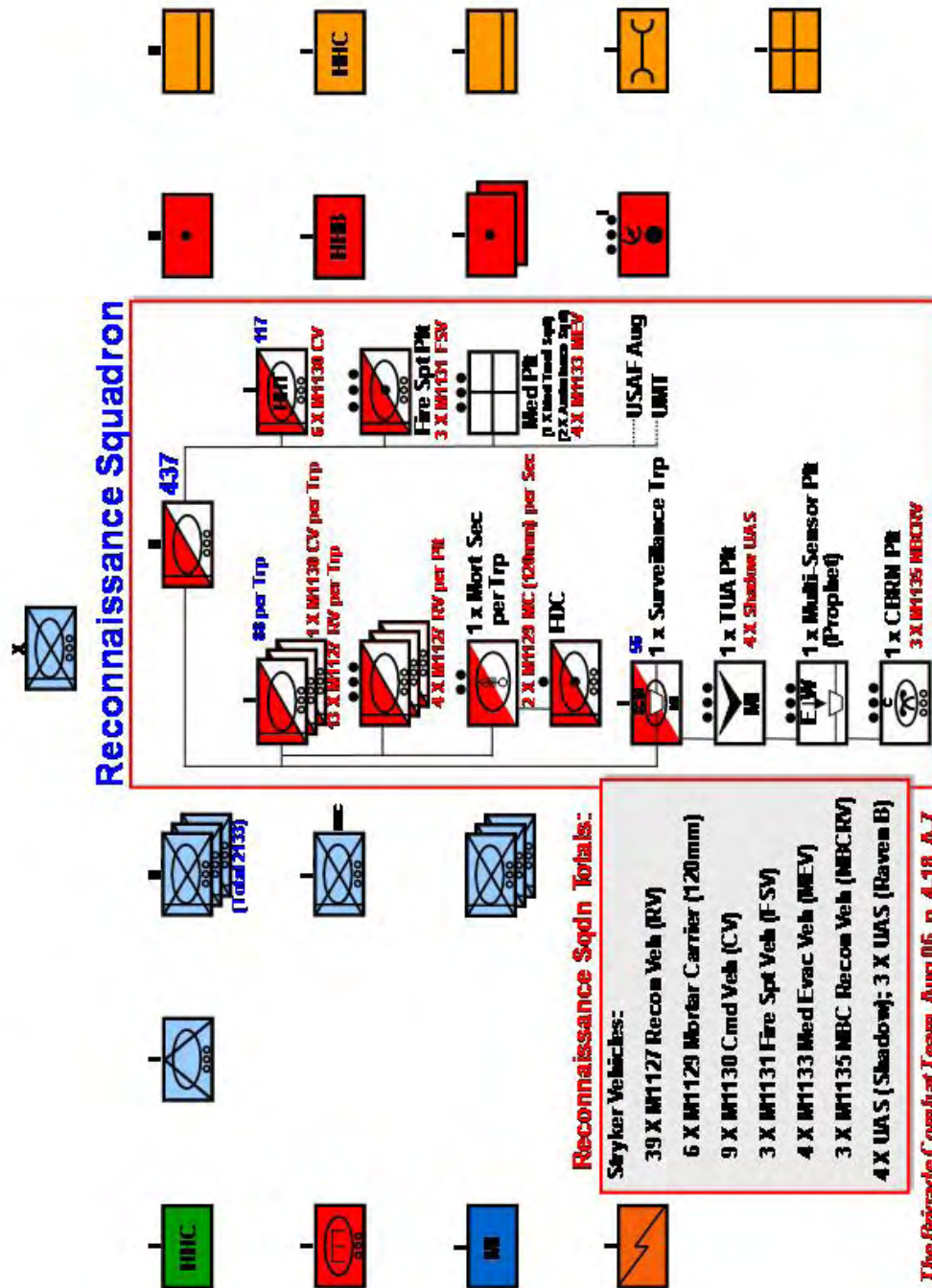




B-5. Infantry Brigade Combat Team, Infantry Battalion

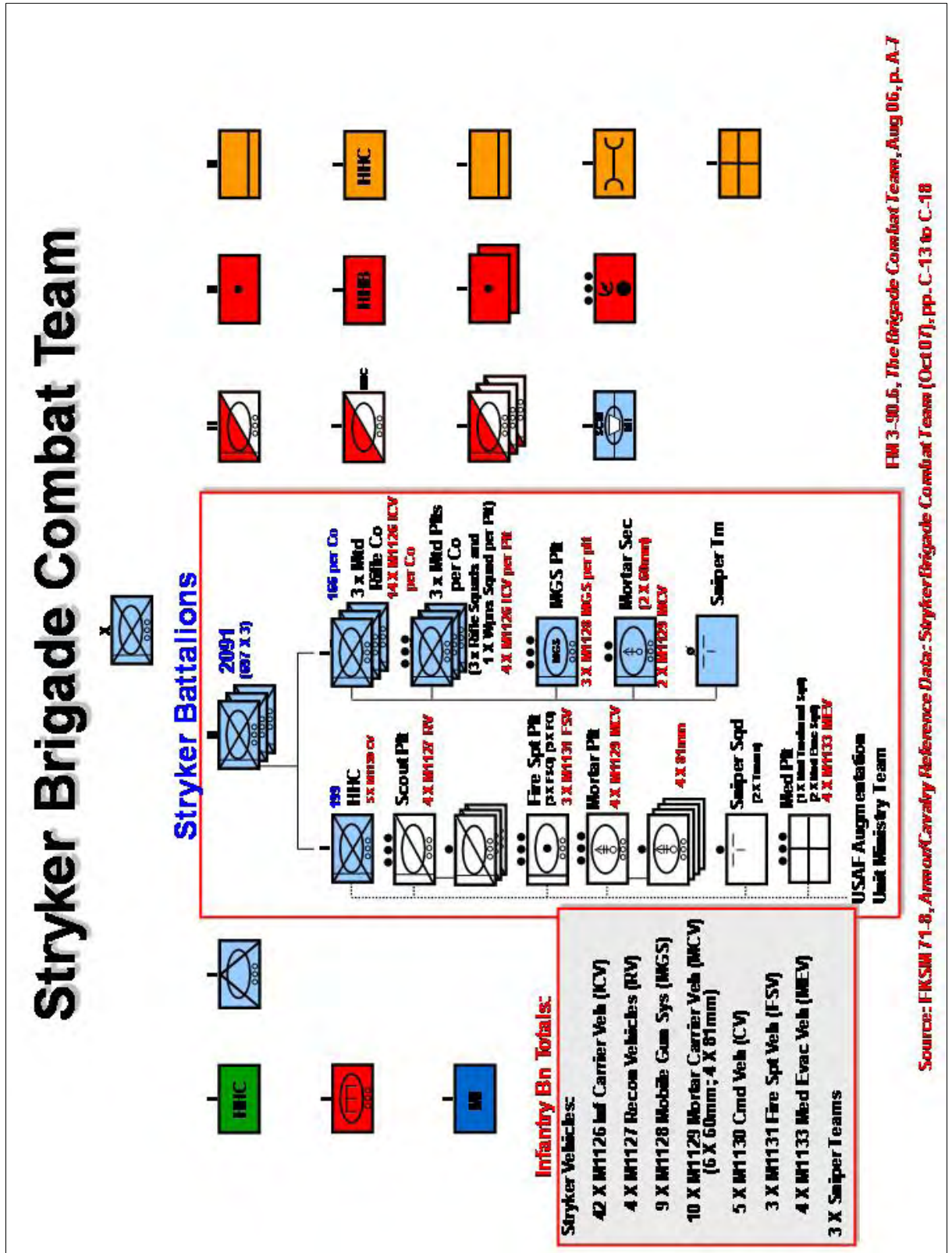






FM 3-90.6, The Brigade Combat Team, Aug 06, p. 4-18, A-7

Source: FKS M 71-B, *Armor Cavalry Reference Data: Stryker Brigade Combat Team* (Oct 07), pp. C-19 to C-25



MAC COA 1



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