The MAGTF as an Operational Maneuver Element in Sustained Operations Ashore

MCWAR 1998

Subject Area Operations

THE MAGTF AS AN OPERATIONAL MANEUVER ELEMENT IN SUSTAINED OPERATIONS ASHORE

by

Lieutenant Colonel J.D. Williams
United States Marine Corps

1 May 1998

Submitted in Partial Fulfillment
of the Requirements for the
Marine Corps War College
Marine Corps University
Marine Corps Combat Development Command
Quantico VA 22134-5067

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
1998		**00-00-1998 to 00-00-1998**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
The MAGTF as an Operational Maneuver Element in Sustained Operations Ashore	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Marine Corps War College,Marine Corps University,Marine Corps Combat Development Command,Quantico,VA,22134-5067**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**58**	

ABSTRACT

TOPIC: *The MAGTF as an Operational Maneuver Element in Sustained Operations Ashore*

STUDENT: LtCol J.D. Williams, USMC

The Marine Corps is engaged in an active effort to determine the concepts required for future warfighting. The Marine Corps future operational concept, *Operational Maneuver From The Sea* (OMFTS) offers the potential for the employment of Marine Air-Ground Task Forces (MAGTFs) directly against an adversary's operational centers of gravity or critical vulnerabilities. While the OMFTS concept paper provides a broad outline for development of the MAGTF's future operating capabilities, the paper lacks sufficient depth and detail to be used as the basis for specific force development.

This paper proposes an operational framework which implements OMFTS during sustained operations ashore. It discusses the concept of operational maneuver and operational maneuver forces in the context of future conflict and explores the suitability of the MAGTF to function in the role of an operational maneuver element (OME). It postulates that the MAGTF is ideally suited to function as an OME in sustained operations ashore and discusses how the MAGTF could be used in this role. Unlike current concepts of sustained operations ashore which require the establishment of large forces ashore to engage in a continuous, methodical ground operation, a MAGTF functioning as an OME will employ a flexible combination of tailored maneuver forces to execute a series of precise, focused, and decisive combat actions. Finally, the paper identifies the capabilities required to optimize MAGTF functioning as an OMB during sustained operations ashore.

TABLE OF CONTENTS

DISCLAIMER ii

ABSTRACT iii

TABLE OF CONTENTS iv

Chapter **Page**

1. Introduction 1

2. Operational Maneuver and Operational Maneuver Forces
   - Operational Manuever 4
   - Operational Manuever Forces 13
   - The MAGTF as an Operational Maneuver Force 21

3. The MAGTF as an Operational Maneuver Element in Sustained Operations Ashore
   - The MAGTF as an Operational Maneuver Element 27
   - MAGTF Organization and Employment as an OME 30
   - Key Capabilities Needed by the MAGTF to Serve as an OME 39

4. Relationship of the MAGTF as an OME Concept To *Joint Vision 2010* and other Service Concepts 45

5. Conclusion 49

Appendix A - List of Acronyms 52

Bibliography 53

CHAPTER 1

INTRODUCTION

The Marine Corps is engaged in an active effort to determine the requirements for future warfighting. Within major warfighting campaigns, Marine forces are typically employed in one of two ways. The Marine Corps' primary role is forcible entry via amphibious assault. The island-hopping campaigns in the Pacific Theater of World War II and the Inchon landing of the Korean War are classic illustrations of Marine forces in this role. The secondary role of Marine forces in major campaigns is sustained ground combat operations, either as a follow-on to an amphibious assault or in conjunction with US Army forces during the prosecution of a major land campaign. Marine participation in the counterattack into North Korea after the Inchon campaign is an example of the former; Marine operations in World War I, Vietnam, and Desert Storm illustrate the latter.

The Marine Corps future operational concept, *Operational Maneuver From The Sea* (OMFTS) significantly alters employment of Marine forces during a major warfighting campaign. OMFTS offers the potential for the employment of Marine Air-Ground Task Forces (MAGTFs) directly against an adversary's operational centers of gravity or critical vulnerabilities. This capability greatly enhances the utility of the MAGTF to the joint force commander (JFC). Forcible entry and sustained ground combat become secondary roles for the MAGTF as its capabilities to execute OMFTS increase.

While the OMFTS concept paper provides a broad outline for development of the MAGTF's future operating capabilities, it lacks sufficient depth to be used as the basis for the development of detailed operational concepts and doctrine.[1] In particular, the paper fails to provide a framework for the employment of a MAGTF conducting OMFTS within the JFC's campaign. This paper provides such a framework. Specifically, it identifies the appropriate role for employment of the MAGTF in future joint warfighting campaigns -- what the Marine Corps calls sustained operations ashore.[2]

This paper explores the concept of operational maneuver as a critical element in the conduct of future military operations. It looks at the origins of this concept, the current application, and its further evolution. Next, it examines the capabilities and forces required to execute operational maneuver -- past, present, and future. Having established the concept and characteristics of both operational maneuver and operational maneuver forces, the paper then evaluates the MAGTF's current and future capabilities to conduct operational maneuver. It shows that the MAGTF of the future is ideally suited to function as an operational maneuver element in sustained operations ashore.

The concept of the MAGTF as an operational maneuver element is then more fully developed. A basic framework for the concept is established along with potential organizational structures and employment considerations. In addition, specific operational capabilities required

---

[1] Department of the Navy, Headquarters, US Marine Corps. *Operational Maneuver from the Sea.* Washington, D.C., 1996.

[2] Sustained operations ashore (SOA) is the employment of Marine forces in a joint force campaign of an extended duration. Definition developed by Concepts Division, MCCDC in the preparation of the concept paper *The MAGTF in Sustained Operations Ashore* (Draft).

to implement the concept are be identified. Finally, the paper evaluates how this concept fits with joint or other Service operational concepts. This evaluation shows that the concept of the MAGTF as an operational maneuver element in sustained operations ashore is fully compatible with the blueprint for the development of future US armed forces, *Joint Vision 2010,* as well as the vision statements or concept papers of the other Services.[3]

---

[3] Department of Defense, Joint Chiefs of Staff, *Joint Vision 2010.* Washington, D.C., July, 1996.

CHAPTER 2

OPERATIONAL MANEUVER AND OPERATIONAL MANEUVER FORCES

OPERATIONAL MANEUVER

The object in war is to impose your will upon an enemy. Military power is used to compel that enemy to give in to your demands. Military commanders fight battles and engagements to break an enemy's capability and will to resist, leading to capitulation and the achievement of the political goals. The employment of battles and engagements at the *tactical* level to achieve *strategic* objectives constitutes the *operational level* of war.[1]

Maneuver is one of the principal instruments used by the operational-level commander to orchestrate accomplishment of strategic objectives through tactical actions. *Maneuver* is traditionally defined as the movement of forces in relation to the enemy to gain positional advantage.[2] However, recent doctrinal concepts have expanded the concept of maneuver to include not only movement in a spatial sense, but taking action in a variety of ways, all of which have the goal of generating some type of advantage over the an adversary. While we most frequently obtain such an advantage through physical movement and positioning, we can also

---

[1] The full definition of the operational level of war is: "The level of war at which campaigns and major operations are planned, conducted, and sustained to accomplish strategic objectives within theaters or areas of operations. Activities at this level link tactics and strategy by establishing operational objectives needed to accomplish strategic objectives, sequencing events to achieve the operational objectives, initiating actions, and applying resources to bring about and sustain these events." Department of Defense, Joint Chiefs of Staff, *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms* (Washington, D.C., March, 1994), 226.

[2] *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms,* 226.

gain an advantage in a psychological, technological, or temporal dimension. The dimension of time is particularly important, in that the generation of a superior operational tempo can be the most rapid and effective way of achieving decisive superiority over the enemy.[3] Throughout this paper, the term *maneuver* will refer not just to the movement of forces, but the use of maneuver in all dimensions to gain advantage over the adversary.

While maneuver is more commonly associated with the tactical level war, maneuver is also employed at the operational level. *Operational maneuver* is the movement of forces within a theater of operations to gain advantage relative to enemy centers of gravity in order to achieve operationally decisive results.[4] The purpose of operational maneuver is to unhinge the enemy's operational plan by controlling or destroying his centers of gravity, thus leading to the achievement of the strategic objective.[5] Operational maneuver differs from tactical maneuver in both purpose and scope: "While tactical maneuver aims to gain an advantage in combat, operational maneuver seeks to gain advantage bearing directly on the outcome of the campaign or in the theater as a whole.[6]" Operational maneuver normally entails the movement of powerful,

---

[3] For a complete discussion of the concept of maneuver see Department of the Navy, Headquarters, US Marine Corps, *Marine Corps Doctrinal Publication 1, Warfighting* (Washington, D.C., June, 1997), 72-76.

[4] Department of Defense, Joint Chiefs of Staff, *Joint Publication 3-0, Doctrine for Joint Operations* (Washington, D.C., February, 1995), IV-8. See also Ash Irwin, *The Levels of War, Operational Art, and Campaign Planning.* Occasional Paper No. 5, Strategic and Combat Studies Institute, UK Staff College, Camberley (Surrey, UK: 1993), 21.

[5] A center of gravity is a source of moral or physical strength, the undermining or elimination of which will most quickly lead to defeat in a conflict. Centers of gravity exist at the strategic, operational, and tactical levels. Operational maneuver is directed against centers of gravity which offer the best chance of causing the enemy to collapse; such opportunities are generally found at the operational level, although they sometimes occur at the tactical or even strategic level. In the future, enhanced capabilities will provide greater opportunity to use operational maneuver against strategic centers of gravity.

[6] Department of the Navy, Headquarters, US Marine Corps, *Marine Corps Doctrinal*

multi-dimensional (land, air, and sea) forces at great depths across the battlespace. However, it can also include the use of rapidity of action, the exploitation of technological advantage, and the collective psychological impact of a variety of effects to achieve decisive advantage over the enemy. For example, while much credit for the defeat of Iraq in Desert Storm has been given to the physical movement of the US Army's VII Corps in its "Hall Mary" maneuver, it can be credibly argued that the Iraqis were in fact defeated before that movement even began by the cumulative impact resulting from the speed of US actions, the demonstrated technical superiority of US forces and systems, and the demoralizing effects of US air, psychological, and deception operations.

The origins of operational maneuver can be traced to Napoleon. His ability to coordinate the maneuver of large, independent corps over great distances and to bring those corps to bear on his opponents' exposed vulnerabilities to achieve decisive results ushered in a new era of warfare. The Prussian Army's Helmuth von Moltke refined the Napoleonic techniques of maneuvering large formations (armies and corps) to encircle and destroy an opposing army, achieving great success in both the Austro-Prussian and Franco-Prussian Wars. Moltke recognized the impact of modern weapons and industrial infrastructure on warfare and became the first military leader to discuss a distinct operational level of warfare.[7] World War I demonstrated the primacy of the defense and the lethality of industrial-age weaponry, causing a major shift in the concept and execution of operational maneuver. These developments virtually eliminated the possibility of

---

Publication 1-2, Campaigning. (Washington, D.C., August, 1997), 78.

[7] John English, "The Operational Art: Developments in the Theories of War," in *The Operational Art,* eds. B.J.C. McKercher and Michael A. Hennessy (Westport, Cn: Prager, 1996), 8.

encircling complete armies through operational maneuver as was done by Napoleon and von Moltke. Military theorists began the search for a new means to achieve decisive results at the operational level, a search which ultimately led to a new concept of operational maneuver.

The new concept of operational maneuver was embodied in the idea of the "deep battle" or "deep operations." British military theorists J.F.C. Fuller and Basil Liddell Hart began to explore this new concept during and after World War I. Fuller advocated the development of large tank forces; these forces, supported by tactical aircraft, would thrust deep into the enemy's rear to attack its command structure, unhinging the enemy's organization by delivering, "a shot to the brain."[8] Liddell Hart proposed the formation of a "new model" army, consisting of combined arms formations of tanks, armored vehicles, and aircraft which would be used to conduct deep strategic penetrations aimed at dislocating the nerve system of the enemy -- its communications and command structure.[9] While Fuller and Liddell Hart differed in the details, they agreed on the core elements of a new concept for operational maneuver: deep attacks by mechanized, combined arms forces on vital elements of the enemy's rear area. The Germans successfully adapted and applied these ideas in the formation of *Panzer* units and the execution of *Blitzkrieg* operations during World War II.

---

[8] See J.F.C Fuller, *Lectures on Field Service Regulations III (Operations Between Mechanized Forces)* (London: Sifton Praed & Co, Ltd, 1932), Lecture 1, and "Plan 1919" in Basil Liddell Hart, *The Sword and the Pen*, (NY: Thomas Y. Crowell Co, 1976), p.271.

[9] Brian Bond and Martin Alexander, "Liddel Hart and De Gaulle: The Doctrines of Limited Liability, and Mobile Defense." In *Makers of Modern Strategy from Machiavelli to the Nuclear Age*, ed. Peter Paret, 598-623. Princeton, NJ: Princeton Press, 1986, 602. See also, Liddell Hart, *Paris, or the Future of War*.

Concurrently, the Soviets also pursued a new concept of operational maneuver. Major General A.A. Svechin introduced the term *operational art* in his 1927 work *Strategy,* while his contemporary, Marshal M.N. Tukhachevsky articulated the Soviet concept of deep operations.[10] This concept called for independent tank and mechanized formations, supported by aircraft and airborne assaults, to conduct deep encirclement operations in the enemy's rear area, offering the potential of collapsing an entire front.[11] The Soviet concept of deep operations was successfully applied during offensive operations in World War II. The Soviets continued to refine this concept in the post-war era, particularly in the context of fighting NATO in Europe.

During the twenties and thirties, naval forces also began to embrace the concept of operational maneuver. While it is difficult to clearly identify naval theorists who spoke in terms of the operational art and the deep battle, the general evolution of naval forces demonstrated many of the same characteristics as ground forces. In particular, the development of carrier aviation and amphibious warfare provided the means to conduct naval warfare through operational maneuver. Naval campaigns were no longer bound by the framework of the Mahanian-style decisive engagement between main battle fleets. Rather, carrier and amphibious task forces could be used to strike directly at critical vulnerabilities throughout the depth of the operational theater. The Japanese attack on Pearl Harbor, the US use of the fast carrier task forces to raid or isolate Japanese strongholds, and the US amphibious island hopping campaign during World War II are the best illustrations of the use of operational maneuver by naval forces.

---

[10] English, 13-14.

[11] Jacob Kipp, "Two Views of Warsaw: The Russian Civil War and Soviet Operational Art," in *The Operational Art,* 79.

Operational maneuver was also applied to air warfare. As in naval warfare, the concept of operational maneuver in air warfare is more clearly illustrated in practice than in theory. The more widely noted aviation theorists like Douhet tended to emphasize the strategic application of airpower directly against the leadership, population, or economic capacity of an adversary. This strategic employment of aviation was embodied in the Royal Air Force's (RAF) Bomber Command, the RAF-U.S Army Air Force's combined bomber offensive of World War II, and the U.S. Air Force's post-World War II Strategic Air Command. While less discussed in theory, in practice, the operational application of airpower was equal to, if not more widespread than strategic airpower. Air forces conduct operational maneuver by concentrating airpower against key targets located in enemy rear areas such as command and control centers, lines of communications, logistics bases, and operational reserves.[12] The use of aviation by German and Soviet forces throughout World War II and the employment of U.S. Army Air Forces to isolate the Normandy beachhead before and after D-day, are the best illustrations of the operational application of airpower.

The operational art and the concept of operational maneuver was not formally introduced into US military doctrine until 1982. The Army led the way with its concept of the "AirLand Battle" articulated in the 1982 version of its capstone doctrinal manual FM 100-5, *Operations.*[13] The AirLand battle provided the framework for fighting a conventional war against the Warsaw Pact in Europe. To be successful, the Army recognized it could not just engage the Pact's lead

---

[12] Martin van Creveld, Steven L. Canby, and Kenneth S. Brower, *Air Power and Maneuver Warfare* (Maxwell AFB, Al: Air University Press, 1994), 28.

[13] English, 16. See also Richard M. Swain, "Filling the Void: The Operational Art and the US Army," in *The Operational Art*, 157-61.

elements, but would have to fight a deep battle against the enemy's second echelon. Each successive edition of FM 100-5 has further developed the concept of the deep battle and the use of operational maneuver.

Today, the concept of operational maneuver is firmly entrenched in US military doctrine. The current version of FM 100-5 discusses operational maneuver as an essential element of the operational level of war.[14] The Marine Corps introduced operational maneuver into its doctrine in the 1989 edition of FMFM 1-2, *Campaigning.* The current version of *Campaigning* describes operational maneuver as the key to success at the operational level of war: "The operational commander seeks to secure a decisive advantage before the battle is jointed by rapid, flexible, and opportunistic maneuver. Such action allows us to gain the initiative and shape the action to create a decisive advantage."[15] Joint doctrine also fully adopted the concept of operational maneuver: "At the operational level, maneuver is a means by which Joint Force Commanders (JFCs) set the terms of battle by time and location, decline battle, or exploit existing situations."[16]

---

14 FM 100-5, 6-6 and 6-15.

15 *Marine Corps Doctrinal Publication 1-2*, 82. [Note: FMFM 1-1 was revised and republished as MCDP 1-2 in August, 1997].

16 *Joint Publication 3-0,* IV-9. The Universal Joint Task List requires the JFC to plan and execute operational maneuver and the development of a separate joint doctrinal publication addressing the conduct of operational maneuver is currently under consideration. See Department of Defense, Joint Chiefs of Staff, *CJCSM 3501. 04A, Universal Joint Task List, Version 3.0* (Washington, D.C., September, 1996), 2-5 and "18th Semiannual Joint Doctrine Working Party," *A Common Perspective, The Joint Warfighting Center Newsletter,* March, 1997, 16.

The concept of operational maneuver found in US doctrine is a direct descendent of the German and Soviet concepts. Operational maneuver aims at accomplishing campaign objectives through the focused application of force against key points in the enemy's organization or infrastructure. This application of force has a greater effect than just engaging a single target or target set by denying, destroying, or undermining a capability critical to the enemy's ability to function as a coherent entity. Operational maneuver focuses on the movement of forces across the depths of the theater to concentrate combat power against one of these key points which are identified as centers of gravity or critical vulnerabilities. Joint Publication 3-0, *Doctrine for Joint Operations*, the capstone manual on the conduct of joint military actions, identifies operational maneuver as critical to the conduct of the joint campaign: "Maneuver of forces relative to key enemy centers of gravity can be key to the Joint Force Commander's campaign or major operation. Maneuver is the means of concentrating forces at decisive points to achieve surprise, psychological shock, and physical momentum.[17]"

The importance of operational maneuver in US military concepts and doctrine is growing. Operational maneuver is at the center of most visions of future military capabilities and organizations. While most of these concepts vary in specific details, they have a basic construct in common:

- Improvements in sensors, information processing, and command and control will provide unprecedented awareness of the battlespace.
- This knowledge will be used to identify and engage key points in the enemy system with greater precision than ever before.

---

17 *Joint Publication 3-0,* IV-8.

- Technological advances in the speed, range, and accuracy of forces and weapons systems will permit the concentration of combat power with decisive effect without the requirement to engage in the lengthy and vulnerable process of massing forces in proximity to the enemy.
- The resulting force structure will be lighter, faster, more agile, possess greater lethality, and will be able to strike from great distances across the depth of the operational battlespace.[18]

Joint Vision 2010 describes the key characteristics of future military operations:

> By 2010, we should be able to change how we conduct the most intense joint operations. Instead of relying on massed forces and sequential operations, we will achieve massed effects in other ways. Information superiority and advances in technology will enable us to achieve the desired effects through the tailored application of joint combat power. Higher lethality weapons will allow us to conduct attacks concurrently that formerly required massed assets, applied in a sequential manner. With precision targeting and longer range systems, commanders can achieve the necessary destruction or suppression of enemy forces with fewer systems, thereby reducing the need for time-consuming and risky massing of people and equipment.[19]

The vision statements or future operational concepts of the individual services all reflect a similar view of the future. In fact, the Marine Corps has made the concept of operational maneuver the centerpiece of its capstone future operational concept, *Operational Maneuver From the Sea*

(OMFTS).

---

[18] For an example of a discussion of future warfighting concepts see Institute For National Strategic Studies, National Defense University, *1997 Strategic Assessment: Flashpoints and Force Structure* (Washington, DC: GPO, 1997), 273-81.

[19] *Joint Vision 2010,* 17-18.

Clearly, operational maneuver is central to both current doctrine and future operating concepts. In the future, the most relevant and useful forces will be those providing a JFC with the capability to conduct operational maneuver across the spectrum of conflict. Next, we turn to an examination of the types and characteristics of the forces required to execute operational maneuver.

OPERATIONAL MANEUVER *FORCES*

Operational maneuver forces are those elements of a force which can maneuver at operational depths to concentrate combat power directly on an operational center of gravity or critical vulnerability.[20] While most military forces can theoretically carry out some aspects of operational maneuver, historically, military organizations have created formations or task groupings configured specifically for the conduct of operational maneuver tasks. Dedicated operational maneuver forces provide the operational-level commander with the means to execute decisive actions when an opportunity presents itself.

Operational maneuver forces are required to conduct high-speed, high-intensity, operations throughout the depth of the battlespace. These operations must be coordinated with,

---

[20] A center of gravity is a source of moral or physical strength, the undermining or elimination of which will most quickly lead to defeat in a conflict. A critical vulnerability is a vulnerability that, if exploited, will do the most significant damage to a participant's ability to resist. Centers of gravity and critical vulnerabilities are complementary concepts. The center of gravity identifies a significant source of strength; the critical vulnerability is a weakness which provides a pathway to undermine that strength. See: *Marine Corps Doctrinal Publication 1, Warfighting*, 45-47. See also: Dr. Joe Strange, *Centers of Gravity and Critical Vulnerabilities.* Marine Corps University Perspectives on Warfighting No 4, Second Edition (Quantico, Va: Marine Corps University Foundation, 1996).

but are largely independent of, operations conducted by forces engaged in the primary battle.

Forces conducting operational maneuver must possess certain key characteristics:

- Mobility -- Operational maneuver forces must have both operational and tactical mobility. Operational mobility provides the means to reach deep into the area of operations while tactical mobility enables the force to gain a positional advantage over the enemy while striking. High mobility also increases the speed at which the operational maneuver forces execute their missions, permitting rapid concentration of force; this, in turn, contributes to the disorientation of the enemy and inhibits his effective response.

- Firepower -- Operational maneuver forces must be able to concentrate the necessary destructive power against operational objectives. They must also possess the firepower necessary for self-protection while operating independently throughout the enemy's rear area.

- Command & Control – Operational maneuver forces normally conduct independent operations at significant distances from established bases or parent organizations. In order to execute such operations, these forces must be able to gain and maintain situational awareness, respond to changes in the situation, exploit new opportunities, coordinate the activities of fast-moving and widely dispersed elements, and request and receive required external support.

- Sustainment – Operational maneuver forces must be able to sustain the level of effort required to complete the operational task. The must possess sufficient organic logistics capability to retain freedom of action while at the same time not be so loaded down with logistics elements that their speed or mobility are significantly inhibited.

An examination of the historical development of operational maneuver forces illustrates how a variety of military organizations attempted to incorporate these characteristics into their force structure. In pre-industrial armies, cavalry filled the role of operational maneuver forces. In industrial armies, the development of the airplane and the motorized vehicle enabled the creation of modern operational maneuver forces.

Building on the work of theorists of the 1920s and 30s, both the Germans and the Soviets formed units specifically configured for the conduct of deep operations. In the German Army, these formations were designated *Panzer* Divisions or Corps and consisted of tanks, motorized infantry, artillery, and engineers.[21] During the 1930s, the Soviets experimented with the integration of tank formations, motorized-mechanized infantry units, and airborne forces for the execution of operational maneuver.[22] Although temporarily disbanded by the purges of the Soviet military leadership in the late 1930s, these formations reappeared in the Red Army during World War II as *mobile groups. Mobile groups* were, "earmarked for the exploitation of success in the operational depth.[23]" *Mobile groups* consisted of tank or mechanized armies or corps made up of tank and motorized rifle brigades with self-propelled artillery, antiaircraft artillery, engineers, and a complete range of combat support and combat service support elements; all elements had the mobility necessary to support deep operations. *"Mobile groups* always had great flexibility in reorganizing, echeloning and grouping of forces....Formations and units

---

[21] Eliot A. Cohen, "A Revolution in Warfare," *Foreign Affairs*, March/April, 1996, 46-47.

[22] David M.Glantz, "The Intellectual Dimension of Soviet (Russian) Operational Art," in *The Operational Art*, 129.

[23] Excerpt from the Red Army *Field Regulation of 1944*, in Glantz, *Soviet Military Operational Art -- In Pursuit of Deep Battle* (London: Frank Cass and Co, 1991), 29.

comprising *mobile groups* were often reinforced or tailored to meet specific requirements.[24]" Both the *Panzers* and *mobile groups* were supported by extensive aviation elements which provided command and control, reconnaissance, firepower, and logistics support. The German and Soviet operational maneuver forces of World War II exhibited the characteristics required to conduct operational maneuver:

- Tanks and motorized infantry had the speed and mobility required to strike the enemy's rear
- Tanks, self-propelled, artillery, and supporting aviation provided the requisite firepower
- Mobile combat engineer and combat service support detachments gave the *Panzers* and *mobile groups* the sustainment necessary for independent operations

Aviation forces were also developed before and during World War II for the conduct of operational maneuver. Again, the Germans and Soviets led the way. The Germans organized a *Luftflotte* (air fleet) to support each major ground force conducting a campaign. A *Luftflotte* was a balanced aviation formation of fighter, close support, bomber, transport, reconnaissance, and liaison aircraft complete with its own ground support organization.[25] The Soviet front-level air armies had a similar purpose and organization. The US Air Force's tactical air forces, while not configured exclusively for action at the operational level, exhibited many of the same characteristics as the German or Soviet operational-level aviation forces.

---

[24] Department of the Navy, Headquarters, US Marine Corps, *Fleet Marine Force Reference Publication 3-200, Operational Maneuver Groups* (Washington, D.C., August, 1991), 6.

[25] Van Creveld, 36.

The evolution of the carrier battle group and the amphibious task force during and after World War II illustrate the development of operational maneuver forces in naval warfare. The fast carrier battle group incorporated speed, range, firepower, self-protection, and endurance into an effective instrument for operational maneuver. Carrier task forces could quickly concentrate and apply decisive force against an operational center of gravity or critical vulnerability. In addition, carrier battle groups had the agility as well as organic intelligence and command and control to adapt to changing situations and exploit opportunities as they arose. Amphibious task forces exhibited similar characteristics, although their operational and tactical mobility were more limited. In the conduct of amphibious operations, these task forces combined strategic mobility, range, and self-sustainment with the capability to project significant and sustainable ground combat power ashore.

In the future, operational maneuver forces will require these same characteristics, with an even greater emphasis being placed on mobility and the ability to concentrate destructive effects at the appropriate time and place. One expert in the study of the operational art predicts that, in the future, "*all* maneuver forces will be designed to sustain and conduct operations to great depth. The most successful design for ground forces will be a maneuver formations of all arms.[26]"

A look at Soviet & Russian writings over the past two decades provide one view of the characteristics required of a modem operational maneuver force. After a period emphasizing

---

[26] James J. Schneider, "Theoretical Implications of the Operational Art," in *On Operational Art*, eds. Clayton R. Newell and Michael D. Krause (Washington, DC: GPO, 1994), 19.

strategic nuclear warfare, the Soviets revived their study of the operational art and began to emphasize the use of independent formations to conduct operational maneuver. The force required to carry out this type of operation was designated the *operational maneuver group* (OMG).[27] The OMG was a front-level exploitation force configured similar to the World War II *mobile groups* -- a tank-heavy force augmented with mechanized infantry, self-propelled artillery, surface-to-surface and surface-to-air missiles, and highly mobile combat support and combat service support forces.[28] Late Soviet and recent Russian writings emphasize the integration of OMGs with precision, long-range missile and air attacks as well as airborne or air assault operations.[29] They also discuss the "tailoring" of OMG forces to fit the requirements of specific missions.[30]

US military discussions see a requirement for forces with characteristics similar to those of an OMG, but these forces are generally viewed as combined air, ground, naval elements rather than a predominately ground force. Marine Corps concepts of OMFTS and Ship-to-Objective Maneuver (STOM) envision a mobile, lethal, combined arms force which exploits the freedom of action afforded by maneuver at sea to strike directly at the operational objective.[31] *Joint Vision 2010* and the *Concept for Future Joint Operations* foresees a force which is made up of, "highly lethal, mobile, agile, and versatile organizations; adaptable maneuver units that can be tailored to

---

[27] Glantz, "The Intellectual Dimension of Soviet (Russian) Operational Art," 136-7.

[28] Soviet tank armies and independent tank brigades were configured for the OMG mission. In the 1980s, the Soviets also experimented with a mixed and more flexible force structure designated the "Unified Army Corps." See Glantz, *Soviet Military Operational Art,* 213.

[29] Bogdan Swita, "The OMG in the Offense," *Military Review,* November, 1993, 36-7, and Glantz, *Soviet Military Operational Art,* 259.

[30] Glantz, *Soviet Military Operational Art,* 252.

[31] *Operational Maneuver from the Sea,* 12, and Department of the Navy, Marine Corps Combat Development Command, *Ship-to-Objective Maneuver* (Quantico, Va., 1997), 3.

task for any operation... [which have) the ability to mass effects and forces rapidly from widely dispersed locations."[32]

Future operational maneuver forces will require the traditional characteristics of mobility, firepower, command and control, and sustainment. However, the nature of these characteristics will change. Improvements in mobility must provide:

- Increased speed and range to open the majority of the theater to operational maneuver
- An integrated force possessing mobility across the mediums of land, air, and sea thus posing a multi-dimensional threat to an adversary
- Synergistic effects of enhanced strategic, operational, and tactical mobility. Such effects enable the rapid concentration of decisive effects from great distances, thus permitting retention of surprise and flexibility, providing the capability to rapidly exploit opportunities, and minimizing the vulnerability of the force to enemy action.

Firepower will be provided by a much greater variety of capabilities. While current operational maneuver forces rely primarily on organic weapons and direct support aviation, future operational maneuver elements will call on an extensive array of external fires. These supporting fires will provide both greater lethality and flexibility in employment, as it will be possible to more precisely tailor the type of fires used to the nature of the target and desired effect. A critical requirement of future operational maneuver forces will be the ability to integrate the capabilities of both organic and external supporting fires in a "combined arms" approach to accomplish the operational task.

---

[32] *Concept for Future Joint Operations,* 51.

Command and control must provide the ability to maintain situational awareness and to integrate external fire and sustainment capabilities with the efforts of the operational maneuver forces. In the past, operational maneuver forces had only the most tenuous link to their operating bases or parent commands, limiting their ability to recognize and exploit opportunities or alter their activities to conform to changes in the situation. New capabilities in intelligence, surveillance, and reconnaissance offer the prospect of gaining and maintaining greatly enhanced situational awareness. Advances in communications and information systems will provide the means to exploit this situational awareness and integrate the full scope of activities among multiple, widely-dispersed operational elements. Operational maneuver forces of the future must be able to synthesize local inputs with the picture provided by the wider sensor and information network. They must then apply the synthesized situational awareness in orchestrating all available capabilities to achieve desired operational effects.

Sustainment will also undergo a number of significant changes. Forces will be smaller and lighter, reducing the demand for large quantities of bulk supplies while increasing their operational and tactical mobility. At the same time, threats from long-range precision fires will prevent the establishment of traditional support bases in proximity to maneuver forces. Logistics elements must be able to support widely-dispersed and rapidly moving forces. That support must be provided from locations protected from enemy action. Future sustainment elements will provide tailored, on-time logistics support at significant distances from support bases.

In addition to traditional capabilities, future operational maneuver forces must also display greater flexibility and agility. These characteristics are required to deal with an extended

battlefield, increased operational tempo, and the likely emergence of significant asymmetrical threats. The ability to tailor and focus force packages to meet a wide range of threats across the spectrum of conflict provides flexibility. An organization provides agility through responsiveness, adaptability, and its ability to rapidly recover, reconfigure, and re-engage in a high-tempo environment. Military forces demonstrating the greatest degree of flexibility and agility in conducting operational maneuver tasks are likely to be the most useful and effective in future conflict.

Finally, future operational maneuver forces must be able to exploit current and emerging capabilities in the area of information operations. Improved command and control capabilities will provide greatly enhanced situational awareness. To be truly effective, operational maneuver forces must exploit this situational awareness not just through firepower and movement, but employ asymmetrical information operations such as deception, electronic warfare, and psychological operations to gain total advantage -- positional, temporal, and psychological --over the enemy. Such operations will not only make the operational maneuver force more effective, they are also necessary to protect the force against potent capabilities of future adversaries.

THE MAGTF AS AN OPERATIONAL MANEUVER FORCE

Comparing the characteristics required to conduct operational maneuver to the capabilities of the MAGTF, it appears that the MAGTF is ideally suited to function in the role of an operational maneuver force. A MAGTF is a balanced, combined-arms force made up of integrated command and control, ground, aviation, and combat service support elements.

MAGTFs are organized, trained, and equipped to conduct combined arms warfare across the dimensions of air, land, and sea. MAGTFs are self-contained and self-sustained striking forces capable of conducting high-speed, high-intensity operations throughout the depth of the battlespace. MAGTFs, operating from land or on a mobile and protected seabase, flexibly project combat power against operational centers of gravity or critical vulnerabilities in support of the JFC's operational objectives.[33]

MAGTFs exhibit the inherent characteristics required of an effective operational maneuver force, both now and in the future:

- Mobility – A MAGTF has significant strategic, operational, and tactical mobility. The MAGTF deploys strategically through a combination of airlift, amphibious shipping, and prepositioning ships. Within the theater, operational mobility is provided by the ships of the amphibious task force (ATF) and aircraft of the MAGTF's aviation combat element (ACE). Tactical mobility is provided by the MAGTF's ground vehicles and aircraft as well as the landing craft of the ATF. The Combination of strategic, operational, and tactical mobility enables the MAGTF to concentrate combat power at the decisive time and place, providing the JFC with a flexible tool for executing operational maneuver tasks.

- Firepower – MAGTFs are organized as combined arms teams, with the core competency of integrating the capabilities of a variety of weapons systems to achieve decisive effect. MAGTFs are expert in the combined employment of organic infantry, armor, artillery, and aviation; they can also leverage naval surface fires and the

---

Department of the Navy, Headquarters, US Marine Corps, *Marine Corps Doctrinal Publication 3, Expeditionary Operations* (Washington, D.C., April, 1998), 65-67. Department of the Navy, Headquarters, US Marine Corps, *Send in the Marines... the Art of MAGTF Operations* (Washington, D.C., 1997).

aviation elements of the other services as required. MAGTFs are currently acquiring an expanded non-leathal weapons capability, giving them even greater flexibility in the tailoring of the appropriate response to the desired effect.

- Command and Control -- MAGTF command elements specialize in orchestrating complex amphibious and combined arms operations. MAGTFs have the command and control capabilities required to integrate the maneuver, fires, and sustainment of multiple air, land, and sea elements operating independently throughout the battlespace. These command and control capabilities are especially relevant to the conduct of operational maneuver.

- Sustainment -- MAGTFs are self-contained and self-sustaining expeditionary forces. Expeditionary forces are built to operate independent of support from fixed bases for an extended period. MAGTF organization and equipment emphasizes deployability, flexibility, and economy. MAGTFs generate the full range of logistics support from organic resources and can function in the most austere environments for extended periods. A self-sustaining MAGTF can conduct sustained operations across the depth of the battlespace without draining resources from other elements of the force.

- Flexibility -- MAGTFs are inherently versatile and adaptable. MAGTFs are task-organized, combining the appropriate combination of capabilities to accomplish an assigned task. The mobility, firepower, command and control, and sustainment characteristics of the MAGTF provide a JFC with the means to rapidly deploy and concentrate the appropriate forces to respond to a variety of requirements. Such flexibility is crucial to the conduct of operational maneuver.

In short, the MAGTF is able to concentrate, project, and coordinate the employment of combat power against centers of gravity or critical vulnerabilities. MAGTFs can conduct independent

operations throughout the depth of the operational battlespace, providing a self-sustaining force tailored to the needs of the specific operational task. Marine forces demonstrated this capability throughout the amphibious campaigns of World War II and in the Inchon-Seoul Operation of the Korean War. Recently, MAGTFs have been employed in the conduct of operational maneuver numerous times during contingency operations, from the evacuation of American citizens and third country nationals during non-combatant evacuation operations to enabling introduction of joint force elements during humanitarian assistance or disaster relief operations.

Future enhancements to the MAGTF will increase its effectiveness as a potential operational maneuver force. MAGTFs will have increased strategic, operational, and tactical mobility. New classes of amphibious ships and the next generation of maritime prepositioning ships[34] will provide greater strategic and operational mobility for the embarked/supported MAGTF. The MAGTF's operational and tactical mobility will be significantly enhanced by the introduction of the MV-22 tilt-rotor aircraft and Advanced Assault Amphibious Vehicle (AAAV) into the inventory.

The MAGTF will have greater firepower as well. Organic firepower will be increased through the continued acquisition of longer-range and precision-guided weaponry. An expanded variety of both conventional munitions and non-lethal weapons will provide greater capability to tailor force application to the desired effect. More significant will be the MAGTF's ability to leverage the expanding capabilities of long-range precision fires from naval surface fire support

---

[34] See Department of the Navy, Headquarters, US Marine Corps, *Maritime Prepositioning Force 2010 and Beyond* (Washington, D.C., 1997).

and aviation platforms. Building on its traditional combined-arms competency, the MAGTF of the future will be able to concentrate a wide range of organic and supporting fires across depths of the battlespace.

Sustainment enhancements will permit MAGTF elements to operate at greater ranges and speed. The ability to deliver responsive, tailored support from a secure seabase will enable forces ashore to minimize their logistics footprint, thus increasing their operational mobility and tempo. Improved seabased sustainment capabilities such as the development of new maritime prepositioning ships or a mobile offshore sustainment base will reduce or eliminate the need for logistically-imposed operational pauses like the need to establish a force beachhead for the buildup of supplies or the conduct of an Maritime prepositioning force linkup in a secure marshaling area.

The most dramatic improvement in MAGTF capabilities is likely to be in command and control. The MAGTF will share in the enhancements in intelligence, surveillance, reconnaissance, communications, and information systems being developed by all the services such as the global command and control system, the global broadcast system, and network centric operations. The MAGTF will exploit its improved situational awareness to apply flexible, task-organized force packages directly against identified centers of gravity or critical vulnerabilities. While today's MAGTF has a significant capability to plan, coordinate, and execute complex, multi-dimensional operational activities, in the future it will be able to do so with increased speed, lethality, depth, and flexibility. And it will be able to conduct command

and control almost exclusively from either an enhanced seabased platform or from garrison locations through "split-basing" or "reach-back."[35]

The combined effect of these improvements will enhance the already potent capability of the MAGTF to conduct operational maneuver. As the ability to apply selective and decisive force directly against an operational center of gravity or critical vulnerability gains increasing emphasis in joint doctrine and operational concepts, one of the MAGTF's primary roles within the joint force will be to act as an operational maneuver force. While crisis-response and initial forcible entry are likely to remain key MAGTF roles during small-scale contingencies and military operations other than war, in a major contingency involving participation of the MAGTF in sustained operations ashore (SOA), the optimum employment of the MAGTF will be to conduct operational maneuver. The remainder of this paper is devoted the development of a concept for the employment of the MAGTF as an operational maneuver element in sustained operations ashore.

---

[35] *Split-basing* is the division of responsibilities for warfighting functions between two or more deployed locations. *Reach back* is the ability of a deployed force to draw support from a non-deployed support agency, parent unit, or stay-behind element.

CHAPTER 3

THE MAGTF AS AN OPERATIONAL MANEUVER ELEMENT IN SUSTAINED OPERATIONS ASHORE

THE MAGTF AS AN OPERATIONAL MANEUVER ELEMENT

The traditional role of the MAGTF in sustained operations ashore has been as an initial enabling force or as a conventional ground force operating under a land component commander. As an enabling force, the MAGTF provides forcible entry, permitting the initial introduction forces and securing a lodgment for the buildup of combat power needed to achieve campaign objectives. During conventional ground operations, Marines can contribute up to division-sized formations enhanced with organic command and control, aviation, and combat service support for the conduct of the JFC's campaign.

The inherent flexibility of the MAGTF and its incorporation of emerging technologies will permit its employment in an expanded role during sustained operations ashore. While MAGTFs will continue to possess the capability to conduct initial forcible entry through OMFTS and Ship-to-Objective Maneuver (STOM) as well as to function as an enhanced air-land combat force, the MAGTF's full potential lies in its capability to function as an **operational maneuver element** (OME) for the JFC. An OME is a force specifically configured for and primarily dedicated to the conduct of operational maneuver. The MAGTF of the future will provide the JFC with an agile, versatile, and responsive force able to strike directly at operational level

centers of gravity or critical vulnerabilities. As such, the MAGTF will be one the JFC's principal tools for conducting dominant maneuver.[1]

Employed as an OME, MAGTFs will be assigned primarily operational-level missions intended to have a decisive impact on the outcome of the campaign. Often, the MAGTF will constitute an operational reserve for the JFC, a formation maintained in immediate readiness to exploit a significant advantage. While the actions of the OME must be coordinated with those of the other joint force components, the OME should be employed primarily as an independent formation. An independent OME provides the flexibility and responsiveness required to exploit opportunities while still retaining the ability to exploit external support. The MAGTF, as a self-contained, self-sustaining combined arms force with integrated air, ground, command and control, and logistics capabilities is ideally suited to function in this role. The MAGTF conducting operational maneuver as an OME would be used in three ways: as an enabling force, a decisive force, or an exploitation force.

Enabling Force. The MAGTF as an OME could be used to conduct enabling operations which pave the way for decisive operations by other elements of the joint force. While closely related the traditional MAGTF role of initial forcible entry, enabling actions can be conducted throughout the course of a campaign. The amphibious landing at Inchon enabled the cutting of North Korean lines of communications and subsequent defeat of North Korean forces by engaging those forces from the rear. During World War II, amphibious operations in the

---

[1] Dominant Maneuver is one of four operational concepts of Joint Vision 2010. *Joint Vision 2010,* 19-20.

Marianas enabled the strategic bombing of the Japanese home islands. In today's context, an enabling force can establish a lodgment in an enemy’s rear area or communications zone to concentrate decisive force against an operational objective. Alternatively, enabling operations may be conducted to enhance the capabilities of other joint force components; the enabling force could seize a forward operating base for ground, naval, air, or information forces or it could provide targeting and control to forces performing precision engagement of critical enemy capabilities.

Decisive Force. The MAGTF as an OME could be used to conduct decisive operations directly against an enemy's operational center of gravity or critical vulnerability. Improvements in command and control, battlespace awareness, mobility, and lethality will give the MAGTF of the future a greatly enhanced capability for decisive action. Such action could include the capture of key piece of terrain, destruction of a vital logistic or command and control facility, or the surprise engagement of a critical element of the enemy's military forces. The MAGTF of the future will be able to conduct operations across the depth of the battlespace that can lead directly to the imposition of our will upon the enemy. For example, a MAGTF operating as OME in the future will have the capacity to strike directly at a main enemy force concentrating in a rear area or to carry out direct actions against enemy leaders concealed in what they believe is a sanctuary.

Exploitation Force. The MAGTF as an OME can also be used as an exploitation force. In this capacity, the MAGTF would be used to take advantage of opportunities created as a result of the activity of other joint force components. It may be difficult to expose an adversary's centers of gravity and critical vulnerabilities and the opportunity for decisive action may not

always present itself in the initial phases of an operation. In this case, actions by the joint force will be required to reduce the enemy's capability to resist through a series of actions. Once these actions begin to have effect, it will be possible to exploit the results through rapid and focused operations by the OME. For example, a MAGTF functioning as OME in a future conflict may use a breakthrough in enemy defenses to strike at a key capability or complete an encirclement of enemy forces attempting to withdraw from the area of operations.

MAGTF ORGANIZATION AND EMPLOYMENT AS ON OME

The employment of the MAGTF as an OME should exploit the key characteristics of the MAGTF: expeditionary nature, naval character, combined-arms orientation, flexibility, adaptability, and sustainability.[2] The organization and basing of the MAGTF will be based on the requirements of the JFC and specific circumstances within the area of operations. While the particular composition of MAGTF elements will vary in each situation, the current four element MAGTF structure (Command Element, Ground Combat Element, Aviation Combat Element, and Combat Service Support Element) will remain the basic operational structure in the future.[3] However, in order to function effectively in the OME role, the four elements of MAGTF will act primarily as force providers rather than as integral fighting groupings. As each OME mission is unique, the MAGTF must rapidly build tailored, task-organized force packages consisting of C2, ground, air, and CSS elements appropriate to the particular tasking. It is envisioned that the

---

2 *Marine Corps Doctrinal Publication 3*, Chapters 2 and 3.

3 As new capabilities are incorporated into the MAGTF and the MAGTF develops new doctrine for the implementation of the OME concept, a significant review and modification of current force structure size and organization will undoubtedly be required. While the remainder of this section explores some variations in task organization for employment of the MAGTF as an OME, a full discussion of the implications of this concept for force structure size and organization is beyond the scope of this paper.

MAGTF will be primarily sea-based. However, in most SOA scenarios, selected elements of the MAGTF will be positioned ashore to create or exploit an operational advantage, achieve greater integration with Army or Air Force components, or provide increased depth in aviation support or sustainment.

Employment of the MAGTF in SOA will be in accordance with roles outlined for the OME in the previous section. This concept envisions use of the MAGTF to execute a series of precise, focused, decisive combat actions rather than participating in a continuous, methodical ground operation. The MAGTF commander, using his shared situational awareness and organic planning and intelligence capabilities, anticipates and responds to operational-level taskings from the JFC. For each mission, the MAGTF task organizes the required force package, conducts requisite mission preparations (normally a rapid response planning effort), and deploys the force package to execute the mission while providing appropriate command and control, intelligence, fires, and logistics support. At the same time, the MAGTF will be prepared to generate additional force packages to reinforce or exploit the efforts of the committed force or to respond to other JFC OME requirements. Upon completion of the assigned mission, deployed forces will conduct follow-on exploitation operations or recover and regenerate for additional OME taskings.

The MAGTFAfloat. In most SOA, the majority of the MAGTF will be sea-based. In response to tasking from the JFC, the MAGTF plans and executes its mission in accordance with OMFTS and STOM concepts and doctrine.[4] Using maneuver at sea as a means of gaining

[4] See *Operational Maneuver from the Sea* and *Ship-to-Objective Maneuver* concept

advantage, OMFTS and STOM provide the JFC with the means to project a combined arms force directly against a center of gravity or critical vulnerability. When employed as an OME, the MAGTF uses operational mobility of its naval basing to launch an attack at the time and place of our choosing to achieve decisive effect or set the stage for decisive actions by other elements of the joint force.[5]

As described in the introduction to this section, the MAGTF would be prepared to conduct a variety of OME taskings on short-notice. The MAGTF CE, through its electronic links to the joint force headquarters and other components of the joint force, monitors the common operational picture, maintains situational awareness, and initiates planning for potential missions. Once formal tasking was received, the MAGTF would develop an appropriate task-organized force package to conduct the mission and initiate a rapid-response planning sequence. During the planning process, the MAGTF CE would be responsible for providing detailed intelligence, coordination with Navy elements as well as supporting units from the other joint force components, and the development of plans for non-organic fires, information operations, sustainment, reinforcement, and operational contingencies. C2 during execution would be primarily seabased. The MAGTF CE directs the implementation of basic and supporting plans to include appropriate branches and sequels, provides continuous intelligence support, and coordinates requisite fires and logistics requirements. While the scope and duration of certain missions may require the establishment of limited C2 or liaison elements ashore, the intent is to

---

papers.

[5] *Marine Corps Doctrinal Publication 3,* 85, *Operational Maneuver from the Sea,* 12, and *Ship-to-Objective Maneuver,* 6

rely on the robust capabilities and connectivity afforded by the naval expeditionary force (NEF) to minimize the C2 footprint ashore.[6]

The size and composition of the force package deployed ashore is subject to almost an infinite number of variations. The MAGTF has the inherent flexibility to deploy and employ task-organized, combined-arms elements tailored to the requirements of a particular mission. The makeup of a particular force package will be determined by the MAGTF commander based on the nature of the mission, the characteristics of the area of operations, and the threat. Nevertheless, it is possible to envision three basic variants in the force package deployed ashore: a reconnaissance-firepower maneuver force, a vertical maneuver force, and a surface maneuver force.

- ***Reconnaissance-firepower Maneuver force.***[7] The reconnaissance-firepower maneuver force would be employed in situations where the threat was vulnerable to precision fires but local ground force elements are required for detection, identification, and/or engagement of particular targets or to assess or exploit the results of attacking such targets. The reconnaissance-firepower maneuver force would be made up of a number of small, independently-operating teams, each

---

[6] A naval expeditionary force (NEF) is a task-organized grouping of Navy and Marine units tailored for the execution of a specific expeditionary mission. In the context of SOA, a NEF would likely consist of a MAGTF, an amphibious group or squadron, a Maritime Prepositioning Force 2010 element, and one or more carrier battle groups.

[7] The concept of a reconnaissance-firepower maneuver force is derived from discussion of infestation tactics and the results of the USMC Warfighting Laboratory's *Hunter Warrior* advanced warfighting experiment. See Marine Corps Warfighting Laboratory, *Exploring Hunter Warrior* (Quantico, Va: August, 1997), 9-11; Col. Gary W. Anderson, USMC, "Infestation Tactics and Operational Maneuver From the Sea; Where Do We Go From Here?" *Marine Corps Gazette,* September, 1997, 70-75.

capable of providing reconnaissance and surveillance over their assigned operating area as well as engaging enemy forces detected within that area. The teams could be inserted and supported by air or surface means, but would possess only limited organic mobility and sustainment. They would operate under the direct control of the MAGTF CE, acting as sensors within an integrated MAGTF surveillance grid. The reconnaissance-firepower maneuver force could perform all three OME tasks. Used as an enabling force, it engages and attrits enemy defenses to permit the secure introduction of other MAGTF or joint forces Employed as the decisive force, it engages a key enemy force or capability at an unexpected time and place. Used as an exploitation force, it strikes at an enemy element exposed or disorganized as a result of other joint force actions.

• ***Vertical Maneuver force.***[8] The vertical maneuver force would be employed where the threat was still vulnerable to precision fires, but a ground force of some significant size or impact was required to accomplish the operational task. A vertical maneuver force would be used either to directly engage parts of the enemy force not vulnerable to long-range fires alone or to physically occupy significant terrain. The vertical maneuver force would consist of one or more task-organized air-ground elements, each with the appropriate mix of firepower, mobility, command and control, and sustainment to accomplish its assigned mission. The vertical maneuver force would operate from ships of the NEF operating over-the-horizon, inserting via MV-22 and CH-53E aircraft. Fixed and rotary-winged aircraft give the force flexibility, mobility, and firepower. Ground elements provide the means to directly engage the enemy, to adapt to new or unexpected conditions, and to force the enemy to react at a disadvantage. In

[8] For additional detail on the vertical maneuver force, see *Ship-to-Objective Maneuver*, 10-11.

addition to employing organic fires, the vertical maneuver force will be fully linked to MAGTF and joint force supporting assets, providing the capability to engage the enemy with the full spectrum of supporting fires. While the vertical maneuver force could be used to perform all three OME tasks, its primary role would be as an enabling or decisive force. As an enabling force, the vertical maneuver force would seize a key entry or choke point for the introduction of other joint force elements such as a port, airhead, bridgehead, or surface transportation junction. It could also create a gap in the enemy's defenses, striking at some critical vulnerability deep in the enemy's rear area like an early warning site or C2 facility. As a decisive force, the vertical maneuver force would directly engage an exposed critical vulnerability. Employing its capability to rapidly maneuver over great depths, the vertical maneuver force could destroy or severely damage a key enemy force or installation before the enemy leadership can react or recover.

• ***Surface Maneuver force.***[9] The surface maneuver force would be employed when an enemy's centers of gravity or critical vulnerabilities cannot be detected or engaged with long-range precision fires. The surface maneuver force provides the means to deal with an uncertain situation and/or apply discretionary direct fires throughout the battlespace through introduction of a powerful, mobile, protected, and sustainable ground force. The surface maneuver force consists of self-contained combined arms teams. The teams will be built around a core of armor, light armor, and/or AAAV units, which provide high mobility and organic firepower as well as the capability to initiate operations from over-the-horizon in Landing Craft, Air Cushion (LCAC)

---

[9] The concept of the surface maneuver force is derived in significant part from LtCols Thomas B. Sward and Tommy L. Tyrrell, Jr., "Marine Light Armor and Deep Maneuver," Marine Corps Gazette, December, 1997, pp. 16-20. See also *Ship-to-Objective Maneuver,* 10.

or the AAAVs themselves. Each team will have tailored, organic intelligence, command and control, and sustainment capabilities. As with the reconnaissance-firepower or vertical maneuver forces, the surface maneuver force will be fully linked to MAGTF and joint force supporting assets, providing the capability to engage the enemy with the full spectrum of supporting fires when the opportunity presents itself. While the surface maneuver force could also be used to perform all three OME tasks, its primary role would be as a decisive or exploitation force. As a decisive force, the surface maneuver force would employ its firepower and mobility to bypass or overwhelm established defenses to undermine an operational center of gravity. As an exploitation force, the surface maneuver force would have the speed and flexibility required to take advantage of opportunities created by other elements of the joint force to deliver a series of crippling blows. In either role, the surface maneuver force can adapt to an uncertain or rapidly changing situation while presenting the enemy with an unacceptable risk to which he must continuously react from a position of disadvantage.

The reconnaissance-firepower maneuver force, the vertical maneuver force, and the surface maneuver force could be employed by itself or in conjunction with any or all of the other elements according to the situation. In most cases, components of the reconnaissance-firepower maneuver force will be required to shape the battlespace for the introduction of either the vertical or surface maneuver forces. The full effect and capability of the MAGTF will normally be achieved through the coordinated employment of the vertical and surface maneuver elements. Nevertheless, the value of the MAGTF as an OME lies in its ability to rapidly tailor the appropriate force package to meet the needs of the mission and to employ its capabilities in a coordinated and adaptable manner to achieve the desired operational-level effect.

As with C2, MAGTF sustainment will be primarily seabased. Maneuver forces deployed ashore will have limited organic logistics capabilities. These capabilities will be tailored to the type and expected duration of the mission. Organic logistics capabilities will be replenished and augmented as required from the seabase. Maneuver forces will use "logistics pull" to obtain support from floating combat service support (CSS) areas or sustain resident on ships of the NEF.[10] While the scope and duration of certain missions may require establishing certain logistic capabilities ashore, it is envisioned that those capabilities can be provided primarily by small, mobile, direct-support CSS detachments rather than traditional fixed logistics bases. As with C2, the intent is to rely on the flexibility afforded by the NEF to minimize the MAGTF's footprint ashore.

Regardless of the type of maneuver force employed and the degree of sustainment established ashore, it is crucial not to view the maneuver force ashore as an independent element. **The MAGTF** is **an integral combined arms team, and it is the MAGTF, not the maneuver force ashore that provides the OME capability**. The command and control, aviation, fires, and logistics support provided by the MAGTF from its seabase is critical to the success of the maneuver force deployed ashore. The successful conduct of an OME mission is impossible without the synergy generated by the four elements of the MAGTF employed as an integrated capability.

The MAGTFAshore. The majority of the MAGTF will be seabased during SOA, conducting operations through OMFTS and STOM. However, it may sometimes be

---

[10] *Ship-to-Objective Maneuver,* 10 and 15.

advantageous to position a limited portion of the MAGTF ashore. The primary reason for shorebasing is to create additional opportunities for MAGTF employment. Shorebasing MAGTF elements can create opportunities by:

- Helping to overcome geographic constraints. Situations in which access from the sea is constrained by geography or hydrography may limit the employment of seabased forces against key operational objectives. Shorebasing elements of the MAGTF may provide access to those operational objectives.
- Providing additional maneuver space. Employing the MAGTF exclusively from a seabase can limit options for MAGTF employment, particularly against an enemy with strong coastal or anti-landing defenses. Shorebasing can provide the opportunity to engage the enemy from multiple directions across the depth of the entire battlespace.
- Permitting the application of larger forces more rapidly. Shorebasing can enable the MAGTF to bring a larger portion of its force to bear against the enemy in a shorter time frame. This is particularly true if the number of ships available for seabasing is limited.

These additional opportunities create deeper dilemmas for an enemy attempting to anticipate and counter MAGTF actions. In addition, shorebasing certain MAGTF elements can provide three other advantages. First, it permits the MAGTF to use developed infrastructure within the theater. This infrastructure can especially enhance the employment of MAGTF aviation and the conduct of logistics activities. Second, it permits operation of the MAGTF under the joint force land-based force protection umbrella, which, in certain cases, may be more developed than seabased force protection capabilities. Finally, shorebased units of the MAGTF may be able to more closely coordinate their activities with other joint force elements.

While any component of the MAGTF could be shorebased, aviation and logistic units will be more frequently located ashore. Using established and expeditionary airfields ashore helps increase the sortie rate and availability of MAGTF aircraft, especially fixed-wing aircraft

whose capability to support the MAGTF will likely be limited by the availability of carrier decks. Basing selected logistic capabilities ashore enhances sustainment of the MAGTF over an extended time frame and permits seabased elements to focus on the immediate CSS requirements of committed forces. However, the MAGTF can also base any or all of its maneuver forces ashore when shorebasing provides a decided advantage. For example, it may be possible to prepare and launch a large surface maneuver force with greater speed and surprise from positions ashore than from ships of the NEF; in this case, the MAGTF commander might choose to base this force ashore.

KEY CAPABILITIES NEEDED BY THE MAGTF TO FUNCTION AS AN OME

Successful implementation of the concept of Sustained Operations Ashore requires improvements in command and control, planning, intelligence, information operations, mobility, firepower, and logistics. Specific enhancements are discussed below.

Command and Control. Command and control provides the mechanism by which a commander recognizes what needs to be done and communicates those actions required to ensure mission accomplishment.[11] Command and control in SOA requires the ability to coordinate the efforts of multiple, widely dispersed elements maneuvering through an extended battlespace. Key C2 capabilities required by the MAGTF to function as OME include the ability to:

- Maintain a common operational picture among all elements of the MAGTF

---

[11] Department of the Navy, Headquarters, US Marine Corps, *Marine Corps Doctrinal Publication 6, Command and Control* (Washington, D.C., October, 1996), 37 and *Ship-to-Objective Maneuver,* 14.

- Integrate the simultaneous actions of numerous maneuver forces
- Quickly respond to new opportunities or changes in the situation
- Coordinate and control external fires in support of maneuver forces ashore
- Provide mechanisms for the rapid receipt of and response to requests for intelligence, operational, or logistics support

MAGTF C2 capabilities should be primarily sea-based, with every effort made to minimize the personnel and logistics footprint of C2 support elements. Future enhancements in communications and information systems (CIS) should permit the execution of many C2 responsibilities from in theater or CONUS garrison locations via split-basing or reach-back. Specialized skills such as cultural expertise, knowledge of weapons of mass destruction, or unique target system analysis capabilities required to plan or execute a specific mission will be made available through "virtual staffing" rather than physically deploying specialists into the theater. The MAGTF must be able to plan and coordinate with the joint force via its C2 architecture, vice collocation or the exchange of large liaison elements.

Planning. An OME is employed to exploit an exposed vulnerability or a newly created operational advantage. Successful employment of the MAGTF as an OME depends upon on the MAGTF's ability to respond to these situations by rapidly planning complex operations and quickly transitioning into execution. To do this, the MAGTF must be able to conduct rapid-response planning within strict time constraints. The current MEU(SOC) planning process and standards can be used as a model for development of a larger MAGTF process. In order to anticipate future taskings, the MAGTF will require full connectivity to the joint force's common operational picture and must be able to monitor and participate in the JFC's planning process. In addition, the MAGTF must possess an effective distributed and collaborative planning system

which enables widely-dispersed elements of the MAGTF to carry out real-time, interactive planning.

Intelligence. Timely and focused intelligence support is critical to the conduct of operational maneuver. Intelligence identifies opportunities for the employment of the OME and guides planning and execution to exploit those opportunities.[12] In order to maintain situational awareness, anticipate taskings, and rapidly respond to assigned missions, the MAGTF must have full connectivity to the joint intelligence architecture and must be able to request, receive, and use intelligence developed by all supporting national, theater, and joint force intelligence assets. Furthermore, the MAGTF must retain a robust organic capability to collect, process, and produce intelligence to satisfy mission-specific requirements of the MAGTF and subordinate element commanders. In addition to possessing full connectivity to MAGTF and supporting joint intelligence assets, maneuver forces ashore must have responsive organic or direct-support capabilities in order to develop the situation, avoid contact with major enemy forces or strong points, identify exploitable opportunities, and aid in developing rapid responses to those opportunities. Organic MAGTF intelligence capabilities are required to provide responsiveness, the degree of detail, and a focus on those intangible, human factors necessary for successful employment at the operational level.

Information Operations. MAGTFs conducting operational maneuver will face a wide variety of symmetric and asymmetric threats. To defeat these threats and protect its maneuver

---

[12] Department of the Navy, Headquarters, US Marine Corps, *Marine Corps Doctrinal Publication 2, Intelligence* (Washington, D.C., June, 1997), 84.

forces striking at operational objectives, the MAGTF must be able not only to employ firepower and movement, but carry out actions that permit it to maneuver against an adversary in multiple dimensions: spatial, temporal, and psychological. Information operations can make a key contribution to gaining decisive advantage over the enemy in these dimensions. Current MAGTF information operations capabilities are extremely limited. To perform true operational maneuver in the future, the MAGTF must be able to leverage the strategic and operational information operations conducted by the joint force and possess a potent organic operational and tactical-level information operations capability. In particular, the MAGTF must obtain an enhanced ability to conduct psychological, electronic warfare, and deception operations.

Mobility. Successful conduct of operational maneuver requires mobility at the strategic, operational, and tactical levels of war. In order to function as an OME, the MAGTF must have the strategic mobility to reach the theater, the operational mobility to strike across the entire area of operations, and the tactical mobility to gain a positional advantage over the enemy once deployed ashore. Strategic mobility is derived from the MAGTF's ability to deploy via a variety of airlift and sealift combinations; enhancements in the MAGTF's strategic mobility will increase both its flexibility and response time. Operational mobility is the key to execution of operational maneuver. Operational mobility is provided by the ships and landing craft of the NEF, aircraft of the ACE, and high-mobility vehicles of the GCE; continued improvements are needed in these areas to provide the range and speed required during operational maneuver. Aggressive support of ongoing and future amphibious assault and maritime prepositioning shipbuilding programs by the Department of Defense and U.S. Navy are required to provide the strategic and operational mobility needed to implement this concept. Tactical mobility is needed to adapt to changes in

the situation and exploit opportunities as they arise. MAGTF maneuver forces must possess sufficient tactical mobility to gain a positional advantage, retain the initiative, and avoid engagements when they are at a disadvantage. ACE aircraft will continue to provide significant tactical mobility, however, surface mobility (via high-speed and protected vehicles such as the AAAV, LAV, and tank) is also needed to provide a flexible OME capability responsive across the spectrum of conflict.

Firepower. Firepower is essential to achieving decisive effect on the enemy. The OME must be able to concentrate accurate and lethal fires at the right time and place. To do this, the MAGTF will draw on a wide range of organic and supporting fires. The majority of these will provided as long-range, precision fires from the NEF or other components of the joint force. Reliance on external fires provides required lethality while maximizing the mobility of maneuver forces ashore and minimizing their logistical requirements. To employ the full range of supporting fires, the maneuver forces must be equipped with the appropriate C2 capabilities. In addition, they must retain sufficient organic firepower to provide for their own force protection, adapt to unanticipated situations, or deal with asymmetrical threats which are less vulnerable to long-range, precision fires. Furthermore, one distinct advantage provided by maneuver forces ashore is their ability to discern and react to local conditions; MAGTF maneuver forces must have an appropriate mix of organic weaponry to provide discretionary direct firepower in response to opportunities or advantages as they develop.

Logistics.. To function effectively in the OME role, the MAGTF must sustain the effort necessary to accomplish the operational objective. While this concept envisions the focused use

of tailored maneuver forces to strike directly at operational centers of gravity or critical vulnerabilities in brief, decisive engagements, certain scenarios may require extended operations ashore. In these situations, MAGTF must be able to support its maneuver elements for the duration of the operation. To do so, the MAGTF must possess the capability to provide tailored logistics support to widely dispersed maneuver forces operating across the breadth of the operational battlespace. Focused, responsive logistics will be needed to deliver critical support at precise times and locations. As with C2, MAGTF sustainment capabilities should be primarily sea-based, with every effort made to minimize the logistics footprint established ashore. Maneuver forces ashore will employ new methods to sustain themselves without loss of operational tempo. One of these methods resembles the current ACE concept of the Forward Arming and Refueling Point (FARP); however, a FARP in support of an OME would be capable of rearming, refueling, resupplying, and repairing ground maneuver elements as well as aircraft. Another method uses small, mobile, task-organized CSS elements ashore; such elements could enhance throughput from the seabase for forces located at great distances inland as well as provide a mobile logistic reserve for forces remaining ashore for extended periods. MAGTF logistics capabilities in the areas of requirements processing, asset visibility, selective throughput, and rapid delivery (especially aerial delivery) must be enhanced in order to implement this concept.

CHAPTER 4

RELATIONSHIP OF THE MAGTF AS AN OME CONCEPT TO *JOINT VISION 2010* AND OTHER SERVICE CONCEPTS

The concept of Marine forces in sustained operations ashore is directly linked to *Joint Vision 2010,* the *Concept for Future Joint Operations*, and the concepts of the services.

Joint Vision 2010 and the *Concept for Future Joint Operations* present a framework for the evolution of future joint capabilities built around four new operational concepts: dominant maneuver, precision engagement, full-dimension protection, and focused logistics. Employing the MAGTF as an OME embodies all the significant characteristics of *dominant maneuver:*

> *Dominant maneuver* will be the multidimensional application of information, engagement, and mobility capabilities to position and employ widely dispersed joint air, land, sea, and space forces to accomplish assigned operational tasks. ...Through a combination of asymmetric leverage, achieved by our positional advantages, as well as decisive speed and tempo, dominant maneuver allows us to apply decisive force to attack enemy centers of gravity at all levels and compels an adversary to either react from a position of disadvantage or quit.[1]

The MAGTF's inherent capability to rapidly focus land, air, and sea forces through the integration of command and control, mobility, firepower, and sustainment provides the means to apply decisive force against an operational center of gravity. Furthermore, the MAGTF embodies the exact capabilities called for in *Joint Vision 2010* to conduct dominant maneuver:

---

[1] *Joint Vision 2010,* 20.

"Dominant maneuver will require forces that are adept at conducting sustained and synchronized operations from dispersed locations. They must be able to apply overwhelming force in the same medium and create asymmetrical advantages by attacking cross-dimensionally, such as air or sea against ground or ground and sea against air defenses. These forces must have the ability to outpace and outmaneuver the enemy."[2] Employment of the MAGTF as an OME provides a dominant maneuver force to the JFC.

In its role as an OME, the MAGTF also employs the other operational concepts *of Joint Vision 2010* and the *Concept for Future Joint Operations.* The MAGTF enhances the exercise of *precision engagement* by providing enhanced sensing and terminal control for long-range, precision weapons. At the same time, precision engagement increases the effectiveness of the MAGTF by providing the means to decisively concentrate combat power at the required time and place. The organic capabilities of the MAGTF contribute to *full dimensional protection,* while simultaneously relying upon the control of the battlespace afforded by full dimensional protection to deploy and maneuver as an OME. Finally, the MAGTF draws upon *focused logistics* in order to provide the tailored sustainment required to conduct wide-ranging operations responsive to the JFC's tasking.

The Navy's operational concept, *Forward...from the Sea -- The Navy Operational Concept* is in complete harmony with the concept for Marine forces in sustained operations ashore. *Forward…from the Sea -- The Navy Operational Concept* describes naval forces employing naval operational maneuver to hold enemy centers of gravity at risk and expose

---

[2] *Joint Vision 2010,* p. 20-21.

enemy weaknesses which can be exploited. The MAGTF, acting as an OME provides an essential component for implementing this concept: "We take advantage of our robust command and control systems and the reach of our sensors and weapons to concentrate combat power from dispersed, networked forces and project power far inland... .Our simultaneous ability to attack the enemy throughout the battlespace with precision naval fires and Marine combat power generates an inescapable tactical quandary.[3]" Seabasing precision fires, robust C2 infrastructure, and flexible logistics capabilities as called for in the Navy's operational concept supports the MAGTF in its role as an OME.

Similarly, the concept for Marines in sustained operations ashore is compatible with the Air Force's future operational concept, *Global Engagement: A Vision for the 21st Century Air Force. Global Engagement* outlines three core competencies of the 21st century air force which will enhance MAGTF employment as an OME: air and space superiority, precision engagement, and information superiority.[4] Air and space superiority provides the MAGTF with freedom from attack and freedom to attack. The Air Force's information superiority capabilities contribute to the situational awareness of the MAGTF by providing intelligence, surveillance and reconnaissance, communications, weather, and navigation support. Precision engagement increases the flexibility and lethality of the MAGTF in the OME role.

---

[3] Department of the Navy, U.S. Navy, *Forward…from the Sea -- The Navy Operational Concept* (Washington, D.C., 1997), 5-7.

[4] Department of the Air Force, *Global Engagement: A Vision for the 21st Century Air Force* (Washington, D.C., 1997), 10-14.

Finally, the concept for Marines in sustained operations ashore compliments the Army's future operational concept, *Army Vision 2010. Army Vision 2010* outlines six key operational patterns which detail the way Army forces will contribute to achievement of full-spectrum dominance. One of these patterns is *decisive operations,* which are described as the equivalent of operational maneuver to achieve decisive effect on the enemy. *Decisive operations* closely resembles the use of a MAGTF as an OME:, Army elements conducting *decisive operations* and the MAGTF operating as OME both attempt to achieve operational-level objectives through the application of force against an enemy center of gravity. In one respect, the concepts are complimentary, providing the JFC with a range of capabilities with which to accomplish the desired effect. The concepts differ, however, in both the scope of the effort and the duration of application. *Decisive operations* aim at, "exercising direct, continuing, and comprehensive control over land, its resources, and people,[5]" emphasizing that these operations are conducted on a widespread and sustained basis across the theater. In contrast, the MAGTF in its role as an OME provides a precise, responsive means to create or take advantage of opportunities at selected points throughout the battlespace. The focused, seabased, and expeditionary nature of the MAGTF as an OME concept helps distinguish it from *decisive operations.*

---

5 Department of the Army, *Army Vision 2010* (Washington, D.C., 1997), 12.

CHAPTER 5

CONCLUSION

Operational maneuver -- the ability to concentrate decisive effects against an adversary's operational-level centers of gravity -- is a critical element in both current doctrine and future warfighting concepts. To execute operational maneuver, forces must conduct high-speed, high-intensity, independent operations throughout the depth of the battlespace. Characteristics required of future operational maneuver forces include high mobility, precise and effective firepower, comprehensive command and control, responsive logistics, flexibility, and agility.

The MAGTF is ideally suited to function as an operational maneuver force. A MAGTF provides the JFC with an adaptable, self-sustained, combined arms force capable of conducting operational maneuver. Future enhancements to MAGTF capabilities will provide greater mobility, enhanced firepower, more effective command and control, more responsive logistics, and increased flexibility. These enhancements will permit the employment of the MAGTF in an expanded role during sustained operations ashore. In the future, the MAGTF's primary role in sustained operations ashore could be to function as an operational maneuver element for the joint force. As such the MAGTF will become one of the JFC's principal tools for the execution of the *Joint Vision 2010* concept of dominant maneuver.

As an OME, the MAGTF will be assigned primarily operational-level missions intended to have a decisive impact on the outcome of the campaign. The MAGTF conducting operational

maneuver would be used as an enabling force, a decisive force, or an exploitation force. MAGTF operations would be conducted primarily from a seabase, with the MAGTF commander directing task-organized force packages in the accomplishment of specific operational-level taskings. Unlike current concepts of sustained operations ashore requiring large forces ashore to engage in a continuous, methodical ground operation, a MAGTF functioning as an OME will employ a flexible combination of tailored maneuver forces to execute a series of precise, focused, and decisive combat actions.

To fully implement this concept, the MAGTF will require specific improvements in command and control, planning, intelligence, mobility, firepower, and logistics. Key capabilities needed to enhance the MAGTF's ability to function as an OME include the ability to:

- Develop and maintain enhanced situational awareness at the operational and tactical levels.
- Rapidly respond to opportunities provided by that situational awareness.
- Conduct and sustain operational maneuver throughout the depth of the battlespace.
- Concentrate precise and decisive firepower effects from a variety of organic and supporting force weapons systems.
- Provide command and control and sustainment for multiple, rapidly moving, and widely dispersed maneuver forces.

When this concept is fully implemented, a MAGTF conducting OMFTS as an operational maneuver element will greatly enhance the JFC's ability to achieve his objectives in sustained operations ashore. The MAGTF will provide a flexible, responsive force capable of dominant

maneuver and precision engagement as envisioned in *Joint Vision 2010* and the *Concept for Future Joint Operations.*

APPENDIX A: ACRONYMS

AAAV	Advanced Assault Amphibian Vehicle
ACE	Air Combat Element
ATF	Amphibious Task Force
C2	Command and Control
CE	Command Element
CIS	Communications and Informations Systems
CONUS	Continental United States
CSS	Combat Service Support
CSSE	Combat Service Support Element
FARP	Forward Arming and Refueling Point
GCE	Ground Combat Element
JFC	Joint Force Commander
JP	Joint Publication
JV 2010	Joint Vision 2010
LAV	Light Armored Vehicle
MAGTF	Marine Air-Ground Task Force
MCDP	Marine Corps Doctrinal Publication
NATO	North Atlantic Treat Organization
NEF	Naval Expeditionary Force
OME	Operational Maneuver Element
OMFTS	Operational Maneuver From The Sea
OMG	Operational Maneuver Group
RAF	Royal Air Force
SOA	Sustained Operations Ashore
STOM	Ship-to-Objective Manuever

BIBLIOGRAPHY

Anderson, Col Gary W., USMC. "Infestation Tactics and Operational Manuever From the Sea; Where Do We Go From Here?" *Marine Corps Gazette,* September, 1997, 70-75.

Bond, Brian and Martin Alexander. "Liddel Hart and De Gaulle: The Doctrines of Limited Liability and Mobile Defense." In *Makers of Modern Strategy from Machiavelli to the Nuclear Age,* ed. Peter Paret, 598-623. Princeton, NJ: Princeton Press, 1986.

Clauer, Col John A., USMC. "Unifed Effort in Support of Dominant Maneuver on the Joint Battlefield." *Marine Corps Gazette,* October, 1997, 52-58.

Cohen, Eliot A. "A Revolution in Warfare." *Foreign Affairs,* March/April, 1996, 37-54.

Davis, Maj Danny M., USA. *Airborne Deep Operational Manuever: Employment Options for the Use of Airborne Forces in Modern Campaigns.* Unpublished research monograph. Fort Leavenworth, Kansas: US Army Command and General Staff College, School of Advanced Military Studies, May, 1989.

Department of the Air Force. Global Engagement: *A Vision for the 21st Century Air Force.* Washington, D.C., 1997.

Department of the Army. *Army Vision 2010.* Washington, D.C., 1997.

Department of Defense, Joint Chiefs of Staff. *CJCSM 3501. 04A, Universal Joint Task List, Version 3.0.* Washington, D.C., September, 1996.

Department of Defense, Joint Chiefs of Staff.. *Concept for Future Joint Operations.* Fort Monroe, Va: The Joint Warfighting Center, May, 1997.

Department of Defense, Joint Chiefs of Staff. *Joint Publication 1, Joint Warfare of the US Armed Forces.* Washington, D.C., November, 1991.

Department of Defense, Joint Chiefs of Staff *Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms.* Washington, D.C., March, 1994.

Department of Defense, Joint Chiefs of Staff. *Joint Publication 3-0, Doctrine for Joint Operations.* Washington, D.C., February, 1995.

Department of Defense, Joint Chiefs of Staff. *Joint Vision 2010.* Washington, D.C., July, 1996.

Department of the Navy, Headquarters, US Marine Corps. *Fleet Marine Force Reference Publication 3-200, Operational Maneuver Groups.* Washington, D.C., August, 1991.

Department of the Navy, Headquarters, US Marine Corps. *Marine Corps Doctrinal Publication 1, Warfighting.* Washington, D.C., June, 1997.

Department of the Navy, Headquarters, US Marine Corps. *Marine Corps Doctrinal Publication 1-2, Campaigning.* Washington, D.C., August, 1997.

Department of the Navy, Headquarters, US Marine Corps. *Marine Corps Doctrinal Publication 2, Intelligence.* Washington, D.C., June, 1997.

Department of the Navy, Headquarters, US Marine Corps. *Marine Corps Doctrinal Publication 3, Expeditionary Operations.* Washington, D.C., February, 1998.

Department of the Navy, Headquarters, US Marine Corps. *Marine Corps Doctrinal Publication 6, Command and Control.* Washington, D.C., October, 1996.

Department of the Navy, Headquarters, US Marine Corps. *Maritime Prepositioning Force: 2010 and Beyond* Washington, D.C., 1997.

Department of the Navy, Headquarters, US Marine Corps. *Operational Maneuver from the Sea.* Washington, D.C., 1996.

Department of the Navy, Marine Corps Combat Development Command. *Ship-to-Objective Maneuver.* Quantico, Va., 1997.

Department of the Navy, U.S. Navy. *Forward...from the Sea -- The Navy Operational Concept.* Washington, D.C., 1997.

Fuller, J.F.C. *Lectures on Field Service Regulations III (Operations Between Mechanized Forces).* London: Sifton Praed & Co, Ltd, 1932.

Gibbons, Wayne M. "Joint Vision 2010: The Road Ahead." *Marine Corps Gazette,* September, 1997, 76-80.

Glantz, David M. *Soviet Military Operational Art -- In Pursuit of Deep Battle.* London: Frank Cass and Co, 1991.

Glantz, David M. *August Storm: The Soviet 1945 Strategic Offensive in Manchura.* Leavenworth Papers No. 7, Combat Studies Institute, U.S. Army Command and General Staff College, Ft Leavenworth, Kansas, 1983.

Glantz, David M. *August Storm: Soviet Tactical and Operational Combat in Manchura, 1945.* Leavenworth Papers No. 8, Combat Studies Institute, U.S. Army Command and General Staff College, Ft Leavenworth, Kansas, 1983.

Institute For National Stategic Studies, National Defense University. *1997 Stategic Assessment: Flashpoints and Force Structure.* Washington, DC: GPO, 1997.

Irwin, Ash. *The Levels of War, Operational Art, and Campaign Planning.* Occasional Paper No. 5, Strategic and Combat Studies Institute, UK Staff College, Camberley. Surrey, UK: 1993.

Krause, Micheal D. "Moltke and the Origins of the Operational Art." *Military Review,* September, 1990, 28-44.

Liddell Hart, Basil. *The Sword and the Pen.* NY: Thomas Y. Crowell Co, 1976.

Marine Corps Warfighting Laboratory. *Exploring Hunter Warrior.* Quantico, Va: August, 1997.

McKercher, B.J.C. and Michael A. Hennessy, eds. *The Operational Art.* Westport, Cn: Prager, 1996.

Newell, Clayton R. and Michael D. Krause, eds. *On Operational Art.* Washington, DC: GPO, 1994.

Newell, Clayton R. "What is Operational Art?" *Military Review,* September, 1990, 2-16.

Raymond, Maj A. Dwight, USA. *Firepower, Maneuver, and the Operational Level of War.* Unpublished research monograph. Fort Leavenworth, Kansas: US Army Command and General Staff College, School of Advanced Military Studies, May, 1992.

Ropp, Theodore. *War in the Modern World.* NY: Collier, 1973.

Strange, Joe. *Centers of Gravity and Critical Vulnerabilities.* Marine Corps University Perspectives on Warfighting No 4, Second Edition. Quantico, Va: Marine Corps University Foundation, 1996.

Swita, Bogdan. "The OMG in the Defense." *Military Review,* July, 1992, 35-45.

Swita, Bogdan. "The OMG in the Offense." *Military Review,* November, 1993, 30-40.

Triandafillov, V.K. *The Nature of the Operations of Modern Armies.* Ed. Jacob W. Kipp. Portland, Or: Frank Cass, 1994.

Van Creveld, Martin, Steven L. Canby, and Kenneth S. Brower. *Air Power and Maneuver Warfare.* Maxwell AFB, Al: Air University Press, 1994.

"18th Semiannual Joint Doctrine Working Party." *A Common Perspective, The Joint Warfighting Center Newsletter,* March, 1997,14-16.