

Chapter IV

MANEUVER

“Commanders with a poor understanding of the essence of maneuver; i.e., the union of efforts, prefer, most of all, to divide the area of their maneuver uniformly among their subordinates and demand the same results from all. It is a misfortune to be subordinated to such a ‘corridor’ commander. A completely opposite picture obtains with a good, efficient leadership”

Mikhail Tukhachevsky

1. Background

Integrated maneuver provides the JFC the opportunity to capitalize on the synergistic effects of a joint force. Specifically, such maneuver forces the enemy to orient combat power against multiple directions and dimensions; permits the rapid shifting of forces to multiple locations as required by the tactical situation; and provides the JFC with flexible, lethal options to shape and fight the battle to achieve joint objectives. Seizing, retaining, and exploiting the initiative through integrated maneuver in either offensive or defensive settings interrupts the enemy’s operational maneuver; spoils the timing of tactical operations by forcing an early culmination or diversion of resources; and ultimately creates opportunities for decisive defeat.

2. DRB Ground Maneuver Organizations

A notional DRB’s ground maneuver organization may consist of a combination of a mechanized (mech) infantry battalion and 2 tank battalions grouped under the command of the brigade headquarters as described in Chapter II. The brigade’s maneuver elements fight the battle by destroying or disrupting enemy forces and seizing and holding terrain. Based on the estimate of the situation and METT-T, the DRB commander task organizes the battalions into mech heavy, tank heavy, or balanced task forces tailored to accomplish specific missions. As a rule, the commander cross-attaches units at the battalion level. This is the lowest level provided a commander and staff with the necessary communications, logistics, and other support to ensure proper command and control of tailored combined arms formations.

a. Mechanized Infantry Battalion. The mech battalion consists of a HHC and four rifle companies as *depicted* in Figure IV-1. All battalion combat vehicles have cross-country mobility and armor protection. Once the battalion is configured as a task force, the task force commander may further task-organize companies into company teams for combat operations.

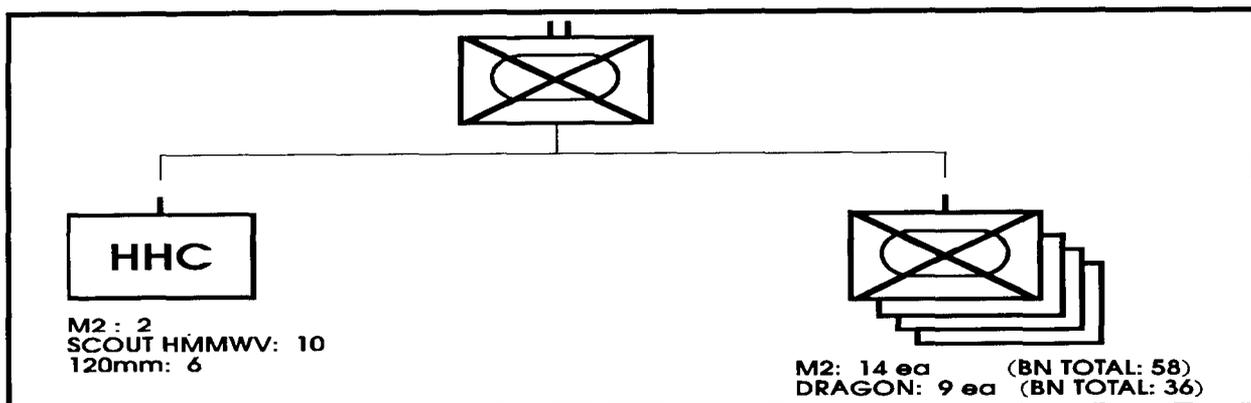


Figure IV-1. DRB Mechanized Infantry Battalion

(1) Rifle Companies. Each of the battalion's 4 rifle companies consist of a company headquarters with 2 M2 Bradley fighting vehicles (BFVs) and 3 rifle platoons of 4 M2s each. The M2 Bradley tube-launched optically-tracked wire-guided (TOW) system and 25mm chain gun combine to provide a significant antiarmor capability as reflected in Table IV-1.

(2) HHC. The HHC contains the staff sections, scouts, heavy mortars, and CSS elements.

(a) Scouts. The scout platoon features 10 high-mobility multipurpose wheeled vehicles (HMMWVs) organized into a command and control section and 4 scout sections consisting of 2 vehicles each. Equipped with electrooptics that enhance reconnaissance and surveillance capabilities, the scouts serve as the TFC's eyes for situation development and awareness. Route, zone, and area

reconnaissance and screening missions also assist movement of battalion units and facilitate task force command and control on the battlefield.

(b) Heavy Mortars. The battalion's 6 heavy 120mm mortars reside on the heavy mortar platoon, The platoon consists of a platoon headquarters, 2 M577 command post-mounted fire direction centers, and 2 sections of M120mm mortars of 3 tubes each. The platoon's ability to conduct split-platoon operations greatly enhances the options available to the TFC in providing immediately responsive indirect fires in support of committed companies/teams. (See Table IV-2.)

b. Tank Battalion. The tank battalion consists of a HHC and 4 tank companies as depicted in Figure IV-2. Like the mech battalion, once configured as a task force, the commander may elect to task organize at the company level.

Table IV-1. M2 Bradley Fighting Vehicle Characteristics

# PER UNIT	WEAPONS	MAXIMUM EFFECTIVE RANGE	AMMUNITION ON BOARD	FUEL USE (GAL/HOUR)	CAPACITY (GALLONS)	RANGE (MILES)	MAX SPEED	OVERCOMES OBSTACLES	
14 per Mech Infantry Company	TOW	3750	7	Idle: 8.4	175	300	HWY: 41	Vertical Step: 3'	
	25mm Chain Gun	APDS:1700 HEL-T:3000	225 675						
	7.62mm Coax MG	900	2340	XCTRY: 18.0			XCTRY: 30		Trench Crossing Width: 8'4"
	Smoke Grenade	30	16	Secondary Roads: 8.6			Water: 4.5		
	Passive Sight	2000+							

Table IV-2. M1064A3 (120mm) Mortar Characteristics

# PER UNIT	WPNS	MAX EFFECTIVE RANGE(M)	AMMUNITION ON BOARD	FUEL USE (GAL/HR)	FUEL (GAL)	RANGE (MILES)	MAX SPEED	OVERCOMES OBSTACLES	
6 per HHC Mortar Platoon	120mm Mortar	HE: 7200	48	Idle: 1.0	95	300	40	Vertical Steps: 2'	
		ILL: 7100	14						XCTRY: 6.2
		WP: 7200	7						Secondary Roads: 8.9
	50 Cal	1200-1600	2000						

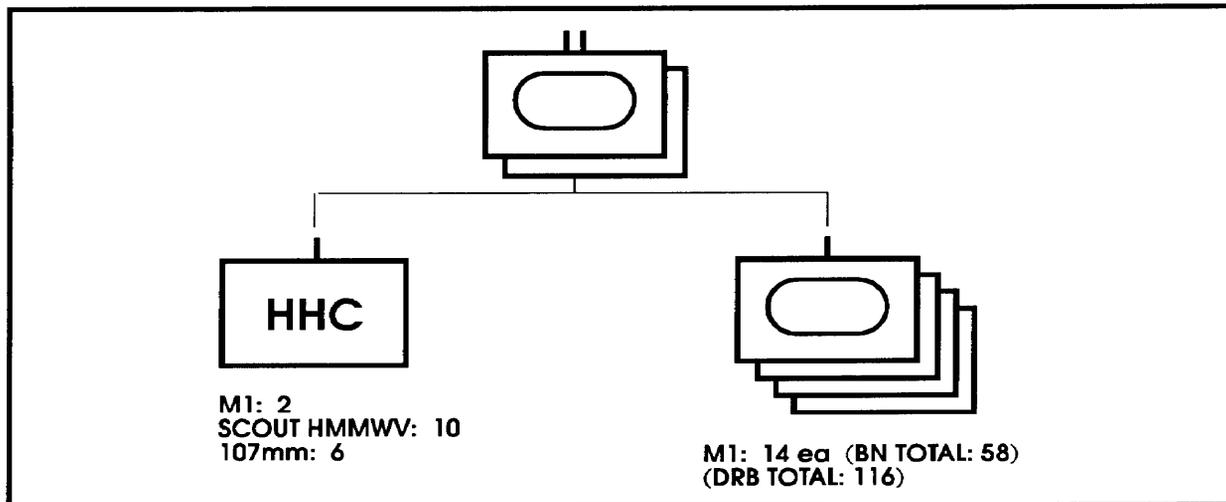


Figure IV-2. DRB Tank Battalion

(1) Tank Company. Each of the battalion's 4 tank companies consist of a company headquarters with 2 M1A1 Abrams tanks and 3 tank platoons with 4 MIs each, for a total of 14 tanks per company. The M1A1 provides the DRB with the optimum antiarmor capability. (See Table IV-3.)

(2) Tank Battalion HHC. The HHC mirrors that found in the mech battalion as described above.

c. Other Supporting Organizations. Although not ground maneuver organizations, the DRB's attached military police (MP) and chemical platoons support brigade operations.

(1) MP Platoon. MP support for the DRB resides in the MP platoon attached to the brigade HHC. The platoon's 4 squads perform the range of MP missions: 1 squad provides security at the brigade's main CP; 1 squad operates the EPW collection point; and the remaining 2 squads conduct battlefield circulation control and area security operations throughout the brigade's rear area; all contribute to law and order operations.

(2) Chemical Platoon. The DRB's attached chemical platoon provides the brigade with chemical reconnaissance support, a smoke generation capability, and the capacity to conduct limited, hasty, and deliberate decontamination operations.

Table IV-3. M1A1 Abrams Tank

# PER UNIT	WEAPONS	MAXIMUM EFFECTIVE RANGE(M)	AMMUNITION ON BOARD	FUEL USE (GAL/HR)	CAPACITY (GALLONS)	RANGE (MILES)	MAX SPEED	OVERCOMES OBSTACLES
14 per Tank Company	120mm	3500	40	Idle: 8.5	504.4	298	HWY: 41.5 XCTRY: 30	Vertical Step: 3'6" Trench Crossing Width: 9'
	50 Cal	1200-1600	900	XCTRY: 56.6				
	7.62mm Coax MG	900	11,400	Secondary Roads: 44.8				
	Smoke Grenade	30	24					
	Thermals	2000+						

3. Maneuver of the DRB

The DRB can execute the range of offensive and defensive operations. The brigade fights by task organizing its ground maneuver battalions into combined arms' task forces that prosecute the close fight. Task forces move, attack, delay, and defend according to the brigade commander's intent and concept of operation. Although focused primarily on the close fight, the brigade can command and control deep operations given aviation and combat support assets. As discussed in Chapter III, the MEF must provide the brigade in-depth intelligence about the enemy so the brigade can exploit enemy weaknesses and maintain the initiative. The brigade performs security operations by assigning tasks to its task forces and by using available augmentation assets such as Army aviation. Task forces employ organic scouts and attached resources for reconnaissance and security missions in support of the task force and brigade commanders. DRB rear operations consist of protecting units behind committed task forces, ensuring continuous combat and CSS, maintaining freedom of movement for uncommitted forces, and securing the brigade command posts and support areas.

a. Tactical Maneuver.

(1) IPB. IPB focuses on the brigades' primary zone and objective area. The brigade IPB must also extend beyond its boundaries

given the probability that the brigade will revert to reserve or be directed into an adjacent zone during an operation. IPB must detail lateral routes and cross-country avenues of movement that connect primary approaches. Avenues that parallel main axes also merit consideration for use during meeting engagements and in bypassing enemy defenses.

(2) Maneuver Techniques. Within the zone, the brigade commander concentrates attacks against enemy weaknesses along an avenue that offers rapid access to the objective area. The brigade will not normally clear its zone unless specifically directed. When in contact with an enemy force requiring attack by more than one task force, the brigade employs the task forces as maneuver and base of fire elements. Task forces and uncommitted units remain within supporting distances of each other in brigade formations. Although such mutual support does not require mutual observation, it does mean that the brigade commander must retain the ability to concentrate task forces when and where required. Committed task forces maneuver in zones wide enough to allow them some freedom of action and far enough apart to give the brigade multiple routes of advance. Task forces should be able to mass fires in a single terrain compartment when attacking, acting as the brigade base of fire, or when defending. Uncommitted task forces normally follow the brigade's main attack closely to support within 30 minutes. (See Table IV-4.)

Table IV-4. DRB Maneuver Spatial Requirements

UNIT	OFFENSE (km) (Zone Width)	DEFENSE (km) (Sector Width)
DRB (Main Effort)	5-15	3-15
DRB (Supporting Effort)	5-25	5-25
Task Force (Main Effort)	4-8	4-8
Task Force (Supporting)	4-8	4-8
Brigade Support Area	7 km (Open)	5 km (Restrictive)
Brigade Depth		25-50

(3) Spatial Considerations. Plans officers should assign the DRB a zone of action that contains at least 2 task force size corridors. The zone should contain terrain that allows the TFCs to maneuver their company teams and, at the same time, permit the DRB commander to mass those task forces abreast when required. Ideally, the zones will also contain at least 1 good quality road to support rapid movement of uncommitted units behind lead units and facilitate logistics for sustainment of operational momentum. Table IV-5 provides some general *rules of thumb* for use by planners in allocating terrain to the DRB when developing plans and supporting operational graphics; METT-T will dictate actual employment options.

(4) Control Measures. The brigade uses measures assigned by the MEF to

control its operations. Graphical control measures should extend beyond objective areas and to its flanks to facilitate execution of on order or subsequent missions. The DRB augment assigned graphics with task force assembly areas, attack positions, zones, sectors, objectives, axes, battle positions, fire support coordination measures, phase lines, and other control measures as necessary to execute the brigade commander's intent and concept of operation. The brigade also employs check points, target reference points, and on-order positions, axes, and objectives to facilitate modifying the maneuver plan during operational execution.

b. Tactical Movement Rates. Table IV-6 defines unopposed movement rates.

Table IV-5. Unopposed Movement Rates

TYPE TERRAIN	DISMOUNTED INFANTRY	ARMORED/MECHANIZED
Unrestricted	4 kmph (Day) 3.2 kmph (Night)	24 kmph (Day) 24 kmph (Night with lights/passive)
Restricted	2.4 kmph (Day) 1.6 kmph (Night)	16 kmph (Day) 8 kmph (Night, blacked out)
Severely Restricted	1.0 kmph (Day) 0.1 to 0.5 kmph (Night)	1.0 kmph (Day) 0.1 to 0.5 kmph (Night)

Table IV-6. M1/M2 Road March Rates

WHEN	PAVED ROAD	GRAVEL ROAD	TANK TRAIL	GO TERRAIN
Day	65 kmph	60 kmph	50 kmph	40 kmph
Night (White Lights)	65 kmph	60 kmph	50 kmph	40 kmph
Night (Red Lights)	60 kmph	50 kmph	40 kmph	35 kmph

4. MEF (FWD) Maneuver Organizations

A notional MEF (FWD) GCE is structured around a Marine infantry regiment. The infantry mission is to close with and destroy the enemy by fire and maneuver. The regiment consists of a headquarters company and 3 rifle battalions as shown in Figure IV-3. Major supporting elements include an artillery battalion, a tank company, a light armored reconnaissance battalion, and an assault amphibian vehicle (AAV) company.

a. Artillery Battalion. The MEF (FWD) artillery battalion provides indirect fires for supported units of the regiment. See Chapter V for detailed discussion.

b. Tank Company. The tank company supports the MEF (FWD) by destroying

enemy forces, fortifications, material, and by providing antimechanized fires in support of committed units. Marine and Army armor and mechanized infantry doctrine are similar; however, in some cases, Marine armor units are task organized below the company level. Since the Marine Corps has few tank battalions, it rarely employs them tank pure; rather, they are typically task organized to reinforce infantry units. Thus, in contrast to the Army's concept of employment that generally attempts to achieve mass by task-organizing tank units no lower than company level, Marine commanders may employ tanks individually to support committed infantry units when required. The MEF (FWD)'s supporting tank company consists of 17 M1A1s organized with a headquarters (2 tanks) and 3 platoons of 5 tanks each.

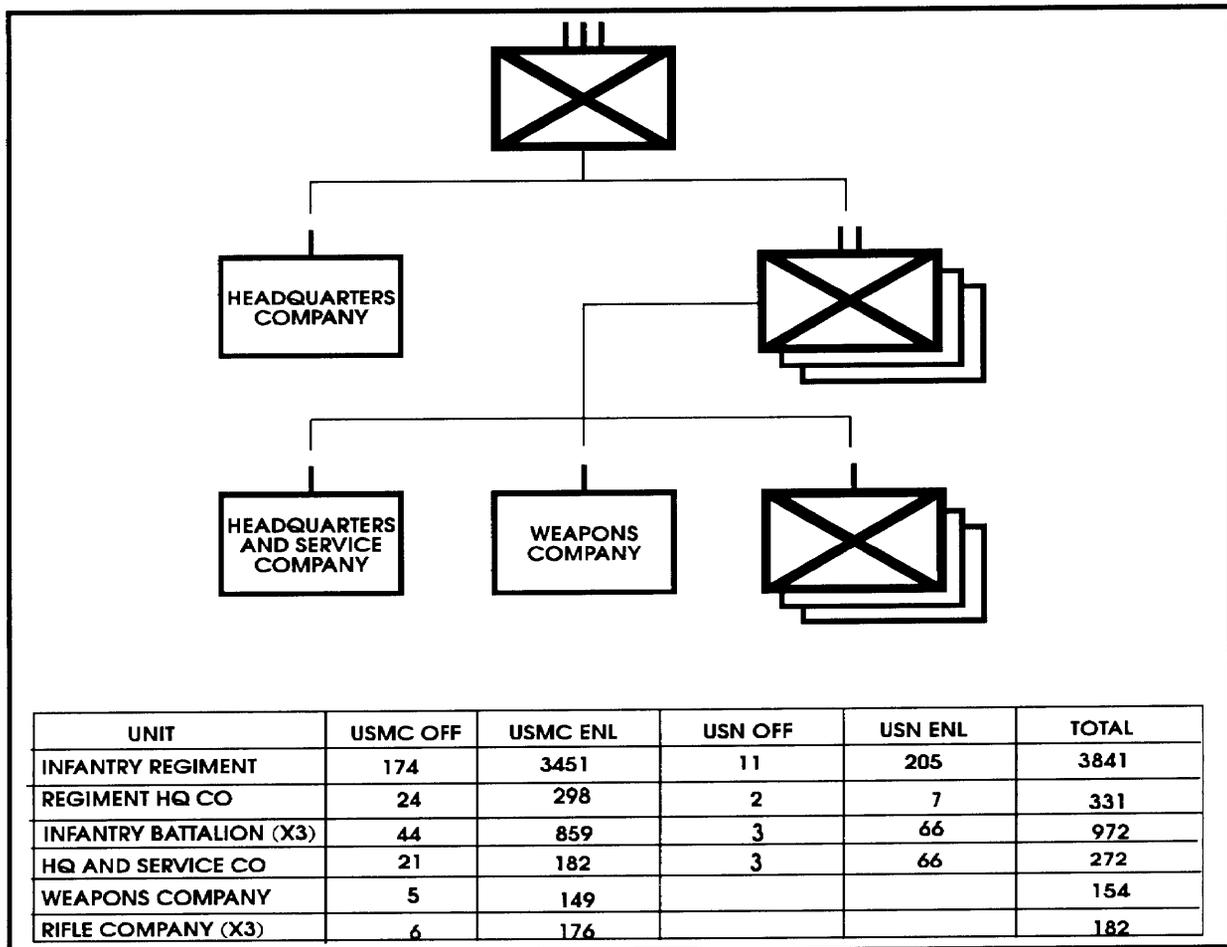


Figure IV-3. Marine Infantry Regiment

c. LAR Battalion. LAR units conduct reconnaissance, security, and economy of force missions. LAR units avoid sustained combat as their value is derived from a high degree of mobility. This mobility enables them to operate on extended frontages at considerable distances from the main force and to strike sudden blows at enemy weak points. LAR's firepower, combined with mobility, make it an effective means of conducting delay actions over considerable fronts and depths. Figure IV-4 portrays the LAR battalion.

d. AAV Company (AAV). AAVs transport the surface assault elements of the landing force from amphibious shipping to inland objectives in a single lift during the amphibious assault, provide support to mechanized operations ashore, and provide combat support for other operations requirements. During operations ashore, AAV units are used principally to improve the tactical mobility of infantry and engineer units. Additionally, AAVs provide the supported unit with limited firepower and armor protection.

5. Maneuver of the MEF (FWD)

“Maneuver is the employment of forces to secure an advantage—or leverage—over the enemy to accomplish the mission. Tactical maneuver aims to gain an advantage in combat. Operational maneuver, on the other hand, impacts beyond the realm of combat. In fact, it aims to reduce the amount of fighting necessary to accomplish the mission.”

FMFM 1-1, Campaigning

The following view of maneuver describes the Marine style of command and control in that every effort is made to speed the tempo of planning and execution:

FMFM 1, War-fighting, states— *‘The traditional understanding of maneuver is a spatial one; that is, we maneuver in space to gain a positional advantage. However, in order to maximize the usefulness of maneuver, we must consider maneuver in time as well; that is, we generate a faster operational tempo than the enemy to gain a temporal advantage. It is through maneuver in both dimensions that an inferior force can achieve decisive superiority in the necessary time and place.’*

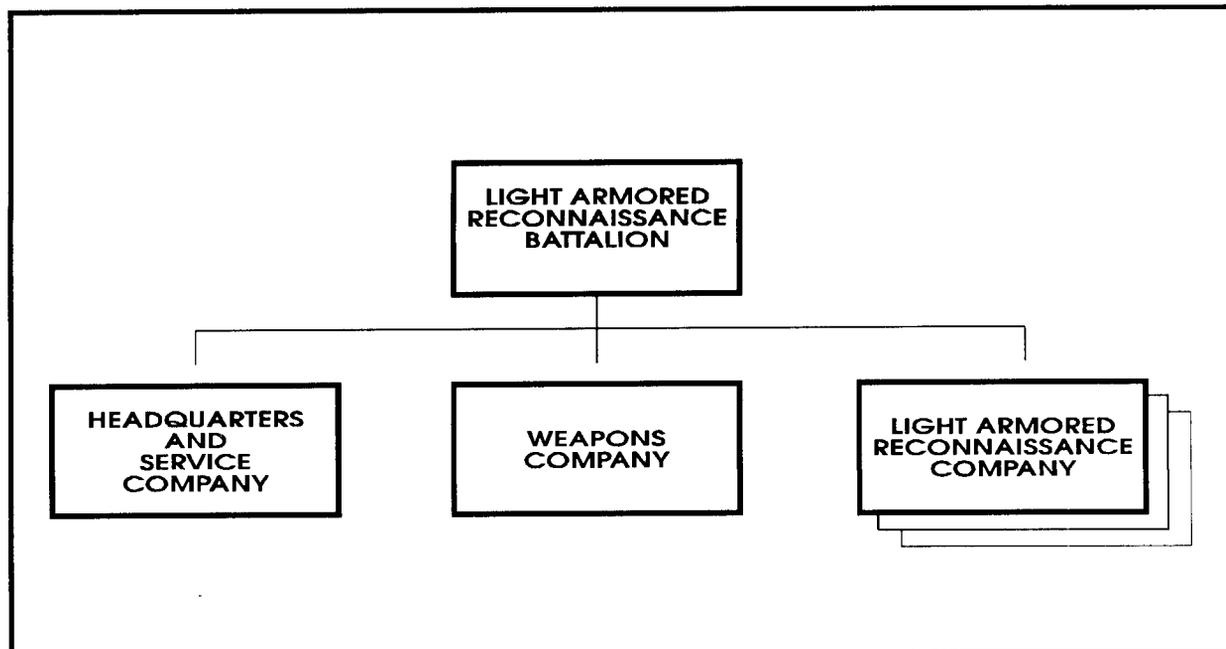


Figure IV-4. Light Armored Reconnaissance Battalion

a. Tactical Maneuver. The AAVs, combined with other assets available within MEF (FWD), enable the commander to configure tailored mechanized forces as discussed below:

(1) Organization. A mechanized force is organized around a nucleus unit. The force is constructed as tank heavy, infantry heavy, or balanced. A tank heavy unit is employed when the shock action of armor is called for by the enemy situation and facilitated by more open terrain. An infantry heavy unit is employed when the shock action of armor is less important or when the operation is conducted in more restricted terrain such as mountainous or built-up areas. When the enemy situation is unclear and maximum flexibility is desired, a balanced force of generally equal proportions is employed.

(2) Elements of a Mechanized Force. A mechanized infantry force in the Marine Corps consists of infantry units mounted in AAVs. AAVs are the Marine Corps' armored personnel carriers; therefore, infantry will normally not fight mounted. Tanks are normally attached or placed OPCON of the mechanized unit, or the mechanized unit is attached or placed OPCON of the tank unit. This allows the commander to task-organize forces per METT-T. The mechanized or tank force is supported by artillery and air and reinforced with LAV, engineer, and air defense units as appropriate, per METT-T.

b. Tactical Mobility. Mechanized assets in the Marine Corps are limited in number and transportation capability; therefore, the

GCE commander will seldom mechanize the entire force. As a result, a mechanized force requires a major portion of the MEF (FWD)'s mobility assets. Marine infantry mobility is limited during dismounted operations. Infantry unit mobility is enhanced during mechanized or helicopterborne operations with the use of AAVs or MEF (FWD) aviation assets. Organic to the GCE for support of movement and maneuver are artillery and combat engineer units that also possess surface mobility assets. Mobility assets are not specifically dedicated to any one element of the MAGTF; rather assets are allocated by the MAGTF/GCE commander based on operational requirements. Table IV-7 illustrates MEF (FWD) mobility assets and capabilities.

c. Helicopterborne Operations. Helicopterborne operations are an integral part of MEF (FWD) operations and provide the joint force with significant capabilities regarding both tactical movement and maneuver. Assault helicopters provide the MEF (FWD) commander the mobility to achieve tactical surprise and to move forces regardless of terrain, obstacles, or barriers. This mobility allows the commander to rapidly maneuver forces to achieve positional advantage over the enemy and quickly apply combat power where and when needed. The inherent speed, maneuverability, and firepower of attack helicopters further enhance the commander's ability to quickly mass combat power to destroy enemy forces. Chapter VII discusses helicopterborne operations in further detail.

Table IV-7. MEF (FWD) Mobility Assets

MOBILITY ASSET	MAX NUMBER AVAILABLE	# PAX
CH53	28	30
CH46	48	15
LVTP (AAVs)	109	20
Mxxx (Trucks)	TBP	TBP
KC-130*	6	92
* Normally used for refueling operations		

6. Integrated Maneuver and Complementary Capabilities

Chapter I detailed the capabilities and limitations of the Army DRB and MEF (FWD) at the macro level. Tables IV-8A through IV-8F reflect the complementary

operational capabilities of the MEF (FWD) and Army DRB across a range of combat operations. In addition to providing plans officers a menu of employment options, the tables further underscore the recurring theme that the capabilities of one force counterbalance the limitations of the other.

Table IV-8A. AMCI Operations Complementary Capabilities

OPERATION	MEF (FWD)	DRB
Amphibious Operations	<ul style="list-style-type: none"> Conduct amphibious assaults, raids, demonstrations, and withdrawals 	
	<ul style="list-style-type: none"> Conduct air operations in support of forcible entry and follow-on combat operations 	
		<ul style="list-style-type: none"> Support amphibious operations (except assault phase) as mobile defensive, counterattack, or breakout force
	<ul style="list-style-type: none"> Transition to follow-on offensive operations 	<ul style="list-style-type: none"> Transition to follow-on offensive operations
Passage of Lines	<ul style="list-style-type: none"> Assist in C2 of passage 	<ul style="list-style-type: none"> Assist in C2 of passage
	<ul style="list-style-type: none"> Clear obstacles from attack positions through passage lanes/mark mines 	
	<ul style="list-style-type: none"> Overwatch passage 	<ul style="list-style-type: none"> Overwatch passage
	<ul style="list-style-type: none"> Infiltrate to tactical depth 	
		<ul style="list-style-type: none"> Act as MEF multifunctional reserve
		<ul style="list-style-type: none"> Transition rapidly to exploit successful passage

Table IV-8B. AMCI Operations Complementary Capabilities

OPERATION	MEF (FWD)	DRB
Movement to Contact	<ul style="list-style-type: none"> Conduct air reconnaissance, offensive air cover, antiair, and EW operations 	<ul style="list-style-type: none"> Conduct reconnaissance in force
	<ul style="list-style-type: none"> Conduct covering force operations 	<ul style="list-style-type: none"> Conduct covering force operations
	<ul style="list-style-type: none"> Conduct security operations 	<ul style="list-style-type: none"> Conduct security operations
	<ul style="list-style-type: none"> Fight meeting engagement 	<ul style="list-style-type: none"> Fight meeting engagement
	<ul style="list-style-type: none"> Seize assigned objectives 	<ul style="list-style-type: none"> Seize assigned objectives
	<ul style="list-style-type: none"> Quickly transition to attack or defense 	<ul style="list-style-type: none"> Quickly transition to attack or defense
	<ul style="list-style-type: none"> Execute vertical assault to seize objectives 	
	<ul style="list-style-type: none"> Clear and secure restricted terrain 	
	<ul style="list-style-type: none"> Fix/defeat enemy dismounted forces 	<ul style="list-style-type: none"> Fix/defeat enemy mounted forces
		<ul style="list-style-type: none"> Act as multifunctional reserve

Table IV-8C. AMCI Operations Complementary Capabilities

OPERATION	MEF (FWD)	DRB
Attack	<ul style="list-style-type: none"> • Conduct dismounted hasty or deliberate attack as main/supporting effort 	<ul style="list-style-type: none"> • Conduct mounted hasty or deliberate attack as main/supporting effort
	<ul style="list-style-type: none"> • Perform economy of force operations 	<ul style="list-style-type: none"> • Perform economy of force operations
	<ul style="list-style-type: none"> • Fix/defeat bypassed enemy forces 	<ul style="list-style-type: none"> • Fix/defeat bypassed enemy forces
	<ul style="list-style-type: none"> • Conduct offensive air operations 	
	<ul style="list-style-type: none"> • Conduct dismounted attacks over restrictive terrain 	
	<ul style="list-style-type: none"> • Seize objectives through vertical envelopment/assault 	
	<ul style="list-style-type: none"> • Conduct military operations on urbanized terrain (MOUT) 	
		<ul style="list-style-type: none"> • Conduct deep air maneuver operations with Army aviation augmentation
		<ul style="list-style-type: none"> • Act as multifunctional combined arms reserve
		<ul style="list-style-type: none"> • Rapidly concentrate combat power to exploit enemy weaknesses
		<ul style="list-style-type: none"> • Attack to linkup with friendly forces
	<ul style="list-style-type: none"> • Isolate objectives 	
	<ul style="list-style-type: none"> • Defeat enemy mobile reserves 	
	<ul style="list-style-type: none"> • Support deception 	<ul style="list-style-type: none"> • Support deception

Table IV-8D. AMCI Operations Complementary Capabilities

OPERATION	MEF (FWD)	DRB
Breaching Operations	<ul style="list-style-type: none"> • Secure the near side 	<ul style="list-style-type: none"> • Secure the near side
	<ul style="list-style-type: none"> • Prebreach/breach obstacles 	
	<ul style="list-style-type: none"> • Support breaching and assault forces with overwatching suppressive fires 	<ul style="list-style-type: none"> • Provide support, breaching, and/or assault forces
		<ul style="list-style-type: none"> • Conduct in-stride or deliberate breaching operations
	<ul style="list-style-type: none"> • Prepare/mark lanes 	<ul style="list-style-type: none"> • Prepare/mark lanes
	<ul style="list-style-type: none"> • Infiltrate enemy defenses 	
	<ul style="list-style-type: none"> • Clear enemy defending obstacles 	
	<ul style="list-style-type: none"> • Conduct/support deception operations 	<ul style="list-style-type: none"> • Conduct/support deception operations
River Crossing Operations		<ul style="list-style-type: none"> • C2 crossing operation
	<ul style="list-style-type: none"> • Secure the near side 	<ul style="list-style-type: none"> • Secure the near side
	<ul style="list-style-type: none"> • Conduct far side reconnaissance 	
	<ul style="list-style-type: none"> • Provide overwatching fires 	<ul style="list-style-type: none"> • Provide overwatching fires
	<ul style="list-style-type: none"> • Execute waterborne assault crossing to secure the far side 	
	<ul style="list-style-type: none"> • Execute vertical assault to seize objectives/secure the far side 	
		<ul style="list-style-type: none"> • Conduct crossing with engineer augmentation
	<ul style="list-style-type: none"> • Conduct/support deception operations 	<ul style="list-style-type: none"> • Conduct/support deception operations

Table IV-8E. AMCI Operations Complementary Capabilities

OPERATION	MEF (FWD)	DRB
Defend		<ul style="list-style-type: none"> • Execute covering force mission
	<ul style="list-style-type: none"> • Conduct counterreconnaissance operations 	<ul style="list-style-type: none"> • Conduct counterreconnaissance operations
	<ul style="list-style-type: none"> • Conduct security operations 	<ul style="list-style-type: none"> • Conduct security operations
	<ul style="list-style-type: none"> • Conduct range of defensive air operations 	
		<ul style="list-style-type: none"> • Conduct limited deep operations
	<ul style="list-style-type: none"> • Conduct raids, ambushes, or spoiling attacks 	<ul style="list-style-type: none"> • Conduct raids, ambushes, or spoiling attacks
	<ul style="list-style-type: none"> • Block dismounted enemy avenues of approach; block mounted routes in restricted terrain 	<ul style="list-style-type: none"> • Block enemy avenues of approach
	<ul style="list-style-type: none"> • Execute vertical assault to seize key objectives 	
	<ul style="list-style-type: none"> • Conduct positional defense 	<ul style="list-style-type: none"> • Conduct mobile or area defenses
	<ul style="list-style-type: none"> • Occupy positions in depth, including strong points 	<ul style="list-style-type: none"> • Defend in depth
	<ul style="list-style-type: none"> • Respond to rear-area threats 	<ul style="list-style-type: none"> • Respond to rear-area threats
		<ul style="list-style-type: none"> • Act as multifunctional reserve
	<ul style="list-style-type: none"> • Conduct MOUT 	
<ul style="list-style-type: none"> • Perform economy-of-force role 	<ul style="list-style-type: none"> • Perform economy-of-force role 	
<ul style="list-style-type: none"> • Assist in deception 	<ul style="list-style-type: none"> • Assist in deception 	

Table IV-8F. AMCI Operations Complementary Capabilities

OPERATION	MEF (FWD)	DRB
Retrograde	<ul style="list-style-type: none"> • Delay along likely enemy dismounted avenues of approach 	<ul style="list-style-type: none"> • Execute delay in depth
	<ul style="list-style-type: none"> • Assist disengagement using air assets 	<ul style="list-style-type: none"> • Assist disengagement using air assets if augmented with aviation
	<ul style="list-style-type: none"> • Conduct limited counterattacks to assist disengagement 	<ul style="list-style-type: none"> • Counterattack to assist disengagement
	<ul style="list-style-type: none"> • Block/reinforce subsequent delay positions 	<ul style="list-style-type: none"> • Block/reinforce subsequent delay positions
		<ul style="list-style-type: none"> • Maneuver rapidly to prevent enemy envelopment
	<ul style="list-style-type: none"> • Cut enemy LOCs; attack enemy combat support and CSS units/assets 	<ul style="list-style-type: none"> • Cut enemy LOCs; attack enemy combat support and CSS units/assets
		<ul style="list-style-type: none"> • Perform rear guard function; protect withdrawal of main body
		<ul style="list-style-type: none"> • Act as multifunctional reserve
	<ul style="list-style-type: none"> • Assist with execution of obstacles planned in depth 	<ul style="list-style-type: none"> • Assist with execution of obstacles planned in depth
	<ul style="list-style-type: none"> • Secure critical nodes 	<ul style="list-style-type: none"> • Secure critical nodes
<ul style="list-style-type: none"> • Conduct MOUT 		

a. Planning Considerations. Commanders and their staffs must recognize the differences inherent in the ground maneuver elements of the joint force. These differences fall in primarily three arenas, subsequently referred to as the *mobility differential*, *survivability differential*, and *firepower differential*. Operations planning should accommodate these differences accordingly.

(1) Mobility Differential. The DRB can move much faster (in short bursts and

for sustained periods) than the GCE can. This differential stems from cross-country capabilities/speed of DRB's organic vehicles. The GCE, in mounted operations, uses AAVs and trucks to carry infantry; artillery units use trucks to tow organic howitzers, Rapid movement is achieved during helicopterborne operations. AAVs are not designed for sustained rapid overland movement. Figure IV-5 shows planning movement rates for various type units.

Degree of Resistance Attacker to Defender Ratio	PREPARED DEFENSE						HASTY DEFENSE/DELAY					
	UNRESTRICTED TERRAIN		RESTRICTED TERRAIN		SEVERELY RESTRICTED TERRAIN		UNRESTRICTED TERRAIN		RESTRICTED TERRAIN		SEVERELY RESTRICTED TERRAIN	
	Armor/Mech	Inf	Armor/Mech	Inf	Armor/Mech	Inf	Armor/Mech	Inf	Armor/Mech	Inf	Armor/Mech	Inf
Intense Resistance 1:1	.6	.5	.5	.3	.16	.1	1.0	.8	.8	.5	.4	.2
Very Heavy 2:1	.9	.6	.6	.4	.3	.2	1.5	1.0	1.0	.7	.6	.3
Heavy 3:1	1.2	.7	.75	.5	.5	.3	2.0	1.2	1.3	.9	.8	.5
Medium 4:1	1.4	.8	1.0	.6	.6	.5	2.4	1.4	1.75	1.1	.9	.8
Light 5:1	1.5	.9	1.1	.7	.7	.6	2.6	1.6	2.0	1.2	1.0	.9
Negligible 6+:1	1.7+	1.0+	1.3+	.8+	.8+	.6+	3.0+	1.7+	2.3+	1.3+	1.1	1.0

Source: Adapted from CACDA Jiffy III War Game, Vol II, Methodology

- ¹ Units cannot sustain these rates for 24 hours. These rates are reduced by 1/2 at night.
- ² The relative combat power ratio must be computed for the unit under consideration.
- ³ When there is surprise, multiply these figures by a surprise factor as follows:
 - Complete Surprise X5 (e.g., Germans at the Ardennes in 1944, Arabs in 1973).
 - Substantial Surprise X3 (e.g., German Invasion of Russia in 1941, Israeli invasion of Sinai in 1967).
 - Minor Surprise X1.3 (e.g., Allied Normandy landing in 1944, Pakistani attack on India in 1971).
 The effects of surprise last for 3 days, being reduced by 1/3 on day 2 and 2/3 on day 3.
- ⁴ Prepared defense is based on defender in prepared positions (24 hours or more).
- ⁵ Hasty defense is based on 2 to 12 hours preparation time.
- ⁶ The ratios used here are to determine the degree of resistance. There is no direct relationship between advance rates and force ratios. However, sustained advances probably are not possible without a 3 to 1 ratio. Advance is possible against superior forces but cannot be sustained.
- ⁷ Rates greater than 6 to 1 will result in advance between these and the unopposed rates.

Figure IV-5. Planning Movement Rates

(2) Survivability Differential. Because of its vast number of armored assets, the DRB has greater overall armored protection than the GCE. Except for the M1A1s (and LAVs to some extent), Marine vehicles (including the lightly armored AAVs) are methods of transportation and normally not used for mounted combat. Towed artillery is also more vulnerable to counterfire than SP artillery.

(3) Firepower Differential. Marines rely upon organic air assets much more than the Army does. The DRB relies primarily upon direct fire weapons; mortars; attached artillery; and, when attached, attack helicopters.

b. Maneuver Employment Options. The following employment options maximize the complementary capabilities the MEF (FWD) and DRB provide the joint force through the execution of integrated operations.

(1) DRB and the MEF. The DRB is effective either as the main or supporting effort in both offensive or defensive situations. It is particularly well suited to perform reserve roles because its mobility and firepower allow it to strike the enemy at the critical time and place to seize or regain the initiative through the destruction of the enemy force. Also, the DRB can stop penetrations or incursions into the MEF rear area.

(2) MEF (FWD) and the Corps. The MEF (FWD) presents the Army Corps with a wide array of employment options and provides the commander with significant capabilities not available within the corps. When employed as a MAGTF, the MEF (FWD) gives the commander the flexibility of an “*enabling force*” to create opportunities for corps mechanized assets to exploit. The MEF (FWD) is highly effective when conducting amphibious operations in littoral contingency areas. The MEF (FWD) is also capable of conducting sustained operations ashore by attacking enemy light forces in all types of terrain, seizing key terrain, and defending against mechanized enemy forces in close terrain. The MEF (FWD) provides the Army commander a formidable force during periods of darkness or limited visibility and in restrictive terrain. It is also well suited for conducting special purpose operations to include reconnaissance, ambushes, raids, feints, demonstrations, and counter-reconnaissance.

c. Weapons Systems. Table IV-9 reflects the types and quantities of weapons systems typically found in the MEF (FWD) and Army DRB. The table does not include secondary weapon systems (i. e., machine guns on tanks, etc.). The exact number and type of systems depend on the actual force package provided for a particular contingency. The table further underscores the complementary nature of Army and Marine Corps forces and concomitant benefits derived from integrated operations.

Table IV-9. Major Weapons and Aircraft Summary

WEAPON SYSTEM	MEF (FWD)	ARMY DRB
Tanks (Abrams)	15	126
BFVs	-	54
AAVs	109	-
LAVs	27	-
MLRS	-	9
155mm Howitzers	18-30	24
107mm Mortars	-	18
81mm Mortars	24	-
60mm Mortars	36	-
MK-19 40mm Grenade Launchers	114	30
TOW Launchers (not including LAV or BFV mounted)	72	-
Dragon Launchers	72	9
Hawk Missile Launchers	12	-
Avenger Missile Teams	-	12
Stinger Missile Teams	45	5
AV-8Bs	20	-
F/A-18A/Cs	24	-
F/A-18Ds	12	-
EA-6Bs	6	-
CH-53E	28	-
AH-64 (when DRB is augmented)	-	24
AH-1W	12	-
CH-46E	48	-
UH-60 (when DRB is augmented)	-	8
UH-1	12	-
OH-58C (when DRB is augmented)	-	6
KC-130	6	-