

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

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1. REPORT DATE (DD-MM-YYYY) 23-04-2015		2. REPORT TYPE Master of Military Studies Research Paper		3. DATES COVERED (From - To) August 2014-April 2015	
4. TITLE AND SUBTITLE The Marine Defense Battalions: Evolution and Contemporary Relevance				5a. CONTRACT NUMBER N/A	
				5b. GRANT NUMBER N/A	
				5c. PROGRAM ELEMENT NUMBER N/A	
6. AUTHOR(S) Reukema, Jason R., Major, USMC				5d. PROJECT NUMBER N/A	
				5e. TASK NUMBER N/A	
				5f. WORK UNIT NUMBER N/A	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) USMC Command and Staff College Marine Corps University 2076 South Street Quantico, VA 22134-5068				8. PERFORMING ORGANIZATION REPORT NUMBER N/A	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A				10. SPONSOR/MONITOR'S ACRONYM(S) N/A	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S) N/A	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES N/A					
14. ABSTRACT The current U.S. military-political situation in the Pacific displays parallels to the decades preceding World War II. Fiscal austerity is increasing, leading to decreased military spending while military rivals decrease the U.S.'s operational access in the Western Pacific. The Defense Battalions played a crucial role in defending American interests while the U.S. generated forces. They delayed Japanese advances at Wake Island, contributed to the Japanese defeat at Midway, and supported amphibious operations through the end of the War. Lessons learned from the successes and failures of the Defense Battalions apply to the contemporary operations environment. A rising China competes with the U.S. for influence in the Western Pacific. China's investment in Anti Access/ Area Denial (A2/AD) systems threatens the U.S.'s ability to protect national interests and support allies. The Marine Corps should explore applying the Defense Battalion's lessons and tactics with emerging technological capabilities and modern tactics. Capabilities such as High Mobility Artillery Rocket Systems, F-35B Joint Strike Fighter, and MV-22 Osprey tilt-rotor aircraft operating from dispersed forward-defended sites can increase Operational Access. This study seeks to examine the purpose, development, and evolution of the Defense Battalions and apply their concept in modern terms.					
15. SUBJECT TERMS Defense Battalions, Expeditionary Advanced Base Operations, Anti-Access/ Area Denial, HIMARS, Distributed STOVL operation					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 45	19a. NAME OF RESPONSIBLE PERSON Marine Corps University/Command and Staff College
a. REPORT Unclass	b. ABSTRACT Unclass	c. THIS PAGE Unclass			19b. TELEPHONE NUMBER (include area code) (703) 784-3330 (Admin Office)

United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
Quantico, Virginia 22134-5068

MASTER OF MILITARY STUDIES

The Marine Defense Battalions: Evolution and Contemporary Relevance

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

Major Jason Richard Reukema USMC

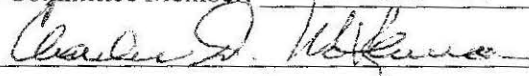
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Date: 23 April 2015

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Date: 23 APRIL 2015

Executive Summary

Title: The Marine Defense Battalions: Evolution and Contemporary Relevance

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Thesis: The Marine Corps can gain operational access in the Western Pacific by applying the Defense Battalions' tactics coupled with modern capabilities to employ Expeditionary Advanced Base Operations as a counter to the Anti-Access /Area Denial environment posed by China.

Discussion: The current U.S. military-political situation in the Pacific displays parallels to the decades preceding World War II. Fiscal austerity is increasing, leading to decreased military spending while military rivals decrease the U.S.'s operational access in the Western Pacific. The Defense Battalions played a crucial role in defending American interests while the U.S. generated forces to execute War Plans in the Atlantic and Pacific. Initially the Defense Battalions provided static defense over strategic sea lanes but rapidly evolved into a tactically mobile combined arms force. These forces did much of the Marine Corps early fighting in World War II. They delayed Japanese advances by defending outposts such as Wake Island, contributed to the Japanese defeat at Midway, and went on to support major amphibious operations through the end of the War. Lessons learned from the successes and failures of the defense battalions apply to the contemporary operations environment. A rising China competes with the U.S. for influence in the Western Pacific. China's investment in Anti Access/ Area Denial (A2/AD) systems threatens the U.S.'s ability to protect national interests and support allies. A2/AD environments coupled with decreasing military spending and lack of adequate amphibious shipping forces the Marine Corps to adopt solutions to gain operational access. The Marine Corps should explore applying the Defense Battalion's lessons and tactics with emerging technological capabilities and modern tactics. Capabilities such as High Mobility Artillery Rocket Systems, F-35B Joint Strike Fighter, and MV-22 Osprey tilt-rotor aircraft operating from dispersed forward-defended sites can increase Operational Access. However, Expeditionary Advanced Base Operations are unfamiliar and capability gaps remain. This study seeks to examine the purpose, development, and evolution of the Defense Battalions and apply their concept in modern terms.

Conclusion: By developing Expeditionary Advanced Base operations coupled with the advanced systems such as HIMARS, the F-35B, and the MV-22 integrated with the Joint Force, the Marine Corps can continue to project force in the A2/AD environment posed by China in the Western Pacific Theater.

Table of Contents

DISCLAIMER i

LIST OF ILLUSTRATIONS ii

PREFACE iii

INTRODUCTION 1

PART I: INCEPTION 3

 Operating Environment 4

 Origins and Early Developments 2

PART II: EVOLUTION: Pickett lines to Tactical Mobility 6

 First Marine Defense Battalion: The Picket Line and Wake Defenders 6

 Fifth Marine Defense Battalion: Strategic Mobility and Crisis Response 8

 Third Marine Defense Battalion: First to Fight, First to Evolve 9

 Ninth Marine Defense Battalion: Tactical Offensive Mobility 11

PART III; MODERN APPLICATION 12

 Contemporary Operating Environment 12

 Challenges and Opportunities 15

 Expeditionary Force 21 16

 Maximizing Emerging Technologies and Tactics 20

 Capability Gaps 25

CONCLUSION 28

CITATIONS AND ENDNOTES 29

BIBLIOGRAPHY 36

DISCLAIMER

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Illustrations

Figure 1. Japan’s Greater East Asian Co-prosperity Sphere.....13

Figure 2. People’s Liberation Army’s Active Offshore Defense Plan13

Preface

The Marine Defense Battalions: Evolution and Contemporary Relevance, is a study of the strategic purpose, organizational evolution, and lessons learned of an often overlooked piece of military history. Furthermore this study examines how the Marine Corps and Joint Force can learn from our past and apply it to the future by taking advantage of emerging technologies and tactics. When studying the current increasing tensions in Asia and comparing the situation to the Western Pacific in the 1930s I wondered if this was a case of “what was old, is new again.”

This project is a product of my own curiosity and educational desire to learn more about the Defense Battalions and to discover a way to link the past to the potential future filtered through my personal experience as a Marine Corps officer and research while at Marine Corps Command and Staff College.

I would like to thank several individuals for their assistance with this project. My mentor, Doctor Craig Swanson, Marine Corps Command and Staff College, who guided me through this process. He assisted me greatly and shared with me his extensive expertise on the Pacific that helped inspire my thought and put into context the struggles the U.S. and Japan faced during the interwar period and World War Two. Lieutenant Colonel Edward Jeep, Office of the Secretary of Defense, assisted me during the early phases of my research and discovery by proposing the subject and pointing me in the right direction with various hard to obtain articles and publications. Captains Adam Jobs and Matthew Said, both USMC artillery officers who served with me at 5th Battalion, 11th Marines for our countless hours around whiteboards sketching out ideas and solutions. Finally I would like to thank the members of my Marine Corps Command and Staff College conference group, specifically Majors Jeffery Starr, Brian O’shea, Jay Hanson, and Mauro Sanchez for our extensive discussions on the South China Sea, ISR, distributed Short Take Off and Vertical Landing operations, and Marine Air-Ground Task Force operations. These discussions provided me great insight and served as a sounding board to explore new ideas and challenge my understanding of my research.

Defense is nothing more than a means by which to attack the enemy most advantageously, in a terrain chosen in advance, where we have drawn up our troops and have arranged things to our advantage.

- Carl von Clausewitz

Through sheer necessity, the Marine Corps has devised a sort of expeditionary coast artillery capable of occupying untenanted and undefended locality, of installing an all around sea-air defense and this within three days. Defense Battalions, the Marine Corps calls them.

- 1stLt Robert D. Heinl

The ability to establish a network of austere advanced bases-by occupation or seizure- as a means of dispersing aircraft, missiles, and intelligence, surveillance, and reconnaissance assets needs to be comprehensively explored. Establishing or merely demonstrating the ability to rapidly establish- such 'oceanic outposts' would strengthen our ability to reassure allies and deter adversaries.

- General James Amos

The Marine Defense Battalions trace their lineage to the Operations Plan 712H: Advance Base Operations in Micronesia, published in 1921 by Major Earl H. "Pete" Ellis. Republished in 1992 as Fleet Marine Force Reference Publication (FMFRP) 12-46, this document served as the foundation that guided the Marine Corps development during the interwar period.¹ Additionally FMFRP 12-46 described the concept of employment used by the Marine Corps during World War II in the Pacific. Study of the evolution of the Defense Battalions reveals similarities to the modern Marine Air-Ground Task Force (MAGTF). Present day Marine Corps operating force units, such as Third Low Altitude Air Defense Battalion (3d LAAD) and the heavy artillery battalions can trace their lineage to the Marine Defense Battalions that fought during World War II. In 1933, the Marine Corps had a two-fold mission consisting of the seizure of advanced bases in support of the US Fleet and amphibious assault.² Prior to and during World War II the Defense Battalions fulfilled the seizure and defense of the advanced bases mission. During World War II, larger landing forces, such as Marine Divisions, accomplished most of the

amphibious assault missions. Scholars and military historians pay great homage to the amphibious assaults during the island hopping campaign but pay little credit to the Defense Battalions contributions during the initial defense of the Pacific and subsequent amphibious assaults.

Most historians relegate the history of the Marine Defense Battalion to the footnotes of U.S. military history or a limited number of special studies resulting in little widespread knowledge of their significance. Students of military history are familiar with the Wake Island Defenders and their limited success by delaying Japanese advances prior to the garrison's surrender. Less familiar is the understanding of what strategic purpose the Defense Battalions served. By understanding the military-political situation in the Pacific Theater of the late 1930s and early 1940s, the value of the defense battalions is clear. By law, the Washington Naval Treaty limited total ship tonnage and prevented the U.S. from building fortresses on its possessions west of Hawaii.³ Domestic isolationist views and fiscal austerity enabled the creation of mobile defensive units that economized manpower while quelling isolationist concerns over offensive deployments. Born out of necessity, the Marine Defense Battalions contributed to the strategic defense of Western Hemisphere and evolved into an offensive capability.

The current U.S. military-political situation in the Pacific displays parallels to the decades preceding World War II. Fiscal austerity is increasing, leading to decreased military spending while military rivals decrease the U.S.'s operational access in the Western Pacific. The Marine Corps can gain operational access in the Western Pacific by applying the Defense Battalions' tactics coupled with modern capabilities to employ Expeditionary Advanced Base Operations as a counter to the Anti-Access /Area Denial environment posed by China.

PART I: INCEPTION

OPERATING ENVIRONMENT

From the early 1920s, through mid-1930s, the United States faced an uncertain global political situation. In the Far-East, the Japan was a rising economic and military power. Additionally the Japanese government became increasingly militarized. China was unstable and experienced episodes of chaotic violence that drew America's attention away from Japan.⁴ In Europe, Germany's rise and militarization threatened U.S. allies and continued to draw attention away from the Pacific.⁵ During this period, the United States War and Navy departments developed a series of war plans to address various threats worldwide.

By 1933, the United States possessed numerous outposts and fueling stations throughout the Pacific. The Navy, however, did not have the personnel or ships available to defend its vast area of responsibility. The War Plan Orange series described the United States' strategy to defeat Japan in a series of offensive amphibious operations while defending American Pacific bases required for the offensive campaign.⁶ After France had fallen to Germany and the Netherlands became German-occupied territories, the United Kingdom falling became a legitimate threat. War Plan Orange then merged with other colored war plans to become a series of Rainbow Plans.⁷ Rainbow 5 was a war plan where an Anglo-American alliance would go to war against Germany, Japan, and Italy.⁸ The Alliance would defeat Germany first while conducting economy of force offensive operations in the Pacific.⁹ The initial economy of force against the Japanese made sense since the Pacific Campaign would be inherently amphibious in nature. Amphibious operations are highly complex, and amphibious doctrine was still untested in the 1930s. Marine Defense Battalions conducting Advance Base Operations were ideally suited to support the economy of force mission in the Pacific.

ORIGINS AND EARLY DEVELOPMENTS

Major Ellis's Advanced Base concept would require specialized units to conduct an amphibious seizure of advanced bases through amphibious assault. A single type of units could not do both missions. The dual mission resulted in the development of fixed defense regiments and mobile landing brigades to accomplish the two core missions of the Marine Corps. Pete Ellis envisioned assignment of a majority of Marine infantrymen to one of the three 6000-member Marine Landing Brigades.¹⁰ The Landing Brigades would accomplish the amphibious assault mission prior to the arrival of a Defense Regiment. Pete Ellis's base defense concept called for a 5425 member Defense Brigade divided into three 1800-member Defense Regiments consisting of multiple functional groups.¹¹ Each Defense Regiment consisted of a headquarters company, supply company, a mix of air-defense, coastal defense, and field artillery companies, searchlight companies, sound locator companies, an engineer company, a communications company, and an air detachment of 16 scout and fighter-bomber aircraft.¹² Even in 1921, the Base Defense Regiment began to resemble what would become a MAGTF. In this case, the ground combat element is supporting arms heavy with a preponderance of the force being artillery heavy versus a more mobile infantry heavy organization.

Fiscal austerity, post-World War I isolationism, and the recent experience of land-based operations in World War I precluded the expansion necessary to resource forces to the extent envisioned by the early amphibious operations pioneers. Despite these challenges, the Marine Corps began slowly reorganizing forces by 1930. Mobile regiments expanded into brigades and artillery battalions reorganized into composite units with the addition of heavy artillery, light tanks, searchlights, and air units.¹³ In 1933, the Marine Corps reorganized into the Fleet Marine

Force (FMF), thus changing the mission of the Marine Corps from ad-hoc landing forces and guard details into formally organized amphibious landing forces and defense forces.¹⁴ From 1933 through 1939 the FMF continued to face fiscal austerity and personnel shortages. These conditions prevented the FMF from fully developing and equipping the Defense Battalions and Amphibious Divisions until the 1940s.

War in Europe and Asia prompted military expansion by the United States, which resulted in the development of new Marine Corps units and expansion of existing units. After President Franklin Roosevelt's 1939 declaration of limited emergency, the Marine Corps began organizing special units to support operations in the Pacific, these units included Parachute, Defense, and Raider battalions.¹⁵ All specialized units had specific capabilities that contributed to amphibious operations. The Raider and Parachute Battalions' emphasis was light infantry operations deep behind enemy lines, similar to modern day Marine Special Operations Command. The Defense Battalions' contribution to the amphibious strategy was strategic mobility and concentrated firepower for low personnel costs. The utility of the defense battalions led to the units receiving manning priority prior to America's formal entry into World War II.

By mid-1941, the United States deployed seven defense battalions to stage a strategic defense and gain time in the event of war. All of the battalions organized differently, tailored to a specific mission or deployment location, similar to a modern MAGTF.¹⁶ Deployment prior to the formal onset of hostilities allowed the United States to defend its national interests while the nation generated forces to execute War Plan Rainbow 5. As such, the defense battalions did much of the Marine Corps' early fighting during World War II. For the Marine Corps, the battalions held the defenses for advanced naval bases in the Pacific and Atlantic during a period of limited manpower while the Marine Corps formed Marine Divisions.

PART II: EVOLUTION: Pickett Lines to Tactical Mobility

FIRST MARINE DEFENSE BATTALION: The Pickett Line and Wake Defenders

The 1st Marine Defense Battalion is the most well-known of the Defense Battalions due to its storied defense of Wake Island. As part of the Hawaiian picket line, the Battalion established defenses on the outposts of Palmyra, Johnston, and Wake Atolls, beginning in 1941.¹⁷ The furthest west and most vulnerable island in the Hawaiian picket line was Wake Island.

When the Japanese attacked Wake Island, they faced an understrength and under-equipped force resulting in the garrison's surrender following two weeks of combat. On 5 December, the Wake Island Detachment of the 1st Defense Battalion consisted of 477 personnel assigned to two 3" anti-aircraft gun batteries, one 5" coastal artillery battery, and VMF 211 a 12 F4F-3 Wildcat squadron.¹⁸ This force was 50 percent of the planned strength and lacked tank and infantry units required for a counter-attack force as well as radar. On 8 December, the Defense Battalion had their first engagement with the Japanese during an aerial raid against Wake airfield.¹⁹ The lack of radar prevented the Wake Island defenders from acquiring early indications of the attack and also meant that the anti-aircraft batteries were unable to coordinate massed fires. The air raid destroyed 7 F4F-3s on the ground with minimal Japanese casualties and two days later the Japanese began a deliberate amphibious assault to seize Wake Island.²⁰ Had the necessary radar been in place at the time of the attack it is unlikely the Japanese would have inflicted the heavy damage they did.

The defense of Wake Island highlights the strengths and weaknesses of the early static Defense Battalions. Firepower was the defense battalion's strength. Initially believing the assault would be an easy rout, a Japanese assault force of eight surface combatants, transports,

submarines, and attack aircraft began their assault on 10 December 1941.²¹ The defenders directed their heavy guns and five remaining aircraft on the surface combatants and transports resulting in the sinking of two destroyers and one transport as well as inflicting heavy damage on two cruisers causing a withdrawal by mid-morning.²² Even understrength and underequipped, the Wake Island defenders inflicted heavy losses on the Japanese, resulting in the loss of their assault forces, approximately 500 personnel, and a loss of 50 percent of their naval fire support assets. These losses dissuaded the Japanese from attacking directly into the defenders main firepower in the subsequent landings.

The second Japanese assault succeeded where the first landing failed. On 23 December, the Japanese executed a second amphibious assault on Wake Island by beaching their transports at night while keeping their surface combatants out to sea in an air defense role.²³ On this occasion, the Japanese avoided the defenders strength by attacking at night, negating the effects of air and coastal defense artillery that was limited to optical fire control. Though the Marines on Wake defended ferociously, once the Japanese landed they exposed the Defense Battalion's critical vulnerability in that they lacked tactical mobility and a counter-attack force. The commanders had to make a decision, order their men to pick up rifles and machine guns to repel the attackers moving inland, or operate the heavy guns to prevent additional troops from landing. Clearly, the defenders could not accomplish both tasks. Shortly after the attack began the Japanese destroyed the remaining Wildcats, severed communications, and surrounded the garrison's command post resulting in Wake Island's surrendered on 23 December 1941.²⁴

Over the span of two weeks, the Wake Island detachment of the 1st Defense Battalion succeeded in some ways and failed in others giving planners a clearer understanding of the limitations inherent in the organization. Their actions provoked the Japanese to divert carrier

assets from other missions in the region and delayed the Japanese Navy to gain time for the Americans reinforce other bastions in the Pacific. Had the defenders on Wake had a full complement of personnel and reinforcement in the form of tanks and infantry they may have repelled the second Japanese attack. Additionally they may have been able to hold the defenses until relief arrived from Hawaii. Although the Marines and Sailors lost the battle, the time they gained delayed Japanese advances long enough to allow strategic reinforcement of other outposts, resulting in a complete change in the offensive initiative by the end of 1942.

FIFTH MARINE DEFENSE BATTALION: Strategic Mobility and Crisis Response

The 5th Marine Defense Battalion's deployment to Iceland demonstrated the use of strategic mobility to react to an emerging crisis. In response to the British need to relocate thousands of soldiers from Iceland, the United States agreed to support the defense of Northern Atlantic shipping lanes and defend Iceland from German attack.²⁵ Due to peacetime policy, only volunteers could be deployed overseas, which prevented the Army from rapid deployment due to an influx of conscripts in 1941.²⁶ This fact resulted in the condition that the only trained combat forces available for immediate peacetime deployment were the Marines. On 7 July 1941, 5th Marine Defense Battalion, as part of 1st Marine Brigade, arrived in Iceland to relieve the British defenders.²⁷ Once established, the Defense Battalions Iceland deployment represented a successful reaction to an emerging crisis that supported strategic alliances and objectives in the European theater.

The defense of Iceland presented a problem for the Defense Battalion. Logically Iceland should have been a large island defense versus the inland harbor defense employed.²⁸ However, the coastal artillery guns lacked the necessary range to defend the entire island effectively due to

its sheer size.²⁹ To mitigate this risk, the defense battalion shifted to an inland harbor defense of the capital city of Reykjavik against aerial attack instead of an area defense. Even though the Germans never attempted an assault on Iceland, the Defense Battalions tracked enemy reconnaissance aircraft on multiple occasions.³⁰ The lessons learned in the Atlantic would assist the Battalion in their subsequent deployment to the South Pacific.

The 5th Defense Battalion's deployment to Iceland was an example of crisis response. The Battalion deployed rapidly, aboard naval shipping, to gain time for the War Department while additional units organized and trained. Once the United States declared war, the conscript heavy Army was able to deploy overseas and take over from the 1st Marine Brigade. The 1st Marine Brigade and 5th Defense Battalion remained on guard until 8 March 1942 when the Army assumed the permanent defense of Iceland.³¹

THIRD MARINE DEFENSE BATTALION: First to Fight, First to Evolve

The 3rd Marine Defense Battalion underwent an extraordinarily dynamic evolution from static defense to tactical mobile forces in a short period. Initially stationed at Pearl Harbor, the Battalion relocated to Midway in February 1941 to establish defensive positions until relieved by 6th Marine Defense Battalion in July 1941.³² While the 3d Marine Defense Battalion recuperated on Oahu, the Japanese attacked Pearl Harbor on 7 December 1941. In the initial moments of the attacks, the battalion emplaced anti-aircraft guns around the Marine Barracks and destroyed three Japanese aircraft during the second attack wave.³³ Though limited in effectiveness, the battalion was one of the few U.S. units to destroy enemy aircraft during the raid that crippled the American fleet. Following the attacks of 7 December the 3rd Marine Defense Battalion's mission changed to reinforcing 1st and 6th Marine Defense Battalions.

In January and February 1942, 3d Marine Defense Battalion rapidly reinforced the Hawaiian picket line, bringing additional heavy firepower and mobility to what would be a turning point victory for the U.S. in the Pacific. U.S. intelligence deciphered Japanese coded messages and determined that Midway was the objective of the Japanese fleet's next major offensive in the Pacific.³⁴ 3d Marine Defense Battalion reinforced Midway with anti-aircraft guns, tanks, and infantry.³⁵ By heavily reinforcing Midway, the 3rd Defense Battalion helped set the American trap for the Japanese Fleet.

The 3rd and 6th Marine Defense Battalions inflicted heavy damages on the attacking Japanese aircraft and contributed to the U.S. Fleet's destruction of the Japanese Fleet's offensive capability in the Pacific. Despite Japanese inflicted damages to Midway airfield, the coastal defenses and air defenses remained intact causing the Japanese Fleet commander order a re-attack on Midway.³⁶ In doing so all of his aircraft armed with torpedoes, destined to strike the American Fleet, had to rearm with high explosive munitions to strike the Midway defenders.³⁷ Incidentally, this action kept the Japanese aircraft on the decks of their aircraft carriers while the U.S. fleet struck. The U.S. counterstrike resulted in the destruction of four aircraft carriers, the most experienced Japanese Naval air wings, and experienced maintenance crews.³⁸ Through fierce defense of Midway Island, the Marine Defense Battalions gained valuable time for the American fleet and helped turn the War in the Pacific in the Americans favor.

Following the Battle of Midway the Americans turned to the offensive and the 3d Marine Defense Battalion's mission changed from static defense to supporting amphibious assaults. Adopting lessons from the Wake and Midway battles the Battalion reorganized and re-equipped prior to the Guadalcanal offensive. All machine gun batteries consolidated into a special weapons group; the organization of the seacoast artillery, searchlights, and radar groups

remained unchanged.³⁹ Tactically, the new organization evolved into coordinated air defense and beach defense versus autonomous static defense.

At Guadalcanal, 3rd Marine Defense Battalion played a critical role in defending the beachhead and during the heroic defense of Henderson Field. After the initial invasion, the 3d Marine Defense Battalion emplaced the 90mm anti-aircraft artillery and special weapons groups around Henderson Field.⁴⁰ There the battalion shot down numerous enemy aircraft while the seacoast artillery repelled Japanese naval reinforcement.⁴¹ On 12 September 1942, the Japanese launched a ground assault to recapture Henderson Field in the famous Battle of Bloody Ridge.⁴² During the nighttime assault, Battery G, the searchlight battery, illuminated the attackers and blinded their frontline waves.⁴³ This action exposed the Japanese attackers to American machine gun fire and prevented the attackers from locating the American defenses. Additionally the Japanese naval gunfire support directed all of their fires against the searchlight battery.⁴⁴ By drawing fire away from the defensive lines, Battery G allowed the Marine defenders to direct unsuppressed fires on the attackers and prevented Henderson Field from falling to the enemy.

NINTH MARINE DEFENSE BATTALION: Tactical Offensive Mobility

By 1943, the Marine Defense Battalions evolved into an offensive combined arms team taking on missions far removed from the static defenses of Wake and Iceland. The 9th Marine Defense Battalion participated as an offensive combined arms team in support of General Douglas MacArthur's New Georgia campaign. Newly equipped with 155mm howitzers and M3 light tanks, the Ninth Defense Battalions played a critical role in the OPERATION TOENAILS. The Ninth Defense Battalion's mission was to assist in the capture of Rendova Island, provide anti-aircraft fire, fire 155mm artillery on Munda Airfield, and repel enemy naval surface

attacks.⁴⁵ By placing the 9th Defense Battalion in early assigned waves, the Battalion was able to bring its heavy guns rapidly into action on Munda airfield and direct their anti-aircraft fire on enemy aircraft. Furthermore, the Defense Battalion's tank platoon led infantry through the jungle clearing lanes through the tall grass and destroying machine gun bunkers in their way.⁴⁶ The inclusion of tanks and assignment of assault missions completed the Defense Battalion's evolution from static defense units to tactically mobile offensive support units.

While the 43d Division completed the seizure of Rendova Island, the 9th Defense Battalion demonstrated its flexibility by rapidly transitioning to heavy artillery fires supporting the main assault on New Georgia Island. By positioning on an island adjacent to New Georgia, the 9th Marine Defense Battalion was able to shell Japanese beach defenses prior to Army's main landing unmolested by enemy ground forces.⁴⁷ Early offset landing of heavy artillery prior to main assault is highly beneficial for the landing force commander since it can supplement naval aviation and surface fire support that requires good weather and steady sea state. The Army and Marine Corps repeated this tactic wherever possible for the duration of the War.

PART III: MODERN APPLICATION

CONTEMPORARY OPERATING ENVIRONMENT

In the contemporary operating environment, the United States faces a similar but less intense environment than the 1920s and 1930s. In the Far East, China is a rising economic powerhouse and emerging military competitor. Like Japan of the 1930s, China possesses anti-access and area denial (A2/AD) capabilities and continues to develop sophisticated systems designed to prevent US influence.⁴⁸ Like the Japanese, who used submarines and Kamikaze aircraft to deny U.S. access the Chinese can use advanced anti-ship cruise missiles (ASMCs). In

the Peoples Liberation Army's (PLA) active offshore defense plan, China describes its area of interest in the Pacific as two island chains. The First Island Chain runs from Japan, through the Ryukyu Islands, Taiwan, the Philippines, the northern shore of Borneo and across the South China Sea to Vietnam.⁴⁹ The Second Island chain extends west of Japan and includes the Bonin Islands, the Marianas Islands, the Caroline Islands, and portions of the Indonesian archipelago.⁵⁰

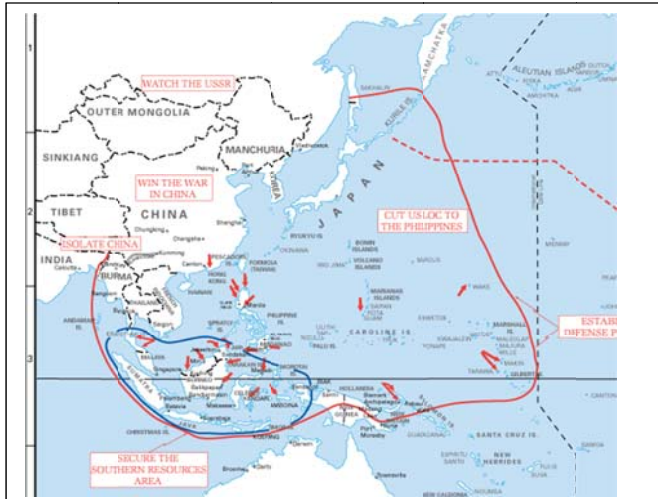


Figure 1. Japan's Greater East Asian Co-Prosperty Sphere⁵¹



Figure 2. People's Liberation Army Active Offshore Defense Plan island chains⁵²

China's territorial claims and militarization of the South and East China Seas eerily mark an expansion eastward across the Pacific similar to, albeit more slowly than, Japan of the 1930s. North Korea represents the disruptive force that China was in the 1920s. North Korea and South Korea frequently engage in low scale violence in the form of artillery exchanges, naval skirmishes, and Special Forces operations. In addition, North Korea threatens armed conflict against the United States and its allies. These actions are disruptive and draw the U.S.'s attention away from other strategic operations in the region.

Outside of East Asia, other nations engage in an alliance of convenience or cooperation with China. Russia represents the rising European military power that Germany was during the

early 1930s.⁵³ The Russian military is an empty force but still possesses capable nuclear weapons, fifth generation fighters, and excellent cyber-warfare capabilities. Russia has a recent history of belligerence within Eastern Europe that disrupts the regional political stability, but will likely remain a disruptive power and not the hemispheric threat that Germany became by 1940. The global military-political tensions coupled with the United States current fiscal constraints combine further to create concerns similar to the conditions that existed in the interwar period.

The United States government is in a period of fiscal austerity that will drive the Department of Defense (DoD) towards cost cutting measures. This is somewhat similar to the fiscal austerity that decreased military expenditure during the interwar period. Today, the military accounts for nearly 16.5% of the U.S. government's annual budget.⁵⁴ After 14 years of deficit spending and increasing national debt, the DoD will inevitably face additional spending cuts and budget caps through 2023.⁵⁵ Spending cuts are not an anomaly but are part of a normal cycle of build up during a conflicts and drawdown post-conflict. The U.S. military has been in major conflicts since 2001 and as of 28 December 2014, the Afghan Campaign of Operation Enduring Freedom transitioned to Afghan-led operations.⁵⁶ With no major combat operations abroad, the U.S. military will continue to reduce manpower in accordance with the normal post-conflict manpower cycle. Personnel and facilities expenditures account for 75% of the DoD's budget.⁵⁷ Should budget deficits continue unabated, the DoD may continue personnel cuts as a means to reduce costs.

CHALLENGES AND OPPORTUNITIES

In 2011, President Barrack Obama announced a rebalancing of U.S. military forces across the world with a focus on the Pacific.⁵⁸ Known in the media and the “Pivot to the Pacific”, rebalancing challenges the DoD deter global threats while contending with fiscal austerity, receding manpower, A2/AD capabilities, and high demands for Marines and amphibious shipping throughout the world. The Pivot to the Pacific represents an opportunity to revisit advanced base operations and the Marine Defense Battalions as a potential solution to some of the challenges presented by an A2/AD environment.

On 1 April 2014, the Office of the Secretary of Defense drafted a memo that may shape the future of the Marine Corps. The memo “Integration of the Naval Services” directs the United States Navy and United States Marine Corps to reintegrate into a single service and reestablish the Fleet Marine Forces.⁵⁹ Though the memo is an unsigned and not officially released document, it reveals significant insight into the thoughts of senior DoD planners as to the future of the Marine Corps. By reintegrating the Naval Services, the Secretary of Defense intends to reduce personnel, infrastructure, and equipment costs while increasing the forward posture of Expeditionary forces. To reduce expenditures while still maintaining forward presence the Marine Corps will provide each Geographic Combatant Commander (GCC) a Marine Expeditionary Brigade (MEB), capable of disaggregating into MEUs, a Crisis Response Special Purpose MAGTF (SPMAGTF-CR), and forces to defend naval bases and stations.⁶⁰ The Marine Corps has an opportunity to meet the requirement for forward deployed forces and hedge against rival powers in the Pacific by employing Defense Battalion like organizations as Expeditionary Advanced Base Forces formed from existing MAGTF structures.

EXPEDITIONARY FORCE 21

The 2014 Marine Corps capstone concept Expeditionary Force 21 (EF21) describes future employment opportunities and conflict conditions where a defense battalion like organization could deploy. General James Amos states, “the ability to establish a network of austere advanced bases-by occupation or seizure- as a means of dispersing aircraft, missiles, and intelligence, surveillance, and reconnaissance [ISR] assets needs to be comprehensively explored.”⁶¹ This statement is a direct link to the Marine Corps Title 10 responsibilities to seize advanced bases for the U.S. Fleet and missions conducted by Defense Battalions. Revisiting advanced base operations is critical for implementing EF21 since current and projected amphibious ship operational availability does not meet GCCs’ requirement for amphibious forces.⁶² Also forward basing reduces the total tonnage required for transoceanic sealift or airlift during wartime conditions. The “oceanic outposts” or Expeditionary Advanced Bases, could mitigate the risk to the GCC’s campaign plan by enabling forward staging of strike capabilities, forces, supplies, maintenance capabilities, and command and control structure.

Expeditionary Advanced Based Force employment can assist to implement EF21’s MEB compositing by providing a defended site, forward deployed shaping forces, and forward maintenance capabilities. Compositing a MEB may consist of joining land based pre-positioned forces, sea-based amphibious forces, and fly-in forces.⁶³ If capable forces are already near potential crisis areas in the Pacific, with the capability to defend key airfields and harbors, they will greatly reduce the time required to composite MAGTFs. If the advanced forces have ISR, offensive strike, and electronic warfare capabilities they could begin shaping the environment while additional Marine and Naval Expeditionary forces converge. Forward maintenance capabilities are critical for expeditionary operations. Just as warships need facilities for

maintenance and rearmament near the crisis zone, expeditionary forces need forward maintenance facilities to repair our increasingly technologically advanced equipment. Seabasing could provide some of the maintenance capabilities but relying on sea-based facilities with low operational availability in an A2/AD environment incurs a significant risk to the commander. Notably any advanced based aviation assets used to shape the environment will require secure maintenance facilities. Potential drawbacks associated with establishing forward bases are fiscal costs and losing our expeditionary posture. Forward deployed forces must retain the capability to move maintenance infrastructure as situations change. Additionally regularly moving increases operational access and force familiarity throughout the region. Increased operational access and refraining from excessive contracted construction could offset the costs of establishing and subsequently moving advanced bases and facilities. Establishing advanced bases and rapidly building up capabilities could mitigate some risk while compositing a MEB as envisioned in EF21.

Security Cooperation is a key focus area in EF21 that Expeditionary Advanced Base Forces can conduct and need to be successful in an A2/AD environment. Security Cooperation is a form of soft power that establishes military to military relationships and familiarizes forces with the environment where they may operate in the future. By training with foreign forces, U.S. forces gain access through habitual relationships and security partnerships. While conducting Security Cooperation, exercise forces can identify and improve sites for future advanced bases in conjunction with Naval Expeditionary Forces and Seabees. As stated in EF21, “[t]heater security cooperation activities that account for establishing these expeditionary sites must be well-integrated and planned.”⁶⁴ Establishing Expeditionary Advanced Bases in foreign countries provides the Marine Corps an opportunity to increase operational access and increase the

capabilities of partners and potential allies. Historical precedent exists for advanced base forces conducting Security Cooperation and increasing the capabilities of native forces. From 1940-1942, the 7th Marine Defense Battalion trained native forces in Samoa eventually exercising command and control of a Samoan company.⁶⁵ Once an Expeditionary Advanced Base Force deploys to a foreign state, its physical presence demonstrates U.S. resolve and interest to protecting its partners. Locations that Expeditionary Advanced Based forces should conduct Theater Security Cooperation to support Operational Access in the Pacific are Vietnam, the Philippines, Malaysia, Indonesia, Japan, and South Korea.

Conducting Expeditionary Advanced Base Operations does not require establishing new permanent organizations but can form from existing organizations such as MEUs and SPMAGTFs. SPMAGTFs have foundations and design similar to the Defense Battalions. Just as each Defense Battalion organized uniquely to its stated purpose the SPMAGTFs organize uniquely. While organized for a specific mission set the MAGTFs remain flexible and can expand or reorganize should a crisis emerge or their mission change. Currently, the SPMAGTF in the form of Crisis Response SPMAGTFs are predominantly infantry and aviation heavy due to their mission sets and large potential areas of operations. However, if the Special Purpose MAGTF trained and organized for a specified mission of establishing and defending an advanced base in an A2/AD environment the unit could have a very different look. By creating a MAGTF consisting of a headquarters, heavy artillery, air defense, STOVL aircraft, ISR, electronic warfare, maintenance capabilities, level II medical capabilities, aerial refueling, tilt-rotary assault support, and an infantry unit the Marine Corps could provide a lethal forward presence capable of operating in an A2/AD environment. This organization would resemble a modernized version of Pete Ellis's Defense Regiments, in effect, a modern Defense Battalion.

Additionally the Marine Corps could deploy multiple Expeditionary Advanced Base Forces throughout the Pacific and tailor each unit to a specific environment or threat.

With limited organizational changes, Marine Expeditionary Units could execute Expeditionary Advanced Base Operations to support Operational Access in certain scenarios. Like the Defense Battalions, MEU's are strategically mobile through embarkation on amphibious shipping and capable of deployment into austere environments. Like the 9th Defense Battalion that conducted independent landings in the South Pacific, modern MEUs can conduct amphibious raids or seize lightly defended ports and airfields. However, MEUs are not normally organized to operate in an A2/AD environment or defend ground for an extended period. The preponderance of forces in a MEU's Battalion Landing Team are infantry that use wheeled vehicles, amphibious tractors, or assault support aircraft for tactical mobility.⁶⁶ The Composite Aviation Squadron consists of medium and heavy lift assault support aircraft, light attack and utility helicopters, STOVL attack jets, low altitude air defense, command and control, and ground support.⁶⁷ The Combat Logistics Battalion is a balanced force tailored to provide logistics functions based on MAGTF force composition and potential operating environment.⁶⁸ A potential scenario where a MEU could conduct Expeditionary Advanced Base Operations is early insertion into a permissive host nation near a potential threat or to establish temporary facilities prior to the arrival of more permanent base defense forces.

Committing a MEU to Expeditionary Advanced Base Operations poses several drawbacks. Once the MEU commits to Expeditionary Advanced Base operations, they could remain in place for several months making them unavailable for additional tasking. Additionally current Marine Corps air-defense capabilities consist of low altitude man-portable Stinger missiles and AV-8B STOVL attack aircraft. The limited air defense represents a capability gap

that would limit MEU-sourced Expeditionary Advanced Bases to areas of low enemy air, cruise missile, and ballistic missile threats or where the base is under Army or Navy air defense shields. Though MEUs could potentially serve as Expeditionary Advanced Base forces, their utility may only be in permissive environments.

MAXIMIZING EMERGING TECHNOLOGIES AND TACTICS

By taking advantage of modern capabilities such as High Mobility Rocket Artillery System (HIMARS), the F-35B Joint Strike Fighter (JSF) STOVL aircraft, and MV-22 Osprey the Expeditionary Advanced Base forces can influence wide areas and penetrate A2/AD defenses. HIMARS would provide long-range all-weather precision fire support capable of destroying point targets and may soon be able to strike enemy vessels at sea. The F-35B JSF can operate from short runways and to provide offensive air support, anti-air warfare, armed reconnaissance, aerial surveillance, and electronic attack. Additionally it is a stealth aircraft capable of operating in an A2/AD environment. The MV-22 has an unrefueled range of 780 nautical miles and is capable of vertical landing and takeoff.⁶⁹ With its range and speed, the MV-22 can move forces and supplies across great distances allowing the commander to disperse forces or position main bases outside of the range of land-based air defenses. The combination of these three systems provides commanders technological capabilities that could combine with tactics ideally suited for Expeditionary Advanced Base Operations in the Pacific.

HIMARS could fill some of the roles that the shore defense artillery and field artillery groups provided to the Defense Battalions but on a greater scale by combining emerging capabilities with modern tactics. The USMC and U.S. Army HIMARS is a mobile rocket launcher that is transportable by C-130, amphibious shipping, and surface connectors.⁷⁰

Currently, the system can fire multiple launch rockets with a range of 85km or tactical missiles with a 300+km range at land based targets.⁷¹ Additionally the DoD is currently developing longer range rockets to strike targets at 125+km and developing missiles to strike point targets and receive in-flight updates to strike moving targets in excess of 500km.⁷² The ability to update target locations while in flight could allow the missile to strike ships at sea. Increased range and the capability to strike enemy ships at sea allows HIMARS to take the place of what was the sea coast and field artillery groups. Once developed and fielded the 500km tactical missiles will provide the Expeditionary Advanced Base Force the capability to sink enemy surface combatants or ASCM carrying vessels while they are still two days sailing away and reduce air defense threats. If an enemy amphibious or ground force threat existed, the HIMARS units could be paired with conventional 155mm artillery to provide close-in fire support and special munitions. The Marine Corps used this composite battery organization successfully in Afghanistan to mitigate HIMARS minimum range restrictions, provide illumination, provide smoke screens, and provide close-in defense for ground installations.⁷³

With the ability to engage long range targets from dispersed locations, the HIMARS units could also supplement U.S. Navy Tomahawk Land Attack Missile (TLAM) strikes, relieving some of the cruisers and destroyers for other missions. Inserting HIMARS into a crisis zone early is similar to the employment of the 9th Marine Defense Battalion and other units, whereby long-range heavy artillery engaged enemy targets from adjacent islands prior to main assaults and supplemented Naval Surface Fires. Since a HIMARS battery can disaggregate into three firing platoons, the firing units can disperse for a limited period to cover greater ranges and improve survivability. In the event that the U.S. needed to penetrate the first island chain in the PLA's active offshore defense plan, as many as twelve firing platoons could deploy to austere

locations surrounding the South and East China Seas using one active duty Marine Corps HIMARS Battalion. With the ability to pre-stage ammunition and launchers, the HIMARS battalion could relieve 12 naval vessels from TLAM missions or allow the naval vessels to remain farther out to sea until fires neutralize the Anti-Ship Ballistic Missile (ASBM) and ASCM threat. Using HIMARS in this manner reduces the risk to mission and risk to the force as a whole. Should an adversary counter-attack and completely annihilate a HIMARS firing platoon position, the force would lose one firing unit, 40 personnel, and approximately 40 million dollars' worth of equipment.⁷⁴ Although tragic, the cost to the force is much less than the loss of a *Zumwalt*-class destroyer or a *Ticonderoga* class cruiser. Loss of one of these ships due to submarines, ASBMs, or ASCMs could result in 142 personnel and over 3 billion dollars' worth of equipment or 330 personnel and over 1 billion dollars' worth of equipment respectively.⁷⁵ Additionally, loss of a cruiser or destroyer would result in the loss of additional Anti-Submarine Warfare, Ballistic Missile Defense, Anti-Air Warfare, Anti-Surface Warfare and Strike Warfare Capabilities. Including HIMARS in Expeditionary Advanced Base Operations could support the overall naval campaign and complement other capabilities in an A2/AD environment.

The F-35B JSF's capabilities and Expeditionary Advanced Base Operations complement one another by providing force projection from dispersed secured sites, similar to the deployment of F4F-3 Wildcats to the Hawaiian Picket Line. The F-35B is a stealth aircraft capable of performing offensive air support, counter air, air interdiction, escort, armed reconnaissance, electronic attack, and suppression of enemy air defense missions.⁷⁶ The F-35B's short takeoff and vertical landing capability make it uniquely suited to take advantage of Expeditionary Advanced Bases. If the Marine Corps pre-positioned fuel, weapons, and maintenance capabilities on expeditionary bases the F-35B could operate for a limited duration from these bases without

needing to plan for and resource additional security and sustainment forces. This tactic is most advantageous when strike aircraft wings cannot mass from a single main airbase. The effect is similar to the Hawaiian Picket Lines of the early 1940s but for offensive versus defensive purposes. However prepositioning fuel, weapons, and maintenance capabilities is costly and could provide the enemy information on friendly intentions. Emerging F-35B employment concepts can mitigate the need to preposition supplies for long durations on advanced bases

Establishing multiple dispersed advanced bases capable of defending STOVL sites still provides friendly forces options by employing Distributed STOVL Operations (DSO). DSO is a tactic that could mitigate A2/AD defenses by dispersing STOVL aircraft across multiple sites inside enemy engagement zones for a limited period. DSO from a land based site could consist of as few as four F-35B supported by MV-22 tiltrotor aircraft and CH-53E/K heavy lift helicopters up to multiple squadrons at spread over multiple DSO sites, supported by C-130s or other Joint Aircraft depending on threats and availability of runways and repair facilities.⁷⁷ Ideally, active offensive F-35B operations from DSO sites last less 72 hours to disrupt enemy targeting cycles.⁷⁸ By coupling DSO with Expeditionary Advanced Base Operations, every Expeditionary Advanced Base serves as a potential defended DSO site or decoy site. Additionally this combination can supplement aircraft carriers operations, can mitigate limited air operations hours from amphibious vessels, and can provide defended locations for aircraft to divert to in the event of an emergency. The future capabilities of F-35B using Expeditionary Advanced Bases to support DSO presents a clear opportunity to gain operational access in the Pacific A2/AD environment.

The MV-22 Osprey tilt-rotor aircraft could provide critical assault support to Expeditionary Advanced Base Operations. With its unrefueled 390nm radius and a maximum

speed of 250nm per hour, the MV-22 can support multiple bases dispersed throughout the Pacific.⁷⁹ With its proven ability to land at austere sites and the MV-22 can help secure, sustain, and reinforce Expeditionary Advanced Bases that lack C-130 or C-17 capable runways. One of the issues the early defense battalions had was the lack of infantry to repel amphibious landings such as at Wake Island. In the event an Advance Base requires reinforcement, a squadron of MV-22s could deliver 288 Marines 750 miles in approximately 3 hours. In the Western Pacific, this could represent a Squadron from an amphibious ship in the Western Philippine Sea reinforcing a unit in northern Borneo, or departing from Okinawa and reinforcing a unit west of Manila. Aerial refueling greatly increases the MV-22's range and increases the range of potential reinforcements and fighter escorts.

The V-22 Aerial Refueling System (VARs) is an emerging capability that could enhance Expeditionary Advanced Base Operations by supporting DSO. The VARs is a roll on module capable of installation in any MV-22 that turns the aircraft into an aerial refueler.⁸⁰ Once fielded, aerial refueling for F-35Bs and MV-22s will overcome the limitations of only using larger fixed wing aircraft that require runways and commercial flight plans. Positioning MV-22s with VARs at Advanced Bases will require pre-positioning of large stocks of aviation fuel, but it will allow F-35s to refuel after takeoff thereby extending its combat radius. Additionally MV-22s with VARs could rapidly establish short duration tanker tracks to support transiting aircraft by departing from an advanced base. With their small size and ability to take off from austere airfields, the MV-22 with VARs would greatly reduce the risk to friendly aircraft by reducing the requirement for large fixed wing tankers. In an A2/AD environment large fixed wing tankers are vulnerable to enemy aircraft and air defenses since they lack stealth and need to make long transits from limited number of airbases with larger runways. Being able to base tankers from

any defensible location that can support MV-22s and bulk aviation fuel delivery would complicate enemy targeting by exponentially increasing potential refueling tracks and air avenues of approach. The MV-22s and Expeditionary Advanced Base Operations mutually support one another to gain Operational Access in the Pacific A2/AD environment.

CAPABILITY GAPS

Current Marine Corps organic weapons system capabilities have several capability gaps that hinder Expeditionary Advanced Base Operations in the Pacific A2/AD environment. The lack of organic ground-based air defense above low altitude air defense is the most significant capability gap that the Marine Corps needs to overcome. Third Low Altitude Air Defense Battalion (3d LAAD) is the direct decedent of the 3d Marine Defense Battalion. 3d LAAD's main air defense weapons consist of shoulder-fired FIM-92 Stinger missiles that have a range of 8km with a vertical range of 3.8km.⁸¹ In comparison, the 3d Defense Battalion of 1944 had 90mm anti-aircraft guns with a horizontal range of 16.5 km and a vertical range of 10.3km.⁸² Though very effective against low-flying attack aircraft the Stinger missiles are not capable of providing useful defense against high flying jets using standoff munitions, cruise missiles, ballistic missiles, artillery, or small unmanned aerial systems (SUAS). The Marine Corps could combine several options using organic program capabilities, potential program capabilities, and joint capabilities to protect an Expeditionary Advanced Base from those threats.

The first option to reduce the risk from lack adequate air and missile defense is a combination of active and passive measures to reduce the risk. Active measures include directly attacking enemy missile launch platforms, aircraft, and artillery prior to their mobilization or entering into their weapons delivery range. Using F-35Bs and HIMARS future munitions, an

Expeditionary Advanced Base Force could realistically neutralize surface threats and attack aircraft air threats out to 500km for a limited period. However eliminating the Western Pacific A2/AD threat entirely to include ASCMs and ASBMs before they can attack a base is unrealistic. Passive measures such as hardening key infrastructure, dispersing forces, repositioning forces, deploying decoys, and deception may mitigate some risk but cannot eliminate it entirely.

An option to reduce risk posed by SUAS, artillery, and mortars is to develop portable directed energy weapon systems or integrate Counter-Rocket, Artillery, and Mortar (C-RAM) land-based Phalanx 20mm Gatling guns (LPWS) into existing force structure. SUAS are inexpensive and commercially available from civilian vendors. SUAS pose a threat by allowing an adversary to survey an Advanced Base for targeting or to determine whether or not a site is a decoy. C-RAM LPWS is the vehicle-mounted version of the U.S. Navy's Phalanx close-in weapon system.⁸³ The C- RAM LPWS is a sensor controlled vehicle mounted 20mm cannon capable of engaging low-flying targets at a range of 2000m.⁸⁴ Incorporating the C-RAM into the existing 3d LAAD table of organization and equipment could provide the Expeditionary Advance Base Force an automated system to engage SUAS as well as artillery, mortars, and cruise missiles. Directed Energy Weapons can supplement existing LAAD capabilities by providing a non-kinetic means to destroy those threats at a greater range than the LPWS and eliminate the potential for unexploded ordnance.

Integrating Expeditionary Advanced Base Operations with the Joint Force's air and missile defense capabilities could mitigate some risk of attack in the Western Pacific. Increasing the Marine Corps' force structure to defend against medium and high altitude attacks from bombers, attack aircraft, and ballistic missiles is unrealistic. Therefore, all Expeditionary Advanced Base planning should be integrated with the Joint Force or to maximize coverage by

U.S. Army, Navy and Air Force defense shields. Larger bases containing key infrastructures such as port facilities, airfields, and maintenance facilities are longer duration sites and more vulnerable to ballistic missile and air attack. A single Navy Aegis-equipped Cruiser can track and engage enemy aircraft or ballistic missiles at a range of 1,650 km and altitude of 225km with SM-3 missile or lower flying cruise missiles and aircraft out to 370km with the SM-6 missile.⁸⁵ The U.S. Army Patriot and Terminal High Altitude Area Defense system (THAAD) can engage targets and at ranges of 35km and altitudes of 36km or ranges of 195km and altitude of 150km respectively.⁸⁶ Since the joint forces possess air and missile defense capabilities well beyond what the Marine Corp can realistically gain, planners should ensure joint planning to mitigate organic Marine Corps air and missile defense deficiencies.

The Marine Corps can mitigate risk incurred by its significant air and missile defense capability deficiency. By directly engaging threats from numerous dispersed positions the total number of threat systems decreases. Passive measures will confuse enemy targeting assets. Integrating existing joint programs into existing force structure increases the Marine Corps defensive capabilities for close threats around critical infrastructure. Finally, ensuring integration with joint air and missile defense assets reduces the risk from high-altitude aircraft, cruise missiles, and ballistic missiles. Expeditionary Advanced Base forces should maximize existing or emerging capabilities and tactics, potential procurement items, and Joint capabilities to increase survivability in the Western Pacific.

CONCLUSION

The Marine Defense Battalion proved their value during World War II for a low cost of equipment and Marines. For a handful of well-placed and well-employed battalions, the U.S.

effectively defended strategic areas and enabled larger offensive operations. As a crisis response force in the Atlantic, to the defense of the Hawaiian Islands, to the island hopping campaigns across the South and Central Pacific, the Battalion's showed that a firepower heavy combined arms task force could protect critical infrastructure and provide offensive support to amphibious landings. They filled a necessary economy of force effort during a period of fiscal austerity with limited amphibious shipping availability and growing military tensions in the Western Pacific.

The contemporary operating environment coupled with fiscal constraints presents the Marine Corps with challenges to rebalance forces and implement EF21. By applying the lessons learned from the Defense Battalions we know that a small combined arms force can gain time and access for larger Expeditionary Forces. These small but capable forces can protect critical infrastructure and lines of communication while disrupting an adversary's offensive advances and A2/ AD efforts. By developing Expeditionary Advanced Base operations coupled with the advanced systems such as HIMARS, the F-35B, and the MV-22 integrated with the Joint Force, the Marine Corps can continue to project force in the A2/AD environment posed by China in the Western Pacific theater.

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