THE AMERICAN DOCTRINE FOR THE USE OF NAVAL GUNFIRE IN SUPPORT OF AMPHIBIOUS LANDINGS: MYTH VS. REALITY IN THE CENTRAL PACIFIC OF WORLD WAR II

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The United States Marine Corps and the United States Navy developed during the interwar period a doctrine that addressed the problems inherent in the substitution of naval gunfire for artillery support in an amphibious assault. The invasion of Betio Islet, Tarawa Atoll, in November of 1943 was the first test of this doctrine. It has been said many times since the war that the doctrine basically passed this test and that lessons learned at Tarawa increased the efficiency with which the Marine Corps and Navy applied the prewar doctrine during the rest of the war. An analysis of the planning and execution of naval bombardments in the Central Pacific Campaign, after the invasion of the Gilberts, does not support this claim. This analysis leads the researcher to three conclusions. First, the Japanese developed defenses against many of the effects of the gunfire support doctrine that blunted much of the force of American firepower. American planners were slow to recognize the implications of these changes and, consequently, were slow to react to them. Second, many naval commanders responsible for providing naval gunfire support for Central Pacific operations still equated tonnage of ordnance to effectiveness of bombardment, regardless of their frequent references to "the lessons of Tarawa." Finally, strategic concerns and outright ignorance played a large part in determining the use of naval gunfire, the first taking precedence over the "lessons" and the second leading to the ignoring of the "lessons" all together.

TABLE OF CONTENTS

LIS	ST OF TABLESiv
LIS	ST OF MAPSv
1.	INTRODUCTION1 Endnotes
2.	NAVAL GUNFIRE: HOW IT WORKED
3.	OPERATION GALVANIC
4.	OPERATION FLINTLOCK
5.	OPERATION FORAGER

6.	OPERATION STALEMATE II The Amphibious Assault of Peleliu Strategic and Operational Objectives for STALEMATE II Resources and Plans for the Assault of Peleliu Naval Gunfire at Peleliu – The "Lessons" Ignored Endnotes	258
7.	OPERATION DETACHMENT The Amphibious Assault of Iwo Jima Strategic and Operational Objectives for DETACHMENT Resources and Plans for the Assault of Iwo Jima The Japanese Plan for the Defense of Iwo Jima Naval Gunfire at Iwo Jima – The "Lessons" Made Irrelevant Endnotes	309
8.	CONCLUSIONS Endnotes	362
AP	PENDIX A Tables	368
AP	PENDIX B Glossary	370
W	ORKS CITED	374

LIST OF TABLES

Page

1.	Number of ships present during preliminary and pre-assault bombardments arranged according to ship types	.369
2.	Size of island objectives and total number of combatants per side	369

LIST OF MAPS

	Pag	e
1. 3	Scene of Battle, 1943-19447	4
2.	Pacific Ocean Areas, 15 June 19447	5
3.	Gilbert and Marshall Islands70	6
4.	Tarawa Atoll7	7
5.	Tarawa Atoll Showing Transport Area, Line of Departure and Landing Beaches, 20 November 19437	8
6.	Setio Islet79	9
7.	Marshall Islands13	9
8.	Kwajalein Atoll14	0
9.	Northern Kwajalein Atoll, 31 January 194414	1
10.	Roi-Namur Islands14	2
11.	Mariana Islands	4
12.	Southern Mariana Islands18	5
13.	Saipan Island18	6
14.	Saipan Island, Plans for Landing18	7
15.	Landing Plan and Scheme of Maneuver, Asan Beachhead, Guam200	0
16.	Landing Plan and Scheme of Maneuver, Agat Beachhead, Guam20	1
17.	Palau Islands25	9
18.	Peleliu Island Landing Plan26	0
19.	Iwo Jima Landing Plan	0

CHAPTER 1

INTRODUCTION

[The preliminary bombardment was i]ncredible! I'd never seen such firing in my life! The big guns from the ships and rockets! Then the airplanes came in and bombed and strafed. A little bit later on, they came in and dropped napalm bombs on the base of Suribachi, particularly. ...[The bombardment] seemed to be pretty destructive. I didn't see how much of anything could live through it.¹

When we got up on deck before we went to get on the tractors, the island was just a mass of dust. We thought: "My God! There's nothing left!"²

Unfortunately for Peake, Gossell, and over 60,000 of their marine brethren, the

defensive installations on Iwo Jima had survived in large part and the Japanese defenders protected within them would exact a high price in exchange for their extermination. This was not how Navy and Marine Corps planners had envisioned the operation. Air and naval gunfire support were supposed to have "softened up" the enemy's defenses, neutralizing or destroying the major part of the Japanese combat power to a point where they could be overrun while sustaining a reasonably acceptable number of casualties. Arguably, given their situation and objectives, the Japanese won the battle for Iwo Jima, inflicting more casualties on the Marines than they sustained. Tarawa, in November of 1943, had taught the remedial lessons of how these types of assaults should be carried out and the Marshall Islands operation in January and February of 1944 had proved those lessons valid. The doctrine, as amended and modified by February of 1945, worked. Or did it?

Richmond Kelly Turner, one of the chief architects of the American war effort in the Central Pacific, believed that the amphibious warfare doctrine applied by the United States against Japan during World War II was adequate to meet the challenge of

breaching the prepared defenses of the Japanese. He also believed that it never changed substantially during the course of the war. According to Turner, what appeared to be changes in the doctrine were, in fact, simply changes in the techniques used to implement it.³ The author of this dissertation will analyze the application of one component of this U.S. Navy and Marine Corps amphibious warfare doctrine: the use of naval gunfire in preparation for an amphibious assault. Before this analysis can be undertaken, however, the entire doctrine must be described and discussed. The focus of this work is on the period preceding the point when shore fire control parties are in place and able to direct gunfire support. In other words, the emphasis is on the period when the ships are on their own, with no help from spotters ashore. A study of the operations against the following objectives will serve as a basis for the analysis in this dissertation: Tarawa, Roi-Namur, Saipan, Guam, Peleliu, and Iwo Jima. Turner oversaw all of these save one, the operation to take Peleliu. The author will show that naval gunfire doctrine did indeed evolve, contrary to Turner's assessment, and that the commander of the Fifth Amphibious Force, his superiors, and his subordinates selectively, rather than consistently, applied the evolving doctrine. In addition, he will show that American amphibious warfare planners working in the Central Pacific failed to understand fully the changes that occurred in Japanese defensive strategy and doctrine after the loss of the Marianas and that United States amphibious warfare doctrine in general, and naval gunfire doctrine in particular, failed to adapt sufficiently to counteract this changed strategy. This failure led to an inefficient and unproductive use of the massive preponderance of firepower that the United States Navy was able to bring to bear against the Japanese by 1944-1945, and it increased American casualties in

Central Pacific assault landings as well.

Men have used ships to transport soldiers to battle since the time of the ancient Greek wars.⁴ The United States Marine Corps did not specialize in amphibious warfare until the early twentieth century.⁵ The evolution of American amphibious warfare doctrine over the years 1900 – 1945, at least that part of the doctrine that was developed by the Marine Corps and the United States Navy, can be divided into four periods: 1900-1933, 1934 - 1 August 1943, 2 August 1943 - February 1944, and March 1944 – October 1945. The first of these periods, by far the longest of the four, witnessed the creation of the Advanced Base Force and its evolution into the Fleet Marine Force. The job of the Advanced Base Force was to take and defend bases as part of a naval campaign, the emphasis being on the Western Pacific Ocean and a war with Japan. The objective was to use naval forces to project American power across vast oceans. Naval gunfire support doctrine, such as it existed during the second half of this period, was rooted in concepts derived from World War I artillery doctrine and was tempered by the lessons derived from the Gallipoli operation of 1915. Ships were expected to deliver short but intense pre-landing bombardments from long range while maneuvering at high speed. The doctrine allowed for some ships taking positions close to the landing beach so that they could destroy enemy emplacements that directly threatened the landing force as it came ashore, but such positioning was deemed to be inherently risky. At this time, doctrinally, ships could not win in a gun battle with land forces.

The second period began with the completion of the first version of the *Tentative Manual* and ended with the promulgation of Change 3 of *Fleet Training Publication*

[FTP] 167 (1938). The authors of the Tentative Manual thought that the majority of ships' gunfire was needed only until the landing force's organic field artillery could begin providing support for troops ashore. Consequently, most gunfire support ships were not expected to remain on station very much past H-Hour. The danger of possible air, surface, or submarine attack was too great to keep them there any longer than what was considered essential for the initial battle on the beaches. There were no rules provided by the authors of the Manual for determining the number of ships to be assigned to a particular unit of the landing force. The number assigned was to be determined based upon the number of available ships and the types of fire missions they were to perform. It was suggested that reduced charges could offer improved performance against defiladed positions relative to the usual flat trajectory of naval guns, but the use of these reduced charges was yet to be tested in 1934. Much work was done during the late 1930s to test these theories and to develop a projectile that was better suited than armor piercing and common ordnance for use in shore bombardment. Finally, the emphasis during this period was on surprising the enemy and then neutralizing his forces in the immediate area of the beach until lodgment of the landing force could be achieved. Significant destruction of the enemy's emplacements was considered to be too difficult to accomplish and, if attempted, would endanger the naval vessels engaged in the process by tying them for too long a period of time to the area of the invasion. The object was to bombard for a short time and then to leave the area for open water. To the naval mind, nothing was more important than the security of the ship.

The next period, 2 August 1943 – February 1944, encompassed the evolution of doctrine from the promulgation of Change 3 of FTP 167 until just after the capture of Roi-Namur in the Marshall Islands. Change 3 resulted from the testing of the original doctrine in peacetime during the 1930s and early 1940s and from the American experience in North Africa and the Solomons during 1942. It carried forward many doctrinal ideas from the *Tentative Manual* but there were differences as well. The most prominent example of the conservation of earlier doctrine was that it still taught that neutralization, as opposed to destruction, was the principal goal of naval gunfire. This point of doctrine would change because of Navy and Marine Corps experience in the Gilbert Islands in November of 1943. The assault of Betio Islet, Tarawa Atoll, in the Gilberts was the first time that the two services were able to test their amphibious warfare doctrine in an attack against a defended beach. The difficulties encountered by the 2nd Marines in going ashore on Betio led to the conclusion that destruction, not neutralization, was necessary if landing force casualties were to be kept to an acceptable level. An example of where Change 3 differed from the Manual was that it provided planners with a rule of thumb as to the number of ships to assign in support of each assault regiment: 4-8 Destroyers, 2 Light Cruisers, and 1 Heavy Cruiser or Battleship with an additional Heavy Cruiser or Battleship assigned for each division of the landing force. Ultimately, however, the Navy and Marine Corps decided that considerably more ships were required for assaults against heavy, deliberate defenses. The capture of Roi-Namur in February of 1944 convinced the two services that the lessons of Tarawa were effective and that they had been absorbed and implemented.

The last period, March 1944 – October 1945, encompasses the evolution of doctrine from the aftermath of the capture of the Marshall Islands to the promulgation of *Amphibious Operations: Naval Gunfire Support* [PHIB-11], a summary of naval gunfire doctrine that was produced immediately after the war. The publication of PHIB-11 is a fitting place to end an analysis of World War II naval gunfire support doctrine. This post-war document states that *FTP 167* was the "current standard operating doctrine for amphibious warfare," an indication that the Navy did not issue any substantial official written changes to the document during the war.⁶ The Navy's failure to update the written doctrine post-1 August 1943 might be the basis of Turner's comment that doctrine did not change during the war, but such a failure is not evidence of doctrinal stagnation. Changes did occur, the shift of emphasis from neutralization to destruction after Tarawa being just one example. PHIB-11 contains no doctrinal statements to the contrary, but a statement emphasizing the preference of neutralization over destruction, like the one found in *FTP 167* Change 3, is not present.

There were other developments during this period as well. One of the most important was the introduction of a new, slow-burning powder for use in bombardment. Use of this powder abrogated the use of reduced charges, as suggested in the *Tentative Manual*, to achieve the correct angle of projectile descent onto a bombardment target. The slower burning powder allowed for a more accurate delivery of ordnance onto a target and for easier access to defiladed positions by bombarding vessels. Another development during this period is further evidence of the doctrinal change Turner maintained never occurred. The assault of the Mariana Islands in June and July of 1944 marked the final passing of the pre-war idea that short, intensive pre-

landing bombardments were best. Long, slow, methodical bombardment was the doctrine from that point on.

This change in doctrine and the Japanese reaction to it lies at the heart of this dissertation. Attempts have been made already to analyze the use of naval gunfire in the Central Pacific during World War II. Donald M. Weller, the Corps-level naval gunfire officer for the lwo Jima operation, has addressed this topic in various post-war writings from the 1950s and 1970s, as have Jeter Isley and Philip Crowl in their analysis of the Marine Corps and American amphibious doctrine in the Pacific published in 1951. Weller wrote in 1977 of changes in American doctrine and of changes in Japanese defenses. He also listed reasons why naval gunfire could not address those defenses adequately. His emphasis was on the ability of United States naval forces to obliterate Japanese defensive structures and he correctly pointed out that American firepower forced the Japanese to concede the beach to their enemy by late 1944 and 1945. He did not, however, address directly the question of how effective the new Japanese strategy was in counteracting American naval gunfire in support of troops beyond the beach. Isley and Crowl, writing within six years of the end of the war, documented what they perceived to be doctrinal change on the part of the Americans, but they were even more reticent than Weller to address the question of the efficacy of the new Japanese defensive strategy. Their book, which became the standard interpretation of its subject, contains a number of errors and misinterpretations, particularly regarding the history of the early development of amphibious doctrine and the relationship between the Navy/Marine Corps' doctrine and the doctrine developed by the United States Army.⁷

Unlike the authors of these previous studies, the author of this dissertation will address this question directly. A concise statement of the consensus among Navy and Marine Corps historians concerning the efficacy of naval gunfire in support of amphibious operations in World War II can be found in PHIB-11, the post-war summation of the doctrine:

[The effectiveness of naval gunfire doctrine] is undeniable. Naval gunfire, through its ability to neutralize a landing beach by leisurely saturation bombardment, permitted the Allies to invade beaches of their own choice with greatly reduced losses. It enabled them to put troops ashore on islands and in areas far more heavily defended than ever before in all history. The complete reversal of Japanese tactics is sufficient testimony. Early in the war they adopted, wherever possible, the policy of repulsing the invasion at the water's edge. But the tremendous weight of naval gunfire, properly coordinated with aerial bombardment, defeated this stratagem at Tarawa, the Marshalls, and elsewhere. It had the effect of forcing the enemy to yield an undefended beachhead, or one defended by fire at the most. They yielded not because of surprise or stealth, but by design because the landing zone was untenable to them. Thereafter, they shifted their tactics. The battle doctrine of the 32nd Army at Okinawa instructed them to give up the beach without a contest, and to pin their hopes on defeating the Americans in the subsequent engagement inland. The results are a matter of history – a history underlined by the development of naval gunfire as a supporting weapon.⁸

The basic truth of this statement as to the results of the operations mentioned is beyond question. Those results are, as the document states, "a matter of history." There are a number of problems with the authors' conclusions, however. First, the authors of the *Tentative Manual* and everyone who worked on the doctrine after them placed great faith in the ability of naval gunfire to overcome practically any defenses an enemy might present them. This faith was not justified. Second, the authors of PHIB-11 mention Tarawa and the Marshalls as two operations that validated the doctrine. This conclusion is not valid. The doctrine tested at Tarawa was not the doctrine documented in PHIB-11; American experience in the Gilberts changed it, and the Marshalls

operation only proved that the doctrine worked against an enemy whose own defensive doctrine was insufficient. Third, the authors of PHIB-11 represent the Okinawa operation as the ultimate proof of their contention that naval gunfire was at least one of the most significant factors in making the Japanese change their defensive tactics. It is granted that naval gunfire did effect Japanese thinking, but the assaults on Saipan, Guam, and Okinawa were undertaken against objectives that were large enough to give the Japanese a choice in tactical and operational defensive doctrine and strategy. They did not have to meet the Americans at the shoreline as they did on small atolls.

The authors of PHIB-11 do not mention one very important operation, however. All of the basic principles of naval gunfire doctrine as they had been developed by the time this operation was undertaken were followed, but the results cannot be seen as neatly validating the authors' conclusions. This operation was the invasion of Iwo Jima. General Kuribayashi, the Japanese commander on Volcano Island, recognized that the tremendous power of United States naval gunfire support precluded the meeting of the American forces on the beach and driving them back into the sea. He would, therefore, have to attempt to defeat the invaders through attrition. The defensive scheme he chose, a defense in depth designed to bleed the enemy assault forces white and, hopefully, cause the United States to have second thoughts about continuing on to the Home Islands of Japan, effectively neutralized the American firepower advantage beyond the landing beaches. Kuribayashi was almost successful in another regard. The losses incurred by United States forces on Iwo Jima gave the Americans pause, but the outcome of the war was inevitable by February of 1945, and Kuribayashi's sacrifice ultimately did not stave off defeat.

The outcome of the war in the Pacific, in fact, was all but inevitable on the very day the Japanese chose to begin a war with the United States. They predicated success in that war upon several premises, and it was their failure to understand the strategic realities of the late 1930s and early 1940s, as exhibited by these premises, that doomed their enterprise from the start. First, they assumed that they could recreate the quick victories of earlier conflicts like the 1894-95 war with China and the 1904-05 war with Russia, insuring that their lack of important commodities like oil and rubber would not hinder them. Second, they assumed that Germany would be victorious in its war with Great Britain and Russia and that the United States would be distracted by having to deal with a powerful Nazi state that dominated Europe. Third, they assumed that the United States lacked the moral fiber to fight back against Japan, superior culture and spirit giving the Japanese an edge that the Americans would dare not challenge. Finally, they assumed that once Japan had pushed the American military forces out of the Western Pacific, the emperor's army and navy would hold the line against U.S. attempts to push back. The Americans, having to deal with Germany, would eventually acquiesce, allowing Japan to keep her conquests. If Germany lost, however, there was no way for Japan, alone, to win. Japanese success was therefore dependent upon German success. For most of 1941, Germany seemed unstoppable, so such a dependency did not seem to be a liability at the time Japan made the decision for war. Once events began to turn against Hitler, however, the stupidity of such a plan began to become apparent. In the end, every one of their assumptions proved wrong, and the Japanese found themselves in a war that they were not prepared to fight and they certainly could not win.

Why is a study of the use of naval gunfire in a war that ended over sixty years ago important? Put simply, it is because the lives of thousands of young men were dependent upon the successful application of the doctrine developed by the United States Navy and Marine Corps to get them ashore across the hostile beaches of the Pacific, and many of them lost their lives when certain parts of that doctrine proved inadequate or was applied improperly. Given our technology, understanding of the enemy, and resources, did our forces produce the most effective doctrine, and if not why? To begin answering those questions, let us first look at the state of the doctrine at the beginning of the war.

Endnotes

1. David Peake, interview by Ronald E. Marcello, 9 October 1994, interview OH 1041, transcript, University of North Texas Oral History Program, 9 and 10.

2. Lloyd Gossell, interview by Ronald E. Marcello, 12 March 2001, interview OH 1394, transcript, University of North Texas Oral History Program, 37.

3. George C. Dyer, *The Amphibians Came to Conquer: The Story of Admiral Richmond Kelly Turner* (Washington, D.C.: Government Printing Office, 1969), 224.

4. E.B. Potter, ed., *The United States and World Sea Power* (Englewood Cliffs, N.J.: Prentice – Hall, 1955), 10-11.

5. Allan R. Millett, *Semper Fidelis: The History of the United States Marine Corps*, rev. ed. (New York: The Free Press, 1991), 267-286 and 319-343.

6. Marine Corps Schools, *Amphibious Operations – Naval Gunfire Support*, PHIB-11 (Quantico, VA: Marine Corps Schools, 1945), 3. Adrian R. Lewis, in his book *Omaha Beach – A Flawed Victory*, has demonstrated irrefutably that the United States Army in the European theater of operations did *not* employ Navy/Marine Corps amphibious doctrine. Its doctrine was an amalgamation of Army, Navy, and British thought, not simply *FTP 167* "put between Army covers," as some have described it. This is a development that PHIB-11 does not address.

7. Donald M. Weller, *Gunfire Support of Amphibious Operations: Past, Present, and Future* (Dahlgren, VA: Naval Surface Weapons Center, 1977). Jeter A. Isely and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory and Practice in the Pacific* (Princeton, NJ: Princeton University Press, 1951). Isely and Crowl's work is still considered the "Bible" of World War II Pacific Theater amphibious warfare analysis, especially by historians who write from a naval or marine background.

8. PHIB-11, 4.

CHAPTER 2

NAVAL GUNFIRE: HOW IT WORKED

Doctrine, The Tentative Manual and FTP 167

The United States Marine Corps developed during the 1930s a doctrine for the execution of amphibious assaults. This doctrine was originally promulgated as the Tentative Manual for Landing Operations in 1934, and it was reissued in a revised form as the Tentative Landing Operations Manual, 1935 on 9 July 1935. This revision was updated and released for limited Navy and Marine Corps use on 21 June 1937 as Landing Operations Doctrine, U.S. Navy, 1937. On 25 November 1938 the Navy released the final general revision of the doctrine undertaken prior to the beginning of World War II, which they entitled Fleet Training Publication [FTP] 167, Landing Operations Doctrine, U.S. Navy, 1938.¹ Three modifications were made to this document prior to the beginning of the Central Pacific Campaign in November of 1943: Change 1, 2 May 1941; Change 2, 1 August 1942; and Change 3, 1 August 1943. Each of these modifications reflected experience gained by the Navy and Marine Corps in trying to implement the amphibious warfare doctrine espoused within the pages of FTP 167 in Fleet Landing Exercises 6 and 7 of early 1941 and the Solomons operation of 1942.²

American Navy and Marine Corps commanders relied upon this doctrine on the morning of 20 November 1943 as Rear Admiral Harry Hill's gunfire support ships moved into their areas of responsibility off Tarawa Atoll. As stated earlier, Kelly Turner insisted until his death that the doctrine never changed in any substantial way, that any perceived doctrinal changes were really changes in techniques. How accurate was his

assessment? Before one can address this question, however, one must consider how the United States Navy of the early 20th century viewed doctrine. The pivotal event in understanding the Navy's view of something considered so integral to the proper functioning of a military force today is the Sampson-Schley controversy after the Spanish-American War. At the heart of this controversy were two Navy admirals, William T. Sampson and Winfield Scott Schley. These two senior officers sniped at one another in public for years over mistakes in tactics and doctrine each claimed the other had made in defeating the Spanish fleet at Santiago, Cuba. The debate, which went on for several years and only ended by order of President Theodore Roosevelt, left a bitter taste in the mouths of most naval officers of the time. The effect of the controversy was profound regarding the issue of doctrine because the Navy chose to shy away from open and frank doctrinal discussions in public, reaching the point of purging the term "doctrine" from the vocabulary of Navy men for years afterward and causing a whole generation of officers to claim that doctrine did not exist in the United States Navy.³

Nimitz, Spruance, and Turner, the three men most responsible for guiding that navy through the perils of the Central Pacific Campaign, all graduated from the Naval Academy during the first decade of the 20th century. Their formative years as plebes, midshipmen, and junior officers were shaped by the superficially anti-doctrinal naval culture of the time.⁴ Doctrine as such, however, did not disappear. As James Tritten, an historian of naval doctrine, describes it:

Doctrine was driven into the formal tactical publications, read primarily by the professional officer, as well as taking root in the unwritten, but extremely powerful, form of shared experiences derived from service at sea, exercises, and war college courses. Doctrinal debate took place mainly in the wardroom and the classroom – not primarily on the pages of professional journals.⁵

This was the environment in which the "doctrines" of the Navy began to take shape prior

to World War I.

What exactly is "doctrine?" This is a good question, for which there is no exact

answer. No two authorities agree on the exact meaning of the word.⁶ The best place to

start is the presently accepted Department of Defense (DOD) definition:

Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.⁷

This definition, though more broad in its connotations, fits well with what Clausewitz

wrote:

Principles, rules, regulations, and methods are...indispensable concepts to or for that part of the theory of war that leads to positive doctrines; for in these doctrines the truth can express itself only in such compressed forms.⁸

He continues, relating the development of doctrine most closely to the tactical level of

war: "Those concepts will appear most frequently in tactics, which is that part of war in

which theory can develop most fully into positive doctrine."⁹ Before one leaves too

quickly the study of what Clausewitz has to say about doctrine, believing that he places

his imprimatur upon the development and strict adherence to doctrinal orthodoxy, one

should also read what he says under the heading "A Positive Doctrine is Unattainable":

Given the nature of the subject, we must remind ourselves that it is simply not possible to construct a model for the art of war that can serve as a scaffolding on which the commander can rely for support at any time. Whenever he has to fall back on his innate talent, he will find himself outside the model and in conflict with it; no matter how versatile the code, the situation will always lead to the consequences we have already alluded to: *talent and genius operate outside the rules, and theory conflicts with practice*.¹⁰

In these words one can see one of the origins of the DOD definition's concept of

judgment in application.

The Navy of the early 20th century developed an understanding of doctrine that followed along these lines. A perceived close relationship between doctrine and tactics as well as doctrine and training proved especially influential. Wayne P. Hughes, Jr., in his stimulating study of the fleet tactics of the United States Navy, describes these

relationships and the resulting naval understanding of doctrine in these words:

Doctrine is the commander's way of controlling his forces in writing, before military action. Doctrine enunciates policies and procedures that govern action. In its broad sense, doctrine is what is taught as "right behavior" – "rules upon which we act spontaneously and without orders for the accomplishment of a mission," wrote Admiral Harry E. Yarnell. In its stringent sense, doctrine is mandatory behavior; it must be obeyed. Either way, high levels of command want coherence of policy for control, while tactical levels want procedures for cooperative effort. These are merely matters of emphasis. Two points about doctrine must be remembered: it is vital, and it must not become dogmatic.

Fleet doctrine may be thought of as the commander's comprehensive battle plan – his standing operation order....

Doctrine may also be thought of as every action that contributes to unity of purpose. Doctrine isn't [sic.] what is written in the books; it is what warriors believe in and act on....Doctrine is greater than tactics in that it encompasses command structure and communication. It is less than tactics in that it can establish no more than procedures that enable and enhance the execution of tactical choice on the battlefield.

In the execution of good doctrine there is always tension between conformity and initiative....There is a measure of entropy in all doctrine. With too little entropy there is order and understanding but no initiative. With too much entropy there is creativity and change but no order....

Doctrine is the basis for training and for the measurement of the achievement of training standards....

Tactical doctrine is the standard operating procedure that the creative commander adapts to the exigencies of battle....

Doctrine is...the standard the tactical analyst uses to evaluate the new against the old....

In sum, doctrine must be whole and firm but not dogmatic. It must leave room for men of freewheeling genius, for such will be the aces of the next war. But it must never surrender control, because control is the prerequisite of concerted action.¹¹

Doctrine, tactics and training are, therefore, interrelated and must be seen as such. In addition, just like Clausewitz, Hughes stresses the importance of leaving room for the "man of genius." In this regard, the use of judgment in the application of doctrine, Hughes agrees also with the DOD definition.

Clausewitz's comment on the relationship between principles and doctrine points

the way toward another difference between the DOD definition and early 20th-century

naval views. For Clausewitz, principles, among other things, "[lead] to positive

doctrines." In other words, a doctrine is not a principle. Rather, doctrine relies upon

and is created with principles in mind. Lieutenant Commander Dudley W. Knox wrote

an article for the United States Naval Institute Proceedings in 1915 regarding the Navy's

reluctance, after the Sampson-Schley controversy, to debate doctrine in a public forum.

In his article, Knox addressed this question of principles versus doctrine in these words:

One meaning of doctrine is a "principle" or "body of principles," but that is not the sense in which it is employed when applied to the art of war by European military forces. Some military writers and translators have caused great confusion by using the term as a synonym for principles. Military doctrines are beliefs or teachings which have been reasoned from principles; that is, they flow from principles as a source. They are intended to be general guides to the application of mutually accepted principles, and thus furnish a practical basis for co-ordination under the extremely difficult conditions governing contact between hostile forces.

A principle is a "fundamental truth as a basis of reasoning; the cause, source or origin of anything." Obviously, there is a great difference between a principle and a military doctrine, notwithstanding that they are related. It has been aptly said that the difficulty with fundamental principles lies not in their comprehension but in their application. Under any given circumstances fundamental principles might be correctly applied in a number of materially different ways, depending upon the varieties of doctrines held. Furthermore, in war the number of possible acceptable solutions to a situation is increased not alone by the number of possible applications of the several principles involved, but as well by the variations in the relative importance which may be assumed for each.¹²

Knox appears to follow Clausewitz's conception of the distinction and relationship

between the two. Hughes shows a similar understanding of this relationship:

...there is a distinction between military principles...and the actions that derive from them. Tactics change, but that does not preclude the search for tactical principles, and if there are strategic principles, that does not mean that strategies do not change. Strategies as well as tactics are influenced by "weapons made by man." ...

Throughout the hierarchy of enlightenment, from Truth, which the epistemologists say exists but is never known with certainty, to principles, which express our contemporary vision of Truth, to policy and doctrine, which are programs for concerted action based on principles, and finally to strategic or tactical decisions, which are individual actions guided by policy and doctrine – throughout this hierarchy, error creeps in....

The armies of the world are much keener to study principles than the navies have ever been....Most students of military history have avoided the problem of differentiating strategic and tactical principles (and underlying logistics) by citing principles of *war*. [italics in original] Their search for enduring truth has ended in the compilation of many transitory lists.¹³

The continuity of thought between these two naval authors over a 71-year interval is

instructive.

What of the Marine Corps? Did perceptive, thinking Marine officers

contemporary with Knox agree with the latter's assessment of the relationship between

these two very important concepts? Major John H. Russell, a future Commandant of

the Marine Corps, wrote an article in 1916 in which he argued that the Corps needed to

develop a policy and doctrine for itself beyond the idea of "cooperation with the Navy."

Concerning that doctrine, he defined the term and stressed the difference between it

and the concept of "principles":

It is well understood by military men of the present time that the Art of War has its theories and its principles, otherwise it would not be an art. It follows that it also has the application of its principles or Doctrine.

The common acceptation of the word doctrine makes it synonomous [sic.] with principle. This is not true. A principle is a fundamental truth. A military principle is a fundamental truth arrived at by a study of the military history of wars and adapted to the circumstances and characteristics not only of the military organization but of the nation it represents. Napoleon has aptly said: "The principles of war are those which have directed the great leaders and of which history has transmitted to us the main facts."

The word "Doctrine", [sic.] as applied to military life, means a teaching that provides for a "mutual understanding" among the commissioned personnel of a military organization. In plain words "team work". [sic.]

Military doctrine is born of military principles. It is the application of principle. A principle cannot be wrong, it is a fact. A doctrine, on the other hand, may be wrong. As it becomes ripened by experience or to suit new conditions, it is altered. It is thus, at first, tentative and gradually build up by a process of evolution.

The historical study from which we derive certain principles is nothing more or less than an estimate of the Situation. The principles deduced represent our decision. Having once made a decision it becomes necessary to put it into execution, in other words to apply the principles. This is true military Doctrine.¹⁴

What does the differentiation between these two terms have to do with the use of

naval gunfire in support of amphibious operations in World War II? It all goes back to

Turner's statement that what appeared to be changes in the doctrine during the war

were actually just changes in the techniques used to apply the doctrine - the doctrine

itself was proved valid and remained essentially unchanged. Before embarking upon a

critique of Turner's statement, however, the author wants to make it clear that he is

keeping in mind Clausewitz's caution to the critics of military matters and decisions:

A critic should never use the results of theory as laws and standards, but only – as the soldier does – as aids to aids to judgment. If, in tactics, it is

generally agreed that in the standard line of battle cavalry should be posted not in line with but behind infantry, it should nevertheless be foolish to condemn every different deployment simply because it is different. The critic should analyze the reasons for the exception. He has no right to appeal to theoretical principles unless these reasons are inadequate.¹⁵

The author's goal is to show that Turner was wrong in his assessment in regard to naval gunfire and that a problem that plagued many Navy men of his time was the reason for his error: an imperfect understanding and use of terminology.

Jeter A. Isley and Philip A. Crowl emphasize one of the more obvious examples of this problem of terminology, the use of "neutralization" when the speaker or writer meant "destruction."¹⁶ They are right to point out this inconsistency. They also rightly conclude that American marines and naval gunfire experts believed prior to Tarawa that shore targets could only be neutralized and that destruction was out of the question, a point made clear later in this chapter. An example of this attitude is found in the report on the 11-29 May 1943 that was produced by Rear Admiral Francis W. Rockwell. Rockwell wrote that "[i]t is the opinion of Commander Amphibious Force, Pacific Fleet, that naval gunfire may be expected to neutralize but not destroy enemy installations."¹⁷ Their work in clearing up the confusion concerning these two terms is commendable, but they are also an example of and are partly responsible for perpetuating the confusion of the terms "principle" and "doctrine." The best example of this confusion is found on page 582 of *The U.S. Marines and Amphibious Warfare*:

At the war's beginning, United States forces had at their disposal a body of tactical principles forming a basic amphibious doctrine which the test of war proved to be sound. This doctrine was first set forth by the Marine Corps in 1934 and officially accepted by the Navy in 1938. An examination of these first statements of tactical principles for employment in amphibious war reveals that for the most part they stood up well and, with slight modifications, were as valid throughout the war as when written. This is not to say that the war in the Pacific taught no new amphibious lessons. Such a proposition would be absurd on the face of it, and the foregoing chapters of this volume should be sufficient to disprove it completely. But the modifications wrought between 1942 and 1945 in the art of amphibious warfare did not seriously affect underlying principles.¹⁸

Obviously, Isley and Crowl are not referring to the lists of "principles of war" referenced above by Hughes. These, instead, are the lesser principles that govern thought on a lower plane than that occupied by high-blown theory. The only tactical principles about which this study is concerned are those relating to naval gunfire in support of amphibious operations, and there was really only one of these: naval guns can be used in place of land-based artillery to support an assault against a well-defended beach. This principle was itself an example of how fluid even fundamental concepts can be. Orthodox thought prior to the early 1930s was that, as Nelson put it, "a ship's a fool to fight a fort." The Allied debacle at Gallipoli in 1915 seemed to prove the "Truth" of this idea to the satisfaction of many British and American military theorists. Marine Corps and Navy thinkers in the early 1930s, however, studied the Gallipoli operation carefully and thoroughly and determined that this seemingly self evident truism was wrong, that ships could indeed fight forts if the power of naval guns were harnessed and controlled properly. Isley and Crowl are therefore correct, as far as it goes, when they say that principles did not change. The Americans began the war believing that naval guns could take the place of artillery and they ended the war convinced that such was the case.

Doctrine, however, is a different story. Doctrine provides guidance for the right and proper way to apply principles. The writers of the naval gunfire support chapters of both the *Tentative Manual* and *FTP 167* began with a principle, that naval guns could

indeed take the place of artillery in support of an assault from the sea, and they developed a doctrine for how it should be done. This doctrine included an emphasis on the neutralization, not complete destruction, of enemy emplacements in order to allow assaulting troops enough time to establish themselves ashore. Massive quantities of ordnance poured onto enemy positions over a short time just before the landing were supposed to numb the defenders to the point where their effective resistance during the first critical minutes of the assault was impossible. Precision fire, while discussed by marines and sailors, was deemed unnecessary. Tarawa taught that this point of doctrine was incorrect. Precision was necessary, along with massive quantities of ordnance. The doctrine was changed and the "lessons of Tarawa" provided naval gunfire planners with the new doctrinal template for the rest of the Central Pacific Campaign.

The author's focus in this chapter is the development of this naval gunfire component of the American amphibious warfare doctrine as it is recorded in the *Tentative Manual, 1935*, Change 1 of *FTP 167*, and Change 3 of *FTP 167*. Before beginning an analysis of the evolution of this one component, however, a quick outline of all the components is in order so that the reader can understand how the one fits into the whole. The *Tentative Manual, 1935* divided amphibious operations into six major parts: command relationships, naval gunfire support, aircraft support, the ship-to-shore movement, securing of the beachhead, and logistics. The first of these components, the command relationships, consisted of the command procedures and with the organization of both the landing and naval forces involved in the assault. Each of these subcategories was integral to the efficient practice of proper command and control in

the carrying out of the operation. The senior flag officer commanding the naval attack force was given overall command of the operation, thus insuring naval control at the point of invasion. Subordinate to this overall commander were the commanders of the two major subdivisions of the attack force, the landing force and the naval support force. The landing force was responsible for carrying out the assault of the beach and then conducting operations ashore once the assault has been completed. It also provided troops for reconnaissance of the beach and delivered supporting fire from small arms and assigned boat guns while they were embarked in landing craft on their way to the beach. The naval support force provided reconnaissance adequate for the successful completion of the assault mission, protected the landing operation from enemy naval forces, provided and manned the landing craft that transport the landing force to the shore, supported the landing operation using naval gunfire and other methods, and provided for signal communications between ships and the shore.¹⁹

The second major doctrinal component was the one that is the author's topic in this dissertation: the provision of naval gunfire support. The authors of the *Manual* recognized that one of the biggest problems encountered in projecting military power ashore from ships is providing adequate artillery support for the landing at a time prior to the establishment of the landing force's field artillery units on the beach. The main question they addressed in relation to this problem, consequently, was how naval guns could be used as a replacement for field artillery during this critical period. They deemed inadequately controlled naval gunfire to be worse than no artillery support at all, however, so the problems associated with the establishment of proper fire control methods and the placement of properly trained spotters and liaison officers ashore were

addressed as well.²⁰

The use of aircraft in support of an amphibious operation was the third major doctrinal component discussed in the *Manual*. Aircraft were assigned four basic tasks, each one tied to a particular stage of the assault. Prior to the beginning of the operation, aircraft were responsible for providing the visual and photographic reconnaissance needed to prepare an overall plan of attack and a scheme of maneuver for the forces put ashore.²¹ They were then responsible for providing cover over the transports and landing craft at the point of embarkation and all the way through the ship-to-shore movement, the most critical part of which was the assault landing.²² As the boat waves approached to within 1,000 yards of the shoreline, they were then to provide airborne fire support in lieu of the lifting naval gunfire.²³ Finally, they were responsible, in conjunction with gunfire support ships, for providing the troops ashore with fire support until such time as field artillery could be landed and brought to bear on enemy positions.²⁴

In an amphibious assault, the movement of the landing craft from the transport ships to the beach was the very heart of the operation. The authors of the *Manual* insisted that the only way to move troops from the offshore transports to the beach successfully was to plan the operation with precision and to exercise rigid control of landing craft during their movement to shore.²⁵ This rigid control was to be accomplished through the use of control, picket, and guide boats that were to be positioned in such a way as to guide the landing craft through the precisely planned stages of the ship-to-shore movement.²⁶ The optimal arrangement for insuring adequate control of the operation both at the point of embarkation and at the point of

landing on the beach was the loading of one, and only one, fully self-sufficient infantry battalion, reinforced with artillery and other arms, in each transport.²⁷ The authors also specified the preferred organization of men and equipment within each landing craft and the best arrangement for boat waves as they went ashore.²⁸

The fifth component of the doctrine was the securing of the beachhead once the troops had landed. The techniques that were necessary for the survival of the landing force between the time during which it was solely reliant upon naval gunfire support and the point at which its own field artillery could take over from naval guns was set forth. The problems associated with establishing communications between units ashore and units still afloat, as well as those involved in providing services and supplies to the landing force, were also addressed. The solution for the problem of providing services and supplies to the landing force centered upon the establishment of a beach party, under the command of a naval officer called a beachmaster, which was given the responsibility of controlling both the movement of boats to the shore and the unloading of supplies and equipment from them. A second group, termed the shore party, then controlled the movement of the unloaded supplies from the beach to the supply dumps and from there to the front lines.²⁹

The final component was logistics. The authors of the *Manual* covered most of the mundane topics one expected to encounter in a discussion of this important but far from scintillating topic, but they put forward a concept within the midst of all their rhetoric that is worthy of note. It is a concept that revolutionized the way in which the Navy supported amphibious assaults, though it would take a lot of hard combat experience before naval planners took it seriously. This revolutionary idea is known as combat unit

loading, and its basic tenets are simple. First, all cargo loading should be tailored to the requirements of the landing force. Second, in addition to one assault battalion and its landing boats, each transport should also carry that battalion's equipment. Third, that equipment should not be stowed haphazardly, but should be loaded on the transport in the order in which it will be needed ashore. These very logical ideas helped to solve many of the problems associated with the adequate supply of necessary equipment to the landing force at the time the equipment was most needed.³⁰

Such were the most important aspects of the overall doctrine as set forth in the Tentative Manual, 1935. Its six components continued to be viewed as the foundation for amphibious assault planning throughout the war, all modifications being seen as improvements in the efficiency of the system already in place rather than as wholesale revisions of the basic theory. It is the opinion of this writer that the second component, the use of naval gunfire in support of amphibious operations, can be shown to have evolved in some essential respects prior to the initiation of the Central Pacific Drive in the Gilberts in November of 1943. To show how this evolution took place over time, an analysis of the three major statements of naval gunfire doctrine to be published prior to the Gilberts operation will be presented. The wholesale reorganization of the naval gunfire chapter in Change 3 of FTP 167 makes a one-to-one comparison difficult, so the author has imposed a structure upon the analysis that he deems to be the most logical possible. Each subsection of the analysis will begin with a description of one aspect of naval gunfire support doctrine as it exists in the *Tentative Manual*, 1935. This statement will be followed by a description of the evolution of that aspect in Changes 1 and 3.³¹

But what of the origins of modern naval gunfire support doctrine, at least as the authors of the *Manual* perceived them? As stated above, the question of how to go about using naval gunfire in support of an amphibious assault grew out of the problem of how to replace field artillery in the early stages of a landing, a time when field artillery units of the landing force are still aboard ship and incapable of supporting the offensive. The necessity of backing an assault with artillery was made abundantly clear to both the United States Army and Marine Corps during World War I. The authors of the *Tentative Manual, 1935* use the knowledge of artillery support both services acquired in the heat of combat during that earlier conflict as their point of departure for the development of a method whereby naval guns could be substituted for field artillery in support of the movement of troops ashore.

On pages 155-159 of the *Manual* is an example of the extent to which the "Great War" influenced the authors' thoughts. Intending to assure their readers that they had absorbed the hard lessons of the battlefields of France, they presented those lessons prior to laying out their doctrine. The first lesson so presented concerns the development of a classification system for defenses and of formulae for the use of artillery in countering them. The classification system is very straightforward: defenses are either "weak," "average," or "strong." Allotments of artillery are theoretically calculated accordingly: a "weak" allotment (one 4-gun battery per 50 yards of front) against hasty entrenchments and relatively poor morale; an "average" allotment (one 4-gun battery per 37 yards of front) against well-constructed entrenchments behind some barbed wire; and a "strong" allotment (one 4-gun battery per 28 yards of front) against well-organized resistance consisting of concrete machine gun emplacements and

shelters. One 4-gun battery per 40 yards of front is reported to have been a workable rule of thumb by the end of World War I.³² An "average" defense was assumed in the preparation of the computations for the chapter on naval gunfire support in the Manual. This means that the authors assumed that a prospective enemy would be occupying well-constructed earth works and would be reasonably strong relative to the front he was holding.³³ The strength and armament of a defender relative to that of an attacker also bore directly on determining artillery support requirements.³⁴ An attacker, according to the theory, has one definite advantage over a defender: initiative and relative mobility. This ability to move about while a defender remains in place gives an attacker a choice of objectives when determining when and where to attack. The greatest advantage to having a choice of objectives is that an attacker has the opportunity to attack at a point where a defender is not prepared adequately.³⁵ This World War I emphasis on the relative mobility of the attacker will be tangentially translated in Change 3 of FTP 167 into an emphasis on the relative mobility of ships when compared to land-based artillery.

The authors of the *Manual* report that a tactical change in the use of artillery occurred during World War I, and their emphasis on this reported change in tactics would prove to have a profound effect on the use by the United States of naval gunfire support for amphibious operations early in the course of the next war. According to the authors, long artillery barrages prior to an infantry attack were the usual practice up until and including 1917. The last year of the war, however, saw the development of a tendency toward the use of short, extremely intense bombardments that were delivered immediately prior to the launching of an attack. The *Manual*'s authors deemed the rapid

fire of naval guns to be well-suited to delivering these short, intense bombardments and the relatively economical ammunition requirements for delivering them seemed to be at least a partial solution to the problem of limited warship magazine capacities.³⁶ Even though this description of World War I land artillery doctrine is dropped from Change 3 of *FTP 167*, vestiges of the "short and intense" bombardment theory can still be seen in the planning and execution of naval gunfire support of the landings at Tarawa a scant three months after the promulgation of this final version of the doctrine. The Second Marine Division would pay a heavy price for the Navy's continued reliance on this "lesson."

Statement and Analysis of the Doctrine

The following analysis of naval gunfire doctrine is divided into five major categories: the organization of D-day for the purpose of planning naval gunfire support; the classification of fires; the characteristics of naval guns, ammunition, ships' batteries, and naval vessels; the organization of fire support groups; and the organization and use of shore fire control parties.

Organization of D-day

The *Tentative Manual, 1935* and Change 1 of *FTP 167* were very vague concerning the organization of D-day. References to time were relative rather than exact with the one exception being recommendations as to the most effective fire schedule for delivering the pre-landing bombardment.³⁷ Change 3 of *FTP 167* introduced a much more exact organization in three phases that coordinated naval gunfire with the activities of the landing force. Phase I, from H-3 to approximately H-1, was the period during which the landing force was transferring from transports to
landing craft and forming boat waves for the movement toward the assault beaches. In Phase II, from approximately H-1 to H-hour, the landing craft executed the ship-to-shore movement of the landing force. Finally, in Phase III, the assault units of the landing force were ashore and were advancing inland. This phase began at H-hour and continued until naval gunfire was no longer needed. Field artillery of the landing force could usually begin to take over fire missions from the naval gunfire support forces at about H+2, but it was deemed by the authors of Change 3 a rare occurrence for artillery to completely relieve naval gunfire of responsibility for fire support during D-day.³⁸ How the authors of Change 3 tied this system of organization into the planning of fire missions will be explained in the next section.

Classification of Fires

There were still many questions to be addressed even after a commander had organized D-day along the proper lines suggested by doctrine. The complete destruction of a major percentage of enemy personnel, weapons, and equipment was recognized to be generally beyond the capabilities of the attacking force, but a volume of fire sufficient at least to cause the enemy to cease-fire and take cover had to be provided in order to insure the success of the operation. This volume of fire had to be maintained for a long enough period to reduce the enemy's morale such that the attacking infantry could overcome him. This morale factor made it difficult to determine exactly how much artillery was necessary to produce the desired effect. One had to make an estimate, however, and go forward with planning fire missions for the landing.³⁹ The *Manual*, in discussing the decisions associated with providing an adequate volume of fire on the beach, states:

Probably the most difficult decision in formulating the scheme of maneuver is that pertaining to the frontage which can be effectively covered by the fire of the available ships, and it is here that the judgment and responsibility of the commander is put to the severest test. In deciding this question, consideration must be given to: First, <u>The devastating effect</u> of the fire of relatively few machine guns when firing under advantageous conditions; Second, <u>That an attack against such weapons has little chance of success unless adequately supported by artillery</u>; Third, <u>That a landing operation cannot be stopped and resumed at the will of the commander</u>, and, as a rule, only one chance for success will be offered. [underlinings in original]⁴⁰

The authors here demonstrate an understanding of the magnitude of the challenge they were undertaking and the importance of the use of artillery in meeting that challenge. They also demonstrate cognizance of the false sense of security that the presentation of formulae for the "proper" use of artillery against given defenses can invoke. They state that, unlike World War I theorists, they have made no attempt to provide planners with any "absolute" formulae for determining the amount of naval artillery support that would be necessary for a given assault situation, and they admitted that such formulae were impossible to derive.⁴¹ Consequently, they spent their time relating detailed descriptions of what they viewed as the seven types of fire support roles that naval gunnery could be expected to fulfill during the course of an amphibious assault. These seven missions were: supporting fires, counter battery, interdiction, destruction, harassing fires, countership fires, and fires on targets of opportunity.⁴²

The first type of mission, that of support for the troops going ashore, was viewed as the most immediately important of the seven. The three main purposes of supporting fires in an amphibious assault, according to the *Manual*, were to cause the enemy to cease-fire and take cover, to inflict losses on him while doing so, and to reduce his combat efficiency so that the attacking infantry could overcome him. There were two

types of supporting fires to be employed for these purposes in the execution of an amphibious assault. Known as close and deep support, each contributed materially to the success of the assault and had to be properly and sufficiently planned for and executed in order to provide the attacking troops with the backing they needed for the successful completion of their mission.⁴³

Close supporting fires were to be delivered on that part of the enemy force that was to be attacked immediately upon the assaulting troops coming ashore. The target objectives of close supporting fires were the enemy weapons that were most dangerous to the attacker's initial landing force and the enemy personnel that would be encountered on the beach. Since close supporting fires destroyed the enemy's ability to defend against the attacker's initial assault at the time when the latter was in his most vulnerable position, then they had to receive top priority in the assignment of both guns and ammunition. It had to be kept in mind, however, that this type of gunfire support was the most difficult for naval guns to deliver due to their low angle of trajectory. Consequently, every effort had to be made to compensate for the deficiencies of naval gunfire through the use of aircraft, boat guns, the guns of inshore support vessels, and the tanks and artillery of the landing force as early in the assault as was practicable.⁴⁴

Close supporting fires delivered from naval vessels were to be executed by direct aim fire only. This requirement limited the use of naval guns in the delivery of close supporting fire to the fires delivered on the beach prior to the landing and, after the landing had been effected, to areas visible from the sea. Offshore fire support groups that were given the task of providing close supporting fires for the initial landing usually would be assigned a particular, definite target area that included a section of the beach

and a specified depth inland. While gunfire support needed to cover all of the target area, the plan of fire was to pay particular attention to those areas where the enemy was known or was suspected to be. Proper fire distribution had to be maintained, this being best undertaken through the assignment of a particular target area to each ship in a fire support group. Use of the time-sector method would insure that no part of a target area would be left uncovered for any length of time. Ships firing both main and secondary batteries were to work target areas over with both and they were to open rapid fire at frequent intervals in order to maintain an element of uncertainty on the part of the enemy.⁴⁵

Close-supporting fires were to reach a density equivalent to sixteen 75mm shells per minute per 100-yd square in order to achieve the three objectives listed above. This was especially true of fire delivered immediately prior to the beginning of the assault. This density was to be maintained on the enemy's defenses at the beach and, if possible, as far inland as the forward slopes of the terrain from which small-arms fire might be expected.⁴⁶ The final burst of fire just prior to the troops going ashore was to be as intense as possible. It was to start before the landing craft were within effective small-arms range of the shore and it was to continue until the boats were about to make the dash to the beach. Gunners were to vary their firing patterns so that the enemy could not determine when he should take cover.⁴⁷

Deep supporting fires were used to deepen the coverage of close supporting fires at the time of the initial amphibious assault. They were also used to cover machine guns, mortars, artillery, and other weapons being used by the enemy to provide overhead fire from rear positions in support of his own front line. They were effective at

reducing the activity and combat efficiency of enemy troops in rear positions that were to be assaulted later. They were also disruptive of the enemy's command, communications, and observation systems.⁴⁸ Targets that were particularly suitable for naval gunfire in the deep supporting role, given the preceding considerations, included: the edges of woods; the tops of hills; any masonry buildings, fences, or hedgerows in the area; and any other topographical features that were easily identifiable and can be assumed to be organized for defense.⁴⁹ Sufficient density could rarely be attained over this entire target area because the size of the space over which the deep-supporting bombardment had to be spread was too large to allow for adequate coverage. Available deep supporting fire, therefore, was to be concentrated upon particularly important enemy positions. The relatively large dispersion of naval ordnance would many times allow for the collateral delivery of deep supporting fire as a direct result of the delivery of close support to the beach area. Consequently, ships would not necessarily have to be assigned specified deep support missions prior to the landing of the assault troops. Deep support missions, however, would need to be assigned to particular ships or specified batteries of battleships and cruisers once the assaulting troops went ashore and began to advance inland.⁵⁰

Targets for the initial uplift inland of fires targeted on the beach had to be determined in advance. The distance of the initial uplift depended upon a number of factors. These factors included range, visibility, the slope of the ground, the direction of fire in relation to the advance of troops, the type of guns being used, the sea conditions at the time of the uplift, and whether or not the area on which the fire is to be delivered is visible from the firing ships. The targets for the initial uplift had to be no farther inland

than was necessary for the safety of the troops, considering the preceding factors. The fire of inshore support ships, aircraft, boat guns, infantry weapons, and the field artillery of the landing force had to cover initially the gap between the beaches and the area being shelled in deep support. Infantry weapons and field artillery could only be used effectively once they were landed, so priority had to be given to getting them ashore as soon as practicable. Using them, the assaulting force could then make every effort to cover the ground between the beach and the target area for the first lift as thoroughly as possible. Tentative targets had to be prescribed for the second and third lifts, but these target lists were to be modified relative to actual battle conditions as the assault progressed.⁵¹

The second major fire mission described in the *Tentative Manual, 1935* was counter battery. Counter battery fire was delivered on enemy artillery for the purposes of causing it to cease-fire and of inflicting losses on personnel and materiel.⁵² Effective counter battery required fire on specific targets rather than on a general area. Theoretically, the number of naval guns necessary to silence an enemy artillery battery was the number necessary to produce the required density (sixteen 75mm shells per minute per 100-yd square) given the pattern of the particular guns used at the given range. One could reduce the amount of counter battery fire on a target by half once the battery was silenced. This could be accomplished either by reducing the rate of fire or by assigning some of the guns that began the fire mission to other targets.⁵³ Enough ammunition was to be allotted for counter battery fires so as to permit them to begin before the landing boats arrived within range of the targeted shore batteries. They were to continue during the critical stages of the operation, ceasing only when those missions

could be taken over by field artillery.⁵⁴ Demonstrations by boats without troops could be made on the flanks of the landing beach in order to cause enemy artillery fire to disperse over a larger area and also in order to get enemy batteries to open up so that they could be located and destroyed.⁵⁵

Each ship in a counter battery group was to be assigned a definite area of target responsibility prior to the landing operation. Doing this reduced confusion as to responsibility for a previously unknown target that began firing during the execution of the landing. It was desirable that each ship be able to take under fire all of the targets within its area of responsibility simultaneously.⁵⁶ There were a number of methods for locating enemy artillery batteries. These included: aerial observation and photography; observation from surface craft and submarines; information from intelligence reports; information from prisoners captured by patrols; ground observation after the landing; flash and sound ranging stations; and information from front line troops after the landing.⁵⁷ All located enemy batteries were to be assigned counter battery fire from naval guns. Fire was to be opened on located batteries and emplacements before landing boats came within range of them and before they opened fire on the boats. Additional naval guns were to be prepared to open fire immediately upon any enemy artillery batteries not previously located that fired upon the landing force. Targets were to be fired on in rotation if there were too many of them to be taken under fire simultaneously. Provision was to be made as well for the shifting of ships and target areas if necessary. The usual method of controlling counter battery fire was through aircraft spotting. Each firing ship was to have a spotting plane and radio frequency assigned to it alone. Indeed, where practicable, each ship was to have two or more

planes so that two or more targets could be fired upon simultaneously and so that each of the ship's gun groups could be controlled continuously.⁵⁸

Interdiction fires, the third major fire mission, were delivered on points or areas in order to deny their use to the enemy. Characteristic targets included roads used for the movement of enemy reserves or supplies and the areas where the enemy was involved in some observable undertaking. Examples of points that were to receive interdiction fire that were randomly listed by the authors of the Manual include crossroads, demonstrable places of assembly, railroad stations, detraining points, defiles, bridges, and fords.⁵⁹ A density of eight 75mm shells per minute per 100-yd square maintained for a five-minute period was deemed sufficient to stop movements overland. A density of sixteen 75mm shells per minute per 100-yd square or greater was to be maintained as long as the enemy was in a vulnerable position in order to stop movement and inflict the maximum possible losses upon him. Bursts of eight or fewer rounds of 75mm per minute per 100-yd square every five to fifteen minutes thereafter was deemed to be sufficient to keep the enemy immobilized.⁶⁰ Direct observation or plane spot was to be used to control the execution of interdiction fire, though the job could be assigned to shore-based fire control parties on occasion. There seldom would be enough ammunition aboard the gunfire support ships to allow for interdiction fires over an entire general target area. Consequently, interdiction fire was to be limited to those types of targets that could be assumed important to the enemy for the moving of reserves and supplies. Interdiction could be accomplished by either firing on targets as they appeared or, when observation was impossible, by the firing of bursts at irregular intervals over an extended period. The second method, though indirect, could produce

the desired results, but direct observation was much preferred. Roads and railways were to be covered in such a way as to prevent the enemy from avoiding losses by way of a practicable detour around the damage inflicted by the interdiction fires.⁶¹

Fires for destruction, the fourth major fire mission according to the authors of the Tentative Manual, 1935, were to be delivered in order to render a material target useless to the enemy. They required a heavy expenditure of ammunition and, therefore, they were to be called for only when there was a reasonable expectation that complete destruction could be obtained. Targets for destruction fires during landing operations were to be of limited area and, preferably, were to be visible from the sea. Randomly selected examples of such targets included particularly dangerous machine guns and antiboat guns, buildings located in the immediate vicinity of the landing, important bridges, and coastal and field artillery that were located close to the shoreline being assaulted.⁶² The amount of ammunition necessary to destroy a given target was understood to vary according to a number of factors. These factors included the nature of the object to be destroyed, the accuracy of the fire being delivered, the caliber and type of shell being used, and the degree of destruction required. In order to be effective, fires for destruction were to be delivered at the shortest possible range for as long a period as was necessary to achieve the degree of destruction required. One material target that was not to be taken under fire by naval guns was barbed wire. To cut a significant breach in any barbed wire that was located on the invasion beach would require an amount of ammunition that would be most prohibitive. Other methods, therefore, were to be used to accomplish the task.⁶³ No special rules of execution were deemed necessary since fires for destruction were to be executed by direct

observation.64

The last three types of major fire missions were not covered in the *Tentative* Manual, 1935 with the thoroughness of the other four. Harassing fire was defined as fire delivered during a relatively quiet period that was meant to interfere with the enemy by alerting him unnecessarily, and thereby lowering his morale and efficiency. Ranging shots preliminary to bombardment were deemed to have some harassing effect. Harassing fire were to be used with care, however, because it had a tendency to accustom the enemy to artillery fire, thus decreasing its morale effect.⁶⁵ Fires on targets of opportunity were supporting fires delivered on any suitable target that appeared within a specified area. Supporting ships and groups that had been assigned this mission had to keep their assigned areas under observation and they were to open fire on targets when they presented themselves. Randomly selected examples of such targets included enemy troops that were forming for a counterattack, enemy work parties, enemy troop and train movements, enemy batteries of artillery that had not been observed previously, enemy troops preparing or occupying a defensive position not previously located, and any seemingly important activity within an assigned area. The targets for this class of fire were, generally, the same as those for counter battery and interdiction. Consequently, ships engaged in the two latter fire missions were usually assigned the mission of firing on targets of opportunity as well.⁶⁶ The last type of fire mission, countership, was delivered on enemy ships that attempt to interfere with the landing operation. If the strength of the naval attack force permitted, these missions were to be assigned to ships that were not directly engaged in fire missions against shore targets.⁶⁷

Change 1 of *FTP 167* followed the *Tentative Manual's* classification of fires rather closely. Change 3 of *FTP 167* defined the various types of fire missions in similar terms to the *Tentative Manual*, but it introduced a more detailed classification system. In this system fire missions were classified according to five basic criteria: the effects sought, the forms taken, whether or not they were prearranged, the tactical purposes sought, and the method of fire control needed to complete them. Fires for purposes of neutralization and destruction fell under the classification of effects sought. The means of achieving them, concentrated fire to achieve neutralization and point fire to achieve destruction, were the two categories of forms recognized.⁶⁸ Classification according to prearrangement was broken down as follows: fire delivered on a time schedule; fire delivered on prearranged locations but only when called for; and fire on targets of opportunity, a category that took care of any targets not covered by the first two forms of prearranged fires.⁶⁹

The classification of fires according to tactical purposes sought covered the most important categories of offensive fires listed in the *Tentative Manual*'s system, introduced some new ones, and integrated all of them into the D-day organization introduced in Change 3. The first tactical purpose was preparation. This was defined as intensive fire delivered on the landing beaches and adjacent areas during the approach to shore of the landing craft of the leading wave. It fell under Phase II of the D-day organizational plan. The second tactical purpose was close support, defined as fires furnished in support of units ashore and placed on enemy troops, weapons, or positions that, because of their proximity to those units, presented the most immediate threat to the supported units. These fires fell under Phase III. Deep support was the

third category of fires for tactical purposes. It was succinctly defined as the more distant fires furnished in support of an operation and it had to be distinguished from fires of more direct and immediate benefit to the front line assault troops. Examples given included fires against enemy artillery, enemy reserves, and on critical points or areas in order to deny the enemy the use thereof. Deep-supporting fires, unlike preparation and close support, could be delivered during all three phases of D-day. The last category of fires according to tactical purposes sought was termed "special missions." These missions were deep-supporting fires for which large caliber naval guns were especially suited. Targets for these "special missions" were cities, airfields, seacoast batteries, and permanent fortifications. The majority of these missions were to be undertaken during Phases I and II.⁷⁰

The last of Change 3's classification criteria, the method of fire control, separated fires according to whether or not the fall of shot could be seen from the firing ship. Direct fire control could be used when fires were delivered on a target that was visible from the ship. Indirect fire control had to be used when fires were delivered on a target that was not visible from the ship. Spotting of the fall of shot could be undertaken from the firing ship in cases of direct fire control, but fall of shot had to be spotted either by plane spotters or spotters on the shore in cases of indirect fire control.⁷¹

Characteristics of Naval Guns, Ammunition, Ships' Batteries, and Naval Vessels

The differences in organization between the *Tentative Manual, 1935*, Change 1 of *FTP 167* and Change 3 of *FTP 167* are evident in the treatment of fire missions classification, but more substantial differences really come to the fore when comparing their treatments of the characteristics of naval guns, ammunition, ships' batteries, and

naval vessels. From a superficial perspective, the first major difference between the two is in the decidedly naval tone taken in Change 3 as opposed to the more Marine Corps/artillery tone evident in the *Tentative Manual* and even in Change 1. Change 3, in other words, describes naval matters in terms understandable to naval officers, placing emphases on characteristics of ships and naval guns that a marine would not necessarily recognize as requiring emphasis. This section of the analysis will begin, as in all cases in this chapter, with a statement of the general doctrine as set forth in the *Tentative Manual*, *1935* and then taken over into Change 1 of *FTP 167*. It will conclude with a statement of the much more detailed doctrine set forth in Change 3 of *FTP 167*.

The authors of the *Tentative Manual* recognized seven factors as important when determining the suitability of naval gunfire for supporting shore operations: muzzle velocity and trajectory of naval ordnance, dispersion, the various types of shell and fuses, direct fire, indirect fire, ammunition supply, and mobility of ships relative to land-based artillery.⁷² All of these factors and the advantages and disadvantages of each regarding the suitability of naval guns as a replacement for field artillery had to be weighed together and understood. The advantages had to be exploited to the greatest extent possible and measures had to be taken to compensate for the disadvantages.⁷³

Naval service ammunition, when fired, produced higher muzzle velocities than equivalent field artillery ammunition. High muzzle velocities caused heavy erosion of gun tubes and produced a flatter trajectory than that produced by field artillery ammunition. This flat trajectory made naval guns much less effective than field artillery in sweeping reverse slopes and in engaging defiladed shore batteries. The effectiveness of naval guns when used in these roles could be increased by using

reduced charges, selecting firing positions on the flank or in the rear of the reverse slopes, or by having the ships engaging defiladed targets stand off at greater ranges.⁷⁴ Planners always needed to keep these limitations in mind when using naval gunfire in place of field artillery, but they should not forget that the high velocity of naval ordnance was of great effect on forward sloping terrain. The demoralizing effect of high velocity ordnance was readily apparent and could be put to use against targets on forward slopes.⁷⁵

The relatively large dispersion of naval gunfire made it less useful in the role of close support of infantry than equivalent calibers of field artillery.⁷⁶ Dispersion of naval guns was greater in range than it was in deflection, but it was possible to overcome this problem to a certain extent by having ships fire from flanking positions. There was, however, a danger of the entire pattern being displaced laterally as well as in range in situations where suitable aiming points were not available.⁷⁷ Terminal ballistics of naval ordnance was not the only characteristic that had to be considered, however. Common and armor-piercing naval shells were not well suited for use in the support of landings for a number of reasons. The delayed fuses used with these munitions and their small bursting charges relative to the same caliber of field artillery made them less effective than some other types of shells against the targets most likely to be encountered during an amphibious landing, especially enemy personnel who were not under cover.⁷⁸ Common and armor-piercing shells with delayed fuses could be used with good effect against concrete emplacements and masonry walls, but they were still not the best choice. Flat nose, antiaircraft, and bombardment shell types compared favorably with field artillery projectiles and, therefore, were to be used in most

supporting fire situations.79

Naval gunfire was especially useful in support of landings where the ability of naval gunners to deliver rapid accurate fire on visible targets could be used to the maximum possible extent. The authors of the Manual exhibited knowledge of the importance of extremely close-range support, a concept dear to the heart of Rear Admiral Richard L. "Close-in" Conolly, when they state: "In planning the support of a landing, full advantage should be taken of this characteristic by having certain supporting ships, under cover of the fire of offshore ships, stand close inshore and engage the enemy beach defenses at short ranges."80 The fire from enemy machine guns, automatic rifles, other infantry small arms, and antiboat guns that were located on or in the immediate vicinity of the landing beaches posed the greatest danger for the troops coming ashore. These enemy weapons could deliver direct, aimed fire on the landing boats and the troops that disembarked from them.⁸¹ It was difficult to locate these weapons accurately because they did not usually open fire until the landing boats were close to the beach, the point at which offshore vessels had either ceased firing or had lifted their fire inland.⁸² To counter this threat, inshore vessels were to stand in and close as the depth of water permitted, watching for the enemy to open fire. Protected by counter battery fire from offshore groups, these inshore vessels could maintain supporting fire closer to the landing boats and disembarking troops.⁸³

Naval guns are not well suited for the delivery of indirect fire for two important reasons. First, they were being fired from essentially unstable platforms. Second, the position of these platforms changed in relation to the target and any established aiming points.⁸⁴ These difficulties could be compensated for, to an extent, by selecting well-

defined aiming points on the beach that were suitably located relative to targets and by providing gunners with continuous aerial or terrestrial observation.⁸⁵ Boats or buoys were to be anchored for the purpose of providing suitable aiming points if such did not exist on shore. In addition, markers were to be set up onshore once the landing force was established.⁸⁶ Aircraft were to be assigned particularly difficult indirect fire missions where possible. The need for the use of indirect fire was not as great when attacking small islands or a peninsula because such objectives allowed maneuvering ships easily to take positions from which they could attack targets using direct fire.⁸⁷

Insuring an adequate supply of ammunition for the support of a landing operation was a serious problem because the magazine capacity aboard naval vessels was limited and combatant vessels and aircraft had to be prepared for engaging an enemy fleet.⁸⁸ This problem could be addressed in a number of ways. First, obsolete vessels and converted merchantmen could be used in gunfire support roles to the maximum extent possible. Second, landing boats could be provided with a powerful armament of their own. Finally, the assault artillery of the landing force could be put ashore as early as possible so as to relieve the naval forces of the responsibility of supporting the operation by gunfire.⁸⁹

The last factor to be considered when determining the suitability of naval gunfire for supporting shore operations, according to the authors of the *Tentative Manual, 1935*, was the mobility of ships relative to land-based artillery. The greater relative mobility of ships gave naval gunfire a degree of flexibility in the support of landings that was very desirable and it offered the planners of an amphibious assault several options. First, supporting vessels could stand in with the landing boats to allow for the engagement of

beach defenses at short range. Second, the fire of several ships could be concentrated in support of successive landings on different beaches. Third, the mobility of ships offered a wide choice as to firing positions for the execution of given fire missions. Finally, the ability of ships to move around offshore provided the landing operation with some protection from enemy submarines, aircraft, and shore artillery.⁹⁰ The personnel in charge of developing the scheme of maneuver and of planning the fire support for an operation were to seek to maximize all these advantages of ship mobility.⁹¹

The information in the *Manual* concerning the general characteristics of naval guns and ammunition was essentially the same as that found in Changes 1 and 3 of FTP 167. Change 3, however, went into greater detail concerning certain characteristics of both of these and also discussed something that neither the *Tentative* Manual nor Change 1 of FTP 167 included in their coverage of this component of the doctrine: the characteristics of ships' batteries and of naval vessels. The definition, according to Change 3, of what constituted a battery aboard a ship was two fold: first, a naval battery consisted of two or more guns of the same caliber on the same ship that could be controlled from the same station; second, keeping the first part of the definition in mind, a naval gunfire support battery consisted of the number of guns responding to one control and bearing on one target.⁹² Generally speaking, the number of guns contained in a battery determined the type of mission that could best be fulfilled by that battery. When firing against personnel targets for the purpose of neutralization, a minimum of four guns was needed to produce the necessary volume of fire quickly enough and to cover the entire target area simultaneously. Batteries of fewer than four guns were not to be assigned close or deep support missions under normal conditions,

but exceptions could be made in emergencies. Batteries of more than six guns would result usually, for smaller calibers at least, in the unnecessary expenditure of ammunition. When firing against material targets for the purpose of destruction, one to three guns in one turret per target would suffice, but when firing against large area targets and "special mission" targets (e.g. airfields, cities, large supply dumps, and docks) where fine adjustments are not required, more guns per battery were deemed to be desirable.⁹³

The sophistication of a battery's fire control technology determined if that battery could be used for indirect fire or if it had to be restricted to direct fire. Batteries furnishing close support fires had to be equipped with the most modern fire control installations. These installations were capable of firing on targets without reference to an aiming point. Batteries that were not equipped with modern fire control installations could be used in close support if they were located aboard ships that were providing support for combat units that were moving parallel to the shoreline. These ships had to be moving parallel with the supported troops, firing across their front on generally visible targets. Even though the most modern fire control installations and navigational instruments made unobserved fires on large areas practicable, they should not be relied on if the unobserved target area was near friendly troops.⁹⁴

The number and types of batteries aboard a ship were irrelevant, however, if those batteries could not be brought to bear on the enemy in an effective way. A ship's draft, speed, and maneuverability were the key characteristics that determined just how close to the shore and to enemy coastal battery positions it could take station in order to place ordnance on a target. The ships that were best suited for engaging targets at

close range near a beach were those that were of relatively shallow draft, traveled at high speeds, and could turn quickly. These types of ships could provide preparation fires for the landing of the assault waves of the landing force and could provide cover for heavier, less maneuverable ships as well by engaging coastal batteries.⁹⁵

The magazine capacity of a ship determined how long it could be employed in support of operations ashore. Generally, fifty percent of a ship's magazine capacity was to be set aside for shore target ammunition when that ship was designated to provide fire support. The reservation of fifty percent of a ship's ammunition for surface engagements insured that the bombardment groups would be capable of fleet defense if necessary. Of the fifty percent reserved for shore bombardment, close and deep support ships had to reserve at least one half for targets of opportunity during Phase III. Ships that were assigned to close support duty for a battalion or to deep support duty for a regiment had to have sufficient reserve ammunition to engage at least fifteen targets of opportunity during Phase III. Destroyers that were assigned as a group in close support were to have a combined magazine capacity that would allow them to provide the necessary supply of shore target ammunition. Ships were not very effective at deep support unless aerial spotting with suitable communication between the aircraft and the supporting ships was available.⁹⁶

The number and type of fire support batteries aboard a ship determined which echelons of a landing force a ship could support. A ship with only one battery could support only one unit, either in close support of a battalion or in deep support of a higher echelon. A ship with two or more batteries, depending on the estimated strength of the enemy's defenses, could provide effective close support for a battalion with one or two

of its batteries while providing deep support to that same battalion's parent regiment. There was a caveat here, however. The same ship was not to provide close support to battalions of different regiments, nor was the same ship to be assigned deep support of one regiment and close support of battalions of a different regiment. The reasons why effective support of widely separated units was not normally practicable were two-fold: first, there were great difficulties involved in providing firing positions suitable for engaging widely separated targets; second, providing effective liaison and communications between widely separated units was highly problematic.⁹⁷

Change 3 of *FTP 167* provided a more detailed list of acceptable naval projectiles for the purposes of bombardment than did either the *Tentative Manual* or Change 1. Naval projectiles were classified according to their effectiveness for neutralization, from most effective to least, as follows: antiaircraft projectiles set to burst above the ground; high capacity projectiles with superquick fuses; antiaircraft projectiles set to burst on impact; high capacity projectiles with short delay fuses; common naval projectiles; and, finally, armor piercing. The relative effectiveness of these same projectile types for destruction of fortifications upon a direct hit was the inverse of the order given in this list.⁹⁸

Naval guns could also be classified according to their effectiveness in performing the various gunfire support roles. Five-inch guns could be used for most close support missions because of their high rate of fire, small pattern, and suitable angle of fall. Fiveinch/38 caliber and 6" guns had the requisite range, rate of fire, and small pattern for use in deep support of echelons up to and including the division. Six-inch guns were especially suited for counter battery against all enemy field artillery in range of a landing

area. Large-caliber guns of 8" and above had rates of fire that were too slow and patterns that were too large to allow them to be used in close support. Consequently, they were classified tactically as deep support weapons. They were best used against long-range targets such as cities and airfields as well as in the destruction of major, permanent fortifications regardless of range. In addition, if 6" guns were not available, 8" guns could be used in long-range counter battery. Guns of all classifications were suitable for use in preparation for a landing with coverage of the objective split in one of two ways: either 5" guns could be used to bombard the beach itself and larger calibers used on adjacent areas, or the heavier calibers could be used in the early period of preparation and the lighter calibers in the later period.⁹⁹ Based upon this analysis of naval guns, the authors of Change 3 classified the standard naval batteries used in naval gunfire support as follows: four 5"/25 caliber for close support; four 5"/38 caliber for close and deep support; six 6"/47 caliber for close and deep support; and nine 8"/55 caliber for deep support and "special missions".¹⁰⁰ The number of guns in a battery varied from this standard according to the way in which a particular ship was equipped.¹⁰¹ The standard target areas for each of these standard naval batteries, based upon the size of the normal patterns of the guns that composed each of them, were as follows: 5"/25 caliber and 5"/38 caliber, 150 yards; 6"/47 caliber, 250 yards; and 8"/55 caliber, 400 yards.102

Naval guns and batteries did not exist on their own, however. They were attached to platforms, and those platforms came in a variety of different configurations. Each configuration, or ship type, exhibited certain advantages and disadvantages relating to their use in naval gunfire support missions. The three major ship types

described in Change 3 of *FTP 167* were destroyers, cruisers, and battleships. Destroyers were particularly well suited for preparation in Phase II because of their shallow draft, high speed, and good maneuverability, and they were well suited for providing close support in Phase III, particularly for units involved in combat at the shoreline. They could stand close inshore, ahead of and on the flanks of the boat waves, placing accurate fire on beach area targets at close range. Destroyers had only one control, however, regardless of the number of guns on board, so they were limited as to the number of targets a single ship could engage. Consequently, one destroyer by itself could not be assigned as a close fire support group.¹⁰³

Cruisers could be used both in close and deep support. Their ability to use airplane spot as well as their adequate radio communications facilities and control systems – usually consisting of two controls for the main batteries and two for the antiaircraft batteries – allowed them to use their 5" batteries for close support and their main batteries for deep support. Light cruisers were preferable to heavy cruisers because of the greater utility of 6" guns over 8" guns in the naval gunfire support role. Cruiser magazine capacity allowed them to participate in preparation with both 5" and main batteries, if necessary, while being able to reserve adequate ammunition for close and deep support in later phases.¹⁰⁴ Battleships were treated like very large heavy cruisers as far as naval gunfire support was concerned. They were generally classified as deep support ships because of their depth of draft and the size of their main armament, but their 5" batteries made them ideal for close support where hydrographic conditions permitted them to approach close to shore.¹⁰⁵

Change 3 went into detail as to the fire support requirements for D-day. It broke down these requirements according to batteries, ammunition, and ships. Regarding batteries, sufficient numbers were to be assigned during Phase I to perform several missions: to neutralize and maintain neutralization of known and suspected enemy guns that are capable of effectively firing on the transport area; to neutralize enemy observation, disrupt his communications, and to neutralize his field artillery positions, bivouac areas, outposts, and other forward garrisons; and to execute any necessary "special missions". During Phase II the number of batteries assigned was to be sufficient to: neutralize all beach defenses; continue engagement of coastal batteries; and engage field artillery batteries that were in position to lay fire on beach areas. The emphasis during Phase III was to be proper support for a given echelon of the landing force. First, there was to be sufficient batteries assigned to provide necessary close support for each assault battalion. Second, there was to be sufficient batteries assigned to provide necessary deep support for each assault regiment and division.¹⁰⁶ Keeping in mind the fifty-fifty split described above, each support group was to be provided sufficient ammunition of suitable types to engage each target on the time schedule twice over, with an equal amount reserved for targets of opportunity.¹⁰⁷

In summary, then the number and types of ships sufficient to provide the necessary batteries for each phase of an assault and the necessary ammunition for those batteries was to be provided. Included in this calculation was to be an adequate number of the following ship types: highly mobile ships, such as destroyers or their equivalent, that can be used to cover the assault waves in close to the beach; cruisers for close support for battalions and deep support to regiments and divisions; and

battleships or heavy cruisers for "special mission" requirements.¹⁰⁸ Fire support requirements had to be met from an organizational standpoint as well as from the standpoint of firepower, however. With this in mind, Change 3 provides a standard for proper support that was much clearer than anything stated in the *Tentative Manual* or Change 1. According to this standard, four – eight destroyers, two light cruisers, and one heavy cruiser or battleship was to support each assault regiment and one heavy cruiser or battleship was to be added for each landing force division.¹⁰⁹

Organization of Fire Support Groups

Mention has been made in numerous places thus far of groups of ships being used in naval gunfire support, but the only details provided thus far have been about individual gun and ship types. What were these groups and what was their function in providing gunfire support for landing operations? According to the authors of the *Tentative Manual*, ships were to be organized into task entities known as fire support groups. Each of these groups was to be assigned one or more fire missions within its area. The number of fire support groups that had to be organized for any given landing operation was dependent upon the number and types of firing ships, the scheme of maneuver adopted for the landing, the number and types of fire missions, and the hydrography of the waters adjacent to the landing area.¹¹⁰ The flagship of the attack force commander was not to be assigned a fire support mission, per se. If its fire was needed, it could best serve by reinforcing the fires of other ships in addition to providing fire on targets of opportunity. Fire support groups executing close- and deep-supporting fires were to be assigned to support specific units of the landing force (e.g., a battalion or a division). The commanders of both the landing force unit and its assigned support

group were to work out gunfire support plans jointly. Within the limits of the ammunition allowance, fire was to be delivered on the targets that were agreed upon. Once the operation had begun, requests for fire were to be transmitted to ships through fire control parties on the beach. The exact types of fire missions that the fire support groups were expected to perform for specified units of the landing force were to be clearly defined during the planning stages of the operation. These specified missions, however, were not to preclude the execution of other fire missions in an emergency.¹¹¹

There were a number of factors considered when determining what types of ships to assign to fire support groups. First, these ships were to carry enough guns and suitable ammunition to carry out their designated fire missions. These missions were to be undertaken according to the following priorities: close supporting fires, deep supporting fires, counter battery, interdiction, and, finally, other fire missions including counter ship and fires on targets of opportunity. Second, consideration was to be given to maintaining a uniformity of ship types within each group. Taking this step permitted the maintenance of normal fleet organization, thereby facilitating the proper maneuvering of ships and the more efficient control of fire. Third, attention was to be paid to the equalization of ammunition consumption and gun barrel erosion from ship to ship within a fire support group. Fourth, the scheme of maneuver adopted for the landing was to be considered and ships assigned accordingly. Fifth, the hydrography of the waters adjacent to the landing area had to be considered, especially as it related to the ability to get deep-drafted vessels in close to the beach. Sixth, the number of subordinate units of the landing force to be supported had to be determined and separate gunfire support groups had to be assigned to each of them accordingly.

Finally, the maximum number of targets that could be taken under fire by ships in a gunfire support group had to be determined so that the group could be matched to a target area efficiently.¹¹²

Flanking fire was to be used whenever possible. Positioning ships to deliver flanking fire got them out of the way of the ship-to-shore movement and allowed them to fire on reverse slopes and defiladed areas more accurately. It also allowed boats to approach closer to shore before supporting fire had to be lifted. All direct fire was to be delivered from as close in as possible since accuracy increased as range decreased. In assigning fire support areas for the delivery of counter battery fires and fires on reverse slopes, however, care had to be taken that sufficient range was maintained to ensure proper angle of fall to reach the target. It may be assumed that a range sufficient to produce an angle of fall of 25 degrees would allow ships to reach all enemy weapons employed in beach defense. Mortars and airplanes could be used to reach those positions that remained defiladed from ships' guns. Reduced charges could be used to increase angles of fall, to permit a greater range of weapons choices, and to reduce gun barrel erosion.¹¹³

There was to be enough ammunition on board the inshore fire support ships to maintain their maximum rate of fire during the approach of the boats to the shore and to cover the flanks of the initial inland advance. Inshore ships were, therefore, not to be required to reinforce the fire of offshore ships if such reinforcement did not allow them to fire at their maximum rate during this period. The best situation was one in which both the inshore and offshore fire support groups were capable of delivering the required density of fire on the beach, the offshore ships lifting fire upon approach of the boats to

the beach and the inshore groups continuing to fire on targets until the boats were right at the point of beaching. Inshore vessels at a range of 1,000 yards or less were much more accurate in their delivery of ordnance on targets than were offshore groups. Their increased accuracy allowed for an equivalent amount of damage without having to supply as great a density over the whole target area.¹¹⁴

Inshore fire support groups were to open fire either just before or immediately after the offshore groups cease-fire. They could reinforce offshore group fires while both were engaged in their missions, but they were to take over the target area once the offshore group lifted inland or ceases fire. Inshore support ships were not to use the time-sector method of bombardment because the period for landing troops on the beach was too short. Instead, they were to fire upon the beach at their maximum rate and cease-fire when the landing craft approached close to the shore. Well-trained observers were to be aboard vessels involved in inshore fire support. These observers were to work in tandem with the fire control and gun groups in order to bring heavy fire down upon an observed target as quickly as possible. Machine guns and antiboat guns were to be considered the most important targets at this stage of the assault. Fire was to be maintained over the whole target area if no observable targets presented themselves.¹¹⁵

Inshore support ships were to watch for enemy flanking fire coming from positions located in the target areas of other ships that were masked from the direct fire of the ship responsible for that area. Ships with the ability to place direct fire upon such a target were to do so, regardless of whether or not the target was in its area of responsibility. Inshore support ships were to continue to lay fire ahead and on the

flanks of the landing party. They were not to cease fire because of an inability to see aiming points. Provision was to be made to continue delivery of fire using indirect methods in case smoke and dust hampered visibility in the target area.¹¹⁶ Offshore supporting groups had to execute deep supporting fires once the approach of the landing boats to the shore forced them to lift their fire off of the beach. Other ships specially designated for the purpose were to augment the offshore supporting groups in the accomplishment of their fire missions.¹¹⁷ Deep supporting fires were to be concentrated on important enemy positions such as areas known or estimated to contain enemy troops and key enemy defensive positions along the axis of the main attack. As in the case of ships providing close-supporting fires, efforts were to be made to select firing positions for ships involved in deep supporting fires that would allow the latter to lay fire by direct observation. Allowing these ships to fire in this way gave them the best chance of approximating the characteristics of close supporting fires. Deep supporting fires were to be controlled by plane spot or by fire control parties ashore if fire by direct observation was not possible.¹¹⁸

The ships providing gunfire support for the amphibious assault had to be assigned to fire support areas offshore. These fire support areas were to be located such that they did not interfere with the transport area or the movement of the boats to the beaches, but care was to be taken that their locations not jeopardize the effectiveness of the support ships in carrying out their fire missions. Close supporting fires being executed best by direct observation, the fire support areas were to be located such that the need for indirect fire was kept to a minimum. In line with this necessity, ships firing on small islands and peninsulas were to position themselves so

that they could undertake fires on reverse slopes and some counter battery fires by means of direct observation. In order to economize ammunition and observation planes and also in order to insure that fire was brought on targets as rapidly as possible, ships assigned to interdiction missions were to be positioned, whenever possible, such that they could keep their targets under continuous, direct observation from the ship.¹¹⁹

A fire support area was to be large enough to allow for the maneuvering of the ships assigned thereto. It was also to be large enough to give the commanders of the fire support groups assigned to it a reasonable amount of latitude in selecting suitable firing runs. Firing runs were to allow for the maximum number of guns to be laid on a target at one time. They also were to allow for the minimum amount of adjustments of range and deflection during the firing. In other words, the target was to bear on the ship's beam at the center of the run, the run being fairly straight and long enough so as not to require frequent turns during the progress of the firing.¹²⁰ It was very important that firing ships not be made to turn at critical times during their runs and that fire be delivered from the most effective position in those runs while presenting the least amount of danger to the landing craft and other ships. Consequently, the position of ships in their firing runs was to be closely coordinated with the firing schedule and with the position of the landing craft.¹²¹ Since delays were bound to occur during the execution of a landing, however, fire support ships were not to open fire until the leading boats were in the position prescribed by the attack force commander. Commanders were not to go strictly by the time schedule! Neither was that schedule to be constructed around a particular hour of the day or a portion thereof. It was to be flexible, playing off the time when the landing craft actually began their run toward the

beach.¹²²

Once again, Change 1 of FTP 167 followed the Tentative Manual rather closely. The most obvious difference between the two was in Change 1's specification that second line combatant ships and suitable Coast Guard vessels should be used to execute fire support missions wherever possible in order to release first line combatant ships for fleet action.¹²³ Change 3 contained much of the same information as the earlier documents concerning the basic concepts of fire support group organization, but it went into greater detail as to the classification of those groups and the most effective groupings of ship types within them. It classified fire support groups as close support, deep support, and "special." One close support fire group was to be assigned to each assault battalion and one deep support group was to be assigned to each assault regiment. An additional deep support group was to be assigned to each assault division if it was determined that such additional support was needed. The "special" support groups were to be assigned as necessary, their principal use being during the preparation phase of the assault and against targets classified as "special" from a tactical standpoint.124

Change 3 of *FTP 167* treated one of the concepts concerning the grouping of ships in fire support groups differently than did the *Tentative Manual* and Change 1. That concept was simplicity of control. The earlier documents recognized the advantages of keeping the use of fire control as simple as possible, but they did not stipulate a solution to the problem, per se. Change 3 was more direct: "By reason of simplicity of communication and fire control it is desirable that only one ship constitute a fire support group whenever practicable."¹²⁵ This stipulation explained the reason why

the authors of Change 3 believed it necessary to point out earlier in the document that individual destroyers, with their one control, should not be assigned as fire support groups.¹²⁶ Regarding ship types, the authors of Change 3 used the same classification system they had used before in discussing general characteristics of naval vessels, this time with an eye toward how best to use them in fire support groups. The authors deemed light cruisers in general to be the "ideal component" of close fire support groups and 6" light cruisers and 8" heavy cruisers to be "preferable" for deep support of regiments. Battleships, on the other hand, were to be reserved as divisional deep support and for use as "special" fire support groups. Destroyers, according to the authors, were especially well suited for use in "special" fire support groups, participating in preparation fires and providing fire on targets of opportunity on the flanks of the assault using ship spot. It was suggested that it could even be desirable to use several destroyers as a close support group rather than one cruiser, the destroyers rotating in answering calls from the shore fire control parties.¹²⁷

Organization and Use of Shore Fire Control Parties

Ships' fire control parties performed two functions according to the doctrine as it was first stated in the *Tentative Manual, 1935*: they provided liaison between a supporting ship or fire support group and the unit of the landing force for which they were providing support, and they spotted ships' gunfire from control vessels and observation stations located ashore.¹²⁸ The most desirable setup was to have a fire control party from each ship in a group firing close and deep supporting missions on the beach or group of beaches being supported. The participation of all ships involved in the fire missions allowed for greater flexibility in the execution of fires on several targets

because two or more observation stations were occupied simultaneously.¹²⁹ To simplify matters, however, a designated ship within a fire support group that had been given the task of supporting two or more beaches could designate one ship to provide a fire control party on a particular beach that could act for the entire group.¹³⁰

The composition of each fire control party was to be as follows: one fire control officer, one spotter with necessary recorders, and a detail of communications personnel. The fire control officer was the person who acted as a liaison with the units of the landing force being supported. Both he and the commander of the supporting field artillery units usually took up a position with the senior marine commander on his assigned beach. A chief fire control officer was to be designated to act as liaison officer where two or more fire control parties were operating on the same beach. The spotting details were ideally to take up positions at the field artillery observation posts.¹³¹ The fire control parties for offshore fire support groups were to be stationed initially aboard control vessels in order that they might provide assistance in the control of fires on the beach, but provision was to be made for landing these parties in time for them to perform their duties ashore.¹³²

The doctrine as related in Change 1 of *FTP 167* was practically the same with one minor and one major exception. First, it stipulated that the communication detail of the fire control parties be equipped with a portable radio, two field telephones, and approximately a mile of wire so that a spotter could take a position quite distant from the radio set.¹³³ Second, it provided greatly detailed instructions as to how fire control parties were to be used and trained, even down to a discussion of the equipment for and the carrying out of training on board ship.¹³⁴

Change 3 of FTP 167 dropped this highly detailed exposition and went back to the more succinct treatment of the *Tentative Manual*. The similarity ended there, however. There was a significant difference between the doctrine promulgated in Change 3 and the one espoused in both of its earlier incarnations. These differences concerned two components: the liaison between the naval support groups and the landing force and the separation of the naval gunfire liaison officer from the fire control party. The earlier version of the doctrine provided for one-way liaison from the landing force units to the firing ships by way of an officer who in most instances was also in command of a fire support party. Change 3 put in place an additional liaison, from the fire support group to the supported infantry commander, and separated the liaison officer ashore from responsibility for the fire support party. Change 3 stipulated that the naval gunfire support officer (the one sent to the commander of the unit of the landing force being supported) had to be qualified in naval gunnery and had to have complete information as to the characteristics of the ships composing the gunfire support group from which he came, and he also had to have some knowledge of the fire support areas his group had been assigned. The landing force officer (the one sent from the landing force to the ships providing fire support) had to have complete knowledge of the scheme of maneuver that had been planned for the assault forces and of information from the intelligence annex and subsequent reports concerning the enemy's situation ashore.¹³⁵ This dual liaison system, according to the authors of Change 3, provided the best method of coordinating fire between the firing ships and the supported units during Phase III of D-day, the period in which unforeseen tactical situations could arise that required a modification of the prearranged firing plan.¹³⁶

The fire control party described in Change 3 was different from the one described in the two earlier versions of the doctrine. First, there was a change in terminology. They were no longer "ships' fire control parties" but "shore fire control parties." Second, rather than the vague references to "the units of the Fleet Marine Force being supported" that were found in the *Tentative Manual*, Change 3 stipulated that one shore fire control party was to be organized for each assault battalion of the landing force. What is more, they were to act under the instructions of the battalion commander. Third, the composition of the fire control party was slightly different: an officer who acted as spotter, a noncommissioned officer who acted as his assistant and who was capable of adjusting fires if necessary, a private who acted as the instrument operator, and a detail of communication personnel.¹³⁷

This was the Navy's gunfire support doctrine as it existed the day marines went ashore on Betio Islet, Tarawa Atoll. The rest of this dissertation is an analysis of the application of this doctrine as it pertained to preparatory and preliminary bombardment of assault beaches and the modifications to the doctrine that resulted from its application.

Endnotes

1. Kenneth J. Clifford, *Amphibious Warfare Development in Britain & America from 1920 to 1940* (Laurens, NY: Edgewood, 1983), 103-105.

2. Ibid., 107 and 208-214.

3. James J. Tritten, *Naval Doctrine...From the Sea* (Norfolk, VA: Naval Doctrine Command, 1994), 1; Wayne P. Hughes, *Fleet Tactics: Theory and Practice* (Annapolis, MD: Naval Institute Press, 1986), 30; E.B. Potter, ed., *Sea Power*, 2nd ed. (Annapolis, MD: Naval Institute Press, 1981), 185.

4. Though many of these men were able to put this embarrassment behind them, some of them actually enjoying the discomfort it caused older officers above them in the ranks, Cadet Chester W. Nimitz was not one of them. According to Nimitz's biographer, E.B. Potter, the scandal was a traumatic experience for the young cadet. As Potter puts it: "[Nimitz] made a vow then and there that, if ever he was in a position to prevent it, there would be no washing of the Navy's dirty linen in public. The shock of the Sampson-Schley controversy may indeed have been at the root of Nimitz's later almost obsessive discretion." E.B. Potter, *Nimitz* (Annapolis, MD: Naval Institute Press, 1976), 53. "Dirty linen" would include vigorous differences of opinion concerning proper principles and doctrines.

5. Tritten, From the Sea, 1.

6. Hughes, *Fleet Tactics*, 30.

7. U.S. Department of Defense, *Dictionary of Military Terms* (New York: Arco Publishing, 1988), 117.

8. Carl von Clausewitz, *On War*, Michael Howard and Peter Paret, editors and translators (Princeton, N.J.: Princeton University Press, 1976), 152.

9. Ibid.

10. Ibid., 140. Italics in original.

11. Hughes, Fleet Tactics, 28-31.

12. Dudley W. Knox, "The Role of Doctrine in Naval Warfare," *United States Naval Institute Proceedings* 41 (March/April 1915): 334-335.

13. Hughes, *Fleet Tactics*, 140-141. Italics in original.

14. John H. Russell, "A Plea for a Mission and Doctrine," Marine Corps Gazette

1 (June 1916): 115. The "estimate of the Situation" to which Russell refers was a part of the analytical process taught at the Naval War College. The first step in preparing a plan of action was to analyze the situation in which one found oneself – your ship's position, the enemy's position, what was known about the enemy's capabilities relative to your own, etc... – and then to begin planning based upon this reasoned foundation. Russell viewed the historical study undertaken by military and naval thinkers as the equivalent of this "estimate of the situation." Historical study lays a foundation for the derivation of principles just as the "estimate of the situation" lays the foundation for solid planning and proper action.

15. Clausewitz, On War, 158.

16. Jeter A. Isely and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory and Practice in the Pacific* (Princeton, NJ: Princeton University Press, 1951; reprint, Quantico, VA: Marine Corps Association, 1988), 232 (page citations are to the reprint edition)

17. United States Navy, *Notes on Amphibious Warfare, No. 2*. Eisenhower Library, Walter Bedell Smith Collection of World War II Documents, 1941-1945. Box 47, File 1, pages 5-9 – 5-10.

18. Isely and Crowl, 582.

19. Department of the Navy, *Tentative Landing Operations Manual, 1935*, 42-43. This work will be referred to from now on in these notes as *Tentative Manual, 1935*.

20. Gunther E. Rothenberg, "From Gallipoli to Guadalcanal," in *Assault from the Sea: Essays on the History of Amphibious Warfare*, ed. Merrill L. Bartlett (Annapolis, Maryland: Naval Institute Press, 1983), 179; E.B. Potter and Chester W. Nimitz, ed's, *Sea Power: A Naval History* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1960), 632.

21. Tentative Manual, 1935, 189.

- 22. Ibid., 190-191.
- 23. Ibid., 192.
- 24. Ibid., 193.
- 25. Ibid., 82.
- 26. Ibid., 127.
- 27. Ibid., 67.
28. Ibid., 84-134.
29. Ibid., 51-55.
30. Ibid., 266-267.

31. Chapter 5, the naval gunfire chapter in the *Tentative Manual, 1935* and all three changes of *FTP 167*, was not revised in Change 2. This failure to make changes concerning naval gunfire explains why the author of this paper only looks at Changes 1 and 3 of *FTP 167*.

32. Tentative Manual, 1935, 155.

33. Ibid., 156.

34. Ibid.

35. Ibid.

36. Ibid., 155-156.

37. *Tentative Manual, 1935,* 162; Department of the Navy, *Fleet Training Publication 167, Landing Operations Doctrine, U.S. Navy, 1938,* Change 1, 121. *FTP 167* Change 1 will be referred to from now on in these notes simply as Change 1.

38. Department of the Navy, *Fleet Training Publication 167, Landing Operations Doctrine, U.S. Navy, 1938*, Change 3, 115. *FTP 167* Change 3 will be referred to from now on in these notes simply as Change 3.

39. Tentative Manual, 1935, 155.

40. Ibid., 25.

41. Ibid., 156.

42. Ibid., 148. This was not the standard accepted by the Army.

43. Ibid.

44. Ibid.

45. Ibid., 178.

46. Ibid., 160.

47. Ibid., 162.

- 48. Ibid., 148.
- 49. Ibid., 180-181.
- 50. Ibid., 163-164.
- 51. Ibid., 181-182.
- 52. Ibid., 148.
- 53. Ibid., 164.
- 54. Ibid., 165.
- 55. Ibid., 165 and 183.
- 56. Ibid., 183.
- 57. Ibid. Radar would be added to this list later in the war.
- 58. Ibid., 183-184.
- 59. Ibid., 149.
- 60. Ibid., 165.
- 61. Ibid., 184.
- 62. Ibid., 149.
- 63. Ibid., 165.
- 64. Ibid., 184.
- 65. Ibid., 149.
- 66. Ibid.
- 67. Ibid., 149-150.
- 68. Change 3, 113.
- 69. Ibid., 114.
- 70. Ibid., 114 and 115.

- 71. Ibid., 114.
- 72. Tentative Manual, 1935, 151.
- 73. Ibid., 151.
- 74. Ibid., 152.
- 75. Ibid.
- 76. Ibid.
- 77. Ibid.
- 78. Ibid.
- 79. Ibid.
- 80. Ibid.
- 81. Ibid., 153.
- 82. Ibid.
- 83. Ibid.
- 84. Ibid.
- 85. Ibid.
- 86. Ibid.
- 87. Ibid.
- 88. Ibid.
- 89. Ibid.
- 90. Ibid., 153-154.
- 91. Ibid., 154.
- 92. Change 3, 117.
- 93. Ibid.

- 94. Ibid.
- 95. Ibid.
- 96. Ibid.
- 97. Ibid. See also section of this chapter on fire control party liaison.
- 98. Ibid., 118.
- 99. Ibid.
- 100. Ibid., 119.
- 101. Ibid., 118.
- 102. Ibid., 119.
- 103. Ibid., 120 and 121.
- 104. Ibid.
- 105. Ibid., 120.
- 106. Ibid., 122.
- 107. Ibid.
- 108. Ibid.
- 109. Ibid.
- 110. Tentative Manual, 1935, 166.
- 111. Ibid., 168.
- 112. Ibid., 166-167.
- 113. Ibid., 169-170.
- 114. Ibid., 163.
- 115. Ibid., 178-179.
- 116. Ibid., 180.

117. Ibid.

- 118. Ibid., 182.
- 119. Ibid., 169.
- 120. Ibid., 170.
- 121. Ibid., 173.
- 122. Ibid., 173-174.
- 123. Change 1, 123.
- 124. Change 3, 122.
- 125. Ibid.

126. See page 51 of this paper concerning the limitations of destroyers in this capacity.

- 127. Change 3, 122-123.
- 128. Tentative Manual, 1935, 184.
- 129. Ibid., 184-185.
- 130. Ibid., 185.
- 131. Ibid.
- 132. Ibid.
- 133. Change 1, 135.
- 134. Ibid., 135-137.
- 135. Change 3, 123.
- 136. Ibid., 130.
- 137. Ibid., 123.

CHAPTER 3

OPERATION GALVANIC

The Amphibious Assault of Tarawa Atoll

It had already been a long and trying morning and it did not look like it was going to get any better. Lieutenant Colonel Herbert R. Amey had so many things on his mind, and complications were adding to the list. Having to deal with transferring his battalion landing team from transports to landing craft in the open ocean off Tarawa Atoll would have been difficult enough under the best of circumstances, but the Japanese were not helping matters with their periodic shelling. The transports had to move to a different position, creating a chaotic condition that cost precious time, but all that had been worked out and things were beginning to get back on track. Now, at 0824, the first waves of amphibian tractors (LVTs) were leaving the line of departure and heading for the beach, but they were behind schedule and they were falling further and further behind as they churned on. Things were not going exactly according to plan.

Amey waited in his LCM (landing craft, medium), taking in what was going on as the first three waves of his landing team (LT), 2nd Battalion of the 2nd Marines, made their way in their LVTs toward their smoke-shrouded objective, Beach Red 2 just to the west of the pier. The Navy had talked of pounding the island so hard that the marines would be able to waltz right in and take it from the Japanese without having to fire hardly a shot. Amey was leery of such a boast, but he held out hope in the back of his mind that it would happen that way – that is until the leading elements of his landing team reached the reef.

Anti-boat and machine gun fire ripped into his men as they crossed the reef in

their amphibian tractors, and there was nothing their commanding officer could do but watch. He had to get into this fight – provide some leadership – but he had to wait until it was time for his wave of landing craft to leave the line of departure. Lieutenant Colonel Walter I. Jordan, an observer from the Fourth Marine Division, could see the wrinkles of concern on Amey's face, and Jordan understood all too well why they were there. Some of those wrinkles disappeared as the LCM started toward the island, but the task was not about to get any easier – and Amey knew it. He tried to get a better view of the beach ahead as the landing craft made its way forward, but the smoke and dust made observation very difficult.

Suddenly, his thoughts were yanked away from his pinned down men on the beach and back to his own little group. With a loud grating crash, the LCM came to a halt on the reef. It would go no farther. He and the other battalion commanders knew that there was a possibility that LCVPs (landing craft, vehicle and personnel) and LCMs might not be able to get over the reef. Now he was faced with irrefutable proof that they would not. He had to get shore, regardless. His men were being torn to pieces and he had to get to them. Two empty LVTs that were heading back to the transports passed nearby. Amey flagged them down and had his command post group offloaded into them. Neither of the LVTs was big enough to carry everyone, so Amey and Jordan got into one with thirteen other officers and men while the rest got into the other tractor with Major Howard Rice, LT 2/2's executive officer. Heavy enemy fire forced Rice's LVT westward, away from Red 2, but Amey's tractor was able to stay on course. There appeared to be something in the water ahead, but it did not matter – they had to reach the beach. The LVT tried to barrel through the obstacle, but it came to a halt about 200

yards from the shore as it became entangled in what turned out to be barbed wire. The beach – they had to reach the beach so that he could set up his command post and begin directing his marines in the midst of this hell. Now was the time when he could begin leading by example. Amey ordered his men over the sides of the tractor. Only a short distance through shallow water and he would be there – on the beach. Waving his pistol toward the island, he yelled to his men, "Come on! Those bastards can't stop us!" – silence.

Lieutenant Colonel Herbert R. Amey fell where he stood, killed by a Japanese machine gun bullet that tore into his throat. His experience on the bloody shores of Betio Islet can be seen as symbolic of the frustrations and torments the Second Marine Division would have to face and surmount over the 76 hours of agony that was the Battle of Tarawa. Many mistakes were made during that battle and many lives were lost because of those mistakes. The Navy and Marine Corps had spent the interwar period attempting to address every foreseeable problem associated with attacking a fortified position from the sea. Tarawa was the first test of the amphibious warfare doctrine the Naval Services had produced, and it proved to be a most difficult one.¹

The troops of Combat Team 2, Second Marine Division, that would take part in the assault waves began to debark at 0320 from the transports of Task Group 53.1, precariously climbing down cargo netting into waiting LCVPs for subsequent transferal to LVT(1)s. These tracked amphibious vehicles would take them over the reef that surrounded an island objective that lay out there, somewhere, in the night. An unexpectedly strong current, however, had caused the transports to halt too far south and this incorrect position put the ships within easy range of the shore batteries on



Map 1 – Scene of Battle, 1943-1944²



Map 2 – Pacific Ocean Areas, 15 June 1944³



Map 3 – Gilbert and Marshall Islands⁴



Map 4 – Tarawa Atoll ⁵



Map 5 – Tarawa Atoll Showing Transport Area, Line of Departure and Landing Beaches, 20 November 1943⁶



Map 6 – Betio Islet⁷

Betio. To make matters worse, they were also masking the ships of Fire Support Area 1 so that those vessels could not begin their job of softening up the Japanese defenses on the island prior to the sending of marines onto the beach. In order to unmask the fire support vessels and to move the transports out of range of the Japanese guns, debarkation of troops was halted and the whole transport group moved north to its proper position.⁸ This unplanned move caused some confusion. LCVPs already loaded with troops had to attempt to keep up with the larger vessels to which they had been assigned as those ships traveled through the open ocean at night. Some of the LCVPs became separated in the darkness and time was lost as these strays were rounded up.⁹ Finally in place by 0345, the transports resumed debarkation of troops. They were joined at 0415 by LSTs (landing ship, tank) loaded with LVT(2)s. These ships disgorged their amphibian tractors and troops from the attack transports were transferred into them. More time was lost as the first waves of LVTs were organized.¹⁰

The Japanese had been quiet during all this time, but shore batteries began opening up on the invaders at 0507. Fire support vessels attempted to neutralize the Japanese emplacements until 0542 when they ceased fire to allow for a scheduled air strike against the beachhead. Aboard the battleship USS *Maryland* (BB 46), commander of the Southern Landing Force (CTF 53) Rear Admiral Harry W. Hill called for the cease-fire in order to allow dust kicked up by the bombardment to settle and to avoid possible collisions between aircraft and bombardment shells.¹¹ The air strike was not delivered on time, possibly as a result of a misunderstanding as to whether it was to take place at dawn or at sunrise. Regardless of why it did not occur at the proper time, the approximately thirty minutes during which the fire support ships waited for the air

attack allowed the Japanese to fire on the transport area unmolested.¹² The fire support vessels resumed firing at 0605, only to have to stop once again for ten minutes when the belated air strike finally came in at a few minutes before 0615.¹³ The resumption of fire after the air strike had been delivered signaled the beginning of the pre-landing bombardment.¹⁴

At sunrise, 0612, the minesweepers USS Pursuit (AM 108) and USS Requisite (AM 109) began clearing the entrance to the lagoon under cover of smoke from pots carried by LCVPs. Aboard the *Pursuit* to act as a guide was a Lieutenant Forbes of the New Zealand Navy, a man familiar with the waters around Tarawa atoll. Waiting in the wings until a path had been swept through the mines were the destroyers USS Dashiell (DD 659) and USS *Ringgold* (DD 500). The destroyers temporarily silenced Japanese guns that fired on the minesweepers while the latter were doing their job. When the minesweepers were finished, the Pursuit, with the help of an observation plane, began to mark the line of departure, the assault lanes, and any shoals that might present a danger to other ships or small craft. The *Requisite* left the lagoon in order to guide the destroyers in. The entry of the *Dashiell* and the *Ringgold* into the lagoon was too much for the previously silenced Japanese gunners to tolerate. Shells began to fall around the destroyers as they came through the cleared passage. One dud slammed into the *Ringgold* and penetrated to her after engine room. Another ricocheted off one of her torpedo tubes, barreled through sickbay, and finally came to rest in her emergency radio room. She opened fire on the gun position from which the shelling was believed to originate, and within a few moments a brilliant explosion lit up the early morning sky. Her shells apparently had found the enemy battery's ammunition supply.¹⁵

The *Pursuit*, after completing the work of setting up for the assault, took position at the line of departure at 0715 and turned on her searchlights. She would act as a beacon, guiding the LVTs that would follow her through the dust and smoke already kicked up by naval bombardment and the air strike. Tracking the waves of LVTs by radar, she reported to CTF 53 that they were behind schedule and would not be able to land at the appointed H-hour of 0830. The pilot of one of the *Maryland*'s spotter planes, Lieutenant Commander Robert A. Macpherson, also reported that the LVTs were not going to meet the schedule. Admiral Hill, faced with the inevitable, radioed all units to postpone H-hour until 0845.¹⁶

The Admiral's day had already gotten off to a bad start, what with the problems forming up the LVTs and the confusion over the timing of the air strike, but the day was only beginning. Hill's command ship, the *Maryland*, had been having problems with her radios ever since she began contributing to the naval bombardment of Betio. The concussion from her 16" main guns knocked out her radio equipment at that time and it had functioned intermittently ever since. The communications problems had kept Hill from contacting the planes of the air strike that had been scheduled for 0542 and they now kept him from notifying the pilots of a second air strike due in at H-hour that the assault had been postponed. Hill received information from Macpherson that the LVTs had finally reached the line of departure and, based upon information that the amphibian tractors were capable of 4-41/2 knots, the task force commander rescheduled H-hour for 0900.¹⁷ The LVTs of the assault waves fell behind schedule for three reasons. First, the shift in transport anchorage early on the morning of 20 November caused them to start out late. Second, the drivers of the LVT(2)s that had

joined the task force at Tarawa had not taken part in the rehearsals for the operation. Consequently, they were unfamiliar with proper signals, speeds, and load limitations, their unfamiliarity slowing down the transfer of men from the LCVPs and the forming of the assault waves. Finally, the faster LVT(2)s had to dress on the slower LVT(1)s. The slower amphibious tractors were incapable of maintaining even four knots when fully loaded.¹⁸

Just as Hill was making this change in plans known to the units of the task force, the air strike that had been scheduled to immediately precede the hitting of the beach began while the LVTs were still approximately forty minutes away from doing so. The *Maryland*'s main batteries were silent for the moment and Hill was able to contact the carrier pilots. He called off their strafing attacks and rescheduled them for between 0855 and 0900. The task force continued to bombard the landing beach on Betio right up until the time of the rescheduled air strike. At 0855 the bombarding ships lifted their fire off of the beach in order to allow the planes to make their strafing runs and, at 0900, the bombardment came to a halt with the exception of the destroyers firing from the lagoon.¹⁹

The preliminary bombardment did not destroy all of Betio's defenses. The enemy's most powerful guns – the 8-inch coastal defense guns – were silenced along with many of the dual-purpose antiaircraft mounts and antiboat guns. The majority of the Japanese concrete pillboxes and the emplacements that were protected by layered coconut logs and sand, however, were unhurt by either bombs or naval shells. The island commander, Rear Admiral Keiji Shibasaki, had done his job well.²⁰ Japanese POWs subsequently reported that the preliminary bombardment had achieved success

in one area, however. The rain of shells and bombs had disrupted the enemy's communications by destroying the wire that had been run between positions. The Japanese had to rely upon messengers, most of who were either killed or forced to stay under cover. Consequently, few messages got through to their destinations, a factor that contributed greatly to a breakdown in command and control.²¹

The Betio defenders began shelling the LVTs as the tractors made their way from the line of departure to the reef surrounding the island. These first shells were set to burst over the LVTs in order to shower the marines inside with shrapnel. The bursting charges of these shells were too powerful, however, and the resulting shrapnel was little larger than grains of sand. No significant casualties resulted from these airbursts or from the long-range fire of Japanese machine guns on Betio. Defensive fire increased significantly as the LVTs crossed the reef, but troop casualties remained low and few of the amphibious tractors failed to reach the beach.²²

First Lieutenant William D. Hawkins and his 2nd Scout-Sniper Platoon approached the smoke-enshrouded ruin of what was once the peacefully idyllic islet of Betio at about 0830. Hawkins and his unit were to clear the Japanese from a long pier that jutted out past the reef on the lagoon side of the island. This pier allowed access to Betio regardless of the tidal conditions. American forces would need the pier for logistical reasons later in the operation, but the main concern here at the beginning was its use by the enemy as a position from which to spray extremely deadly enfilading fire onto the approaching waves of amphibian tractors. There was a seaplane ramp that ran from the pier over the reef to the lagoon and it is here that Hawkins and a small part of his unit landed at 0855, the first American troops to set foot on the little bit of hell that

would be remembered henceforth simply as "Tarawa."23

Hawkins led the way from his platoon's LCVP, jumping onto the seaplane ramp and charging up it toward the pier. Engineer Second Lieutenant Alan G. Leslie, Jr., and four other marines followed close behind him. After he and the others had secured the ramp, Hawkins called for the rest of his platoon to join him. As his men began to transfer from their boat to the ramp, however, enemy fire began to slam into the pier around some gasoline drums the Japanese had stored there. Hawkins ordered his marines back into the LCVP while he, the four scouts who were already with him, and Lieutenant Leslie began advancing down the pier toward the shore. The engineer, who was carrying a flamethrower, hosed everything that looked like a good shelter for enemy snipers while Hawkins and the four scouts made sure that no Japanese were left alive to fire upon the incoming marines. In his zeal to kill enemy snipers, Leslie actually set a part of the pier ablaze, burning a gap in it that would cause problems later when trying to move supplies ashore. Future logistical difficulties were not foremost in the minds of Hawkins and his scout-snipers, however. Ensuring the safety of their fellow marines in the approaching assault waves was. Now it was up to those fellow amphibians to take the fight directly to the enemy.²⁴

Major Schoettel's 3/2 was the first assault battalion to reach its assigned beach, going ashore on Beach Red One beginning at 0910. Company I landed on the extreme right while Company K landed on the extreme left, on the boundary of Red One and Red Two. This boundary happened to coincide with a Japanese strongpoint that was in a position to pour flanking fire onto Company K as that unit attempted to gain the protection of the coconut log barricade located a few yards inland. Company K was

responsible for tying into the unit on the extreme right of Red Two. The company's commander could not locate any marines to his left, so he made contact with Company I and made no attempt to advance toward Red Two. These two assault companies lost over one half of their men over the next two hours of the battle. Company L of 3/2 and the battalion mortar platoon were only slightly more fortunate. Boated in LCVPs rather than LVTs, they suffered approximately thirty-five percent casualties wading toward Red One after their landing craft grounded on the reef.²⁵

Major Crowe's 2/8 reached Red Three at 0917. Fire from the destroyers in the lagoon, which was kept up until 0910, forced the Japanese to remain under cover. The seven minutes between the cease-fire and 2/8's landing were insufficient for the defenders to recover before the marines were upon them. Two of the battalion's LVTs made their way through a gap in the beach barricade and were able to unload their troops at the airstrip. The remaining LVTs stopped at the log barrier, unloaded, and returned to the control boats in the lagoon. Fewer than twenty-five of the 552 men in the first three waves assaulting Red Three became casualties during the landing.²⁶

Lieutenant Colonel Amey's 2/2 faced the most violent opposition of all the assault battalions on D-day. Company F and most of Company E landed on Red Two at 0922. One platoon of Company E was driven off course by machine gun and antiboat fire and was forced to land on Red One. Company G followed the first two by only three minutes, but even with its additional weight behind the assault, 2/2 could only carve out a beachhead approximately fifty yards deep. Battalion casualties were very heavy, with Company F alone losing approximately one half of its strength.²⁷

The first three assault waves found that, as feared, the depth of water across the reef varied from three feet to only a few inches. Standard landing craft (LCVPs and LCMs) drafted approximately four feet or more of water, so they were barred from access to the beachhead. Infantrymen and pack howitzer crews either transferred to LVTs or waded the 400-500 yards from the reef to the beach under the strain of the load of their weapons and the withering enemy fire from the island. Tanks had to attempt the trip from reef to beach under their own power, trying not to sink into potholes and drown their engines.²⁸ The men who waded ashore from the reef suffered the largest number of casualties on D-day at Tarawa. Tactical organization broke down as they attempted to advance in the face of the shrapnel-punctuated maelstrom that greeted them and the movement ashore became as much a race to survival as it was a coordinated amphibious assault.²⁹

Battalion command groups faced major, seemingly insurmountable problems in coming ashore. Boated in landing craft that were positioned between the third and fourth waves, the commanders and their staffs were among those who had to wade to shore from the reef. Major Crowe, on Red 3, encountered the least trouble. Lieutenant Colonel Amey's death severely compromised his battalion's command and control at a key point in the operation and Major Schoettel, while living through the ordeal, was not able to get ashore over Red 1 until late in the afternoon. Shortly after 0959, while the Major was still hung up on the reef, he radioed a reply to an order from Colonel Shoup to land his reserve over Red 2 and attack westward. His stark statement: "We have nothing left to land."³⁰

Regimental command elements also encountered major problems in going ashore. Not being able to continue past the reef, Colonel Shoup commandeered an LVT that was carrying wounded back from the beach and, after having the wounded transferred to his own LCVP, started for shore on the left half of Red 2. The LVT came under intense fire as it neared the beach. Shoup and his command group went over the side of the tractor and waded toward the central pier. According to Shoup, "From then on it was a matter of getting from the pier on down. You could say my CP was in the boat, then in the LVT, and then on the pier on the way in, but there was very little business conducted." Upon reaching the beach, Shoup determined just how much of Red 2 was in 2/2's possession and then set up his CP. By the time he and his command group had done this, it was approximately 1200.³¹

At 0958, during Shoup's exchange with Schoettel over the landing of the battalion commander's reserve, the colonel ordered regimental reserve battalion 1/2 to land on Red 2 and attack westward in order to help 3/2 in their battle on Red 1. This plan was slow to develop due to a shortage of LVTs. Only enough tractors could be found that morning to transport Companies A and B of 1/2. Heavy fire from the right side of Red 2 forced some of the LVTs carrying these two companies, comprising a total of four officers and 110 men, to veer off and land on Red 1. The rest of the LVTs landed on Red 2 and helped expand the beachhead there. It was not until the next morning that all of Kyle's command was landed.³²

At 1018 General Julian Smith committed one of his two divisional reserve battalions to the battle, the 3rd Battalion 8th Marines (3/8) commanded by Major Robert H. Ruud. Tactical control was given to Colonel Shoup at 1103 and he ordered 3/8 to

land on Red 3 in support of Major Crowe's 2/8. Ruud's first four waves were cut to pieces as his men tried to make their way from the reef to the shore. The landing of the battalion was halted after the fourth wave and the remaining units stayed at the end of the central pier until ordered in at approximately 1500. All of 3/8 was ashore by 1730. Ruud then, on Shoup's orders, deployed one of his companies to plug a gap between 2/8 and 1/2. 3/8's Company K was already attached to Crowe's 2/8, having arrived in the first waves of 3/8's landing. It remained attached to 2/8 throughout the rest of the battle.³³

The operation lost momentum after the initial assault waves had gained a toehold on the island. LVT losses were mounting as the battle progressed, and it was these losses that slowed the attack down as the afternoon wore on. Many of the reserves had to go ashore in LCVPs and, like the men in the fourth and fifth waves of the assault, they had to wade ashore under fire. The battle was raging just inshore from the beach, so those men who survived the 400-500 yard gauntlet between the reef and the beach had to enter the battle immediately upon emerging form the water. Command and control at the battlein and even at the company level was virtually impossible for the reserve elements coming ashore under these conditions. Much of the burden of continuing the assault fell upon individual marines who were struggling for their very survival. Many of them kept pushing forward, trying to get ashore and under cover despite all the Japanese tried to do to stop them.³⁴

Observation of what was transpiring on the beach and inland was very difficult. The pre-invasion naval bombardment and air strikes had raised a column of dust and smoke over the island and subsequent operations on Betio continued to contribute to it.

Only parts of the island were visible at any one time, even from the air, so that neither Julian Smith aboard the *Maryland* nor Colonel Shoup in the thick of the battle ashore could either directly or indirectly observe more than a miniscule part of the operation as it unfolded. Continuing communications problems, both with the radios used by the marines on the island and with the radios aboard the *Maryland*, insured that command and control at all levels would be difficult.³⁵

Colonel Shoup set up his CP approximately 30 yards inland on Red 2, right up against a Japanese pillbox that still contained 25 or 26 live Japanese. Sentries were posted at the entrances to the pillbox to keep the enemy from emerging.³⁶ The regimental commander began to have a better idea of what he was dealing with by noon on D-day. He was able to make contact with his subordinates, finding out from them what they needed to press the assault forward. He then began to call for medical supplies, ammunition, and air support, the most critical items requested.³⁷

Major Michael P. Ryan, commander of Company L 3/2, consolidated his company's beachhead on Red 1 using a conglomerate command made up of pieces of several units. His "provisional company" consisted of elements from all the companies of 3/2, four platoons and part of the headquarters company from 2/2, and the four officers and 110 men from 1/2 who had been driven off course while attempting to land on Red 2. Major Rice, the executive officer of 2/2, had also ended up on Red 1 and he brought with him the only usable radio to be found in the vicinity of their beachhead. This radio proved to be the only link Ryan would have with Colonel Shoup's CP. Ryan and his marines cleared an area 500 yards deep and 150 yards wide during the afternoon of D-day, but, not having enough men to hold all of this ground, they pulled

back approximately 200 yards and dug in for the night. Two medium tanks reached Red 1 by 1130 out of six that attempted to make the crossing from the reef to the beach. Both contributed to Major Ryan's advance that afternoon, one being destroyed in the fighting and the other, only its bow machine gun operational, placed in a position to protect the beachhead flank during the night.³⁸

Medium tanks and also artillery landed on Red 2 by the end of D-day. Three tanks that had originally gone ashore on Red 3 crossed over to Red 2 and supported 2/2 as it advanced toward the runway of the airfield. The tanks rolled up to the openings of the Japanese pillboxes and fired their 75mm gun into them at pointblank range. Two of the tanks were knocked out, but one of these was retrieved on the morning of D+1.³⁹ Artillery arriving on Red 2 was originally meant for Red 1. Lieutenant Colonel Presley M. Rixey was the commander of this artillery, 1st Battalion 10th Marines (1/10). As a member of Shoup's CP group, Rixey had landed before noon while his 75mm pack howitzers and their crews awaited further orders at the line of departure. Shoup and Rixey decided that Red 1 was too hot a beach for landing artillery, so they ordered the guns ashore at Red 2. One section from Battery A and one from Battery B were transferred to LVTs for a dusk landing. Three sections from Battery C were also ordered to land, but they had not transferred to LVTs and had to make the trip to the beach in LCVPs. When their landing craft hit the reef, the gun crews had to wade ashore along the side of the pier loaded down with their dismantled pack howitzers, the largest element of which weighed 225 pounds. Not reaching shore until after dark, the five sections of 1/10 had to wait until dawn to get into position and to contribute to the battle.40

Elements of Major Crowe's 2/8 penetrated all the way to the interior of the triangle formed by the runway and taxi strip after coming ashore over Red 3. His men encountered a Japanese strongpoint on their left flank, located at the base of the Burns-Philp pier. Seventy marines from 3/8 were sent into the triangle to hold that section of the line. A group of marines from various battalions whose weapons were either lost or ruined by immersion in saltwater, found sheltering themselves under the pier, were led ashore, rearmed, and sent into battle on 2/8's left flank.⁴¹ Major Crowe's men attempted to advance beyond the fortifications just inland of the pier throughout D-day. Once past these fortifications, the battalion was to turn eastward and attack along the narrowing "tail" of the island. Crowe was able to use four medium tanks to support his advance, but the Japanese positions were too strong. Japanese gunners disabled one tank, another was accidentally destroyed by an American dive bomber, and a third was destroyed when it drove into an excavation used by the Japanese as a fuel dump and the gasoline contained in the dump was set afire by an American plane. Only one tank was able to contribute to the fight for long, even though a Japanese shell damaged it during the course of the battle.⁴²

The landing of 3/8 left Julian Smith with only one landing team in reserve. Shortly after noon on D-day, the division commander seriously began to consider having to use his last landing team, 1st Battalion 8th Marines. If he committed 1/8 to the battle, the only units he would have left in reserve would be elements of the 10th Marines (artillery), the 18th Marines (engineers), division Special Troops, and Service Troops.⁴³ Once developments on Betio forced him to commit 1/8, Smith requested that the 6th Marines be withdrawn from corps reserve and given over to Second Marine

Division. He contacted Holland Smith at 1331 with the request, Admiral Hill concurring, and approval was received within the hour from Admiral Turner. While awaiting word from the corps commander, Julian Smith began making plans for assembling his support group into provisional battalions for use ashore.⁴⁴

At 1343 division command ordered Colonel Elmer E. Hall, CO of the 8th Marines, to proceed with his Regimental Headquarters and his remaining landing team, 1/8 under the command of Major Lawrence C. Hays, Jr., to the line of departure and await further orders. Julian Smith asked Colonel Shoup where best to land 1/8, but the commander of CT 2 did not receive the message. Hall's HQ and BLT 1/8 remained at the line of departure throughout the afternoon of D-day waiting for Shoup's instructions. Finally, at 1625, Julian Smith ordered Hall to land on the north shore of the most eastern end of Betio at 1745. The landing team was then to attack to the northwest in support of 2/8's and 3/8's battle on Red 3. Like Shoup, however, Hall did not receive these orders. Division command did not discover until midnight that Hall and his command were still afloat at the line of departure awaiting word to go ashore.⁴⁵

At 1230 Colonel Shoup sent Lieutenant Colonel Evans F. Carlson off to the *Maryland* to inform Julian Smith of CT 2's plan for the conquest of Betio. Carlson had been assigned as an observer to Operation GALVANIC and he had been present with Shoup all morning long. Balky communications, the continuing scourge of the American assault forces, made it necessary for the combat team commander to send Carlson as a messenger. Shoup's plan was to attack southward, unite the beachheads, and then make one last advance to take the island. Carlson was instructed to inform division command of this plan and to tell them that reserves needed to be landed on Red 2 to

support this effort. As the two men parted, Shop told Carlson "You tell the general and the admiral that we are going to stick and fight it out."⁴⁶ Carlson reported to General Smith aboard the Maryland at 1800. After leaving Shoup at approximately 1230, he had spent time shuttling several LVT-loads of marines to the island and returning with casualties who were put aboard LCVPs at the reef and then taken back to awaiting transports. The combat team commander knew of Carlson's actions and approved them. When this work was completed, Carlson left his LVT at the reef and boarded an LCVP for transport to the *Maryland*.⁴⁷

Assistant Division Commander Brigadier General Leo D. Hermle, on board the USS Monrovia (APA 31), was informed by division command early in the afternoon of D-day that he needed to prepare his CP group for landing. At 1343, Hermle was ordered to go to the end of the central pier, determine how the operation was progressing, and then to report back to Julian Smith. Hermle attempted to raise Shoup on radio as he approached the pier, trying to locate CT 2's command post, but he was unsuccessful. At 1740 the Assistant Division Commander reported reaching the pier and that he was under heavy fire. His attempts to radio reports of the action ashore to division command, however, were thwarted by the aggravating communications failures that continued to plaque the Tarawa operation.⁴⁸ Hermle was able, nonetheless, to establish intermittent radio contact with Shoup and Crowe from his position at the pier. He was informed that the marines ashore desperately needed water and ammunition. Enough men were available in the immediate vicinity of Hermle's position, members of 3/8 who had gathered under the pier for protection, for the general to organize parties for carrying supplies inland. Tenuous as it was, his radio link with the embattled

commanders ashore was severed at approximately 1930.49

Hermle needed to locate Shoup's command post and he also needed to know where the combat team commander wanted to land the reserves, so at 1930 he sent Major Rathvon McC. Tompkins and Captain Thomas C. Dutton to track Shoup and his command group down. Tompkins and Dutton made it to Shoup, found out the information, and finally made it back to Hermle to report their findings at 0345. The general could not relay this information to Julian Smith because of communications problems, so he and his party went back into the lagoon and boarded the Ringgold to use her radio. Word that Shoup wanted Major Hays' 1/8 landed near the central pier on Red 2 was sent to the *Maryland* at 0445.⁵⁰ At 0510 Hermle radioed Shoup informing him of his recommendations to division. A few minutes later Hermle received instructions from Julian Smith that he was to remain aboard the *Ringgold* and to come aboard *Maryland* when the destroyer came alongside. When he arrived, Hermle was informed that the division commander had radioed an order to him at 1750 instructing him to take command of the troops ashore and to report when he had established his command post. Hermle had not received the message - the victim of another communications failure – and Colonel Shoup remained in command of operations on Betio for another day.⁵¹

Strategic and Operational Objectives for GALVANIC

Admiral Ernest J. King, Commander-in-Chief of the United States Fleet and Chief of Naval Operations, succinctly presented the orthodox explanation for why the Gilbert Islands were assaulted by the United States in November 1943 in his first report to the Secretary of the Navy on the conduct of the war:

The Gilbert Islands are a group of coral atolls lying athwart the equator. They had been held by the British up to the outbreak of war in December 1941, when they were seized by the Japanese. Their location is of great strategic significance because they are north and west of other islands in our possession and immediately south and east of important Japanese bases in the Carolines and Marshalls. The capture of the Gilberts was, therefore, a necessary part of any serious thrust at the Japanese Empire.⁵²

The connection between the Gilberts and the Marshalls was not as obvious to American planners at the beginning of the war as King's description would make it appear, however. The road to Tarawa was a convoluted one, and no one knew that better than King himself.

The military establishment of the United States is given a number of responsibilities during peacetime. One of the most important of those responsibilities is the development of contingency plans that are to be implemented when the use of military force is deemed necessary by civilian authorities. The famous ORANGE plans of the period 1906-1939 are examples of such planning by the United States Navy. "ORANGE" was the codename for the projected enemy against whom the plan was to be used: Japan. The heart of most of the various ORANGE War Plans and of the Navy versions of the subsequent RAINBOW plans was a thrust across the Central Pacific through two island groups of the Japanese Mandate: the Marshalls and the Carolines. Use of the British-owned Gilberts as a staging area for such a movement into the Mandate was suggested and discussed from time to time, but the perceived strategic and tactical realities dictated by an ORANGE war always argued against their use and the idea was dropped each time. It was not until mid-1941, when Franklin D. Roosevelt became interested in entering into a Lend-Lease arrangement with the British to use their Central and South Pacific islands as bases, that the possibility of going at the

Marshalls from the Gilberts once again became an item for discussion.⁵³ In addition to Roosevelt's interest, some of the staff members of the Navy War Plans Division (Op-12) in May of 1941 considered using the idea of possible operations in the Gilberts as a lure to lead the aggressive newly appointed Commander-in-Chief of the Pacific Fleet, Admiral Husband E. Kimmel, away from his insistence on operating the fleet in the dangerous Wake-Eniwetok region. The lure did not work, so the idea of operations in the Gilberts was once again dropped.⁵⁴

After 7 December, as the Japanese ran the United States and her Allies out of one position after another in Asia and the Pacific, the production of workable plans for a war with Japan began in earnest. Admiral King believed that the three primary objectives for the United States during this early stage of the war were: to secure and hold the Hawaiian Islands, to support Australia and Asia, and to advance to the northwestward into Japanese-held territory from bases in the New Hebrides.⁵⁵ The staff of Op-12, with King's objectives in mind, prepared an outline of a campaign against Japan and presented it to him in mid-April 1942. The plan envisioned an advance against Japan in four stages:

- (a) First Stage, in which we are now engaged, envisages building up forces and positions in the Pacific Theater and particularly in the South Pacific and Southwest Pacific for the purpose of holding these areas, and in preparation for launching an ultimate offensive against the Japanese; and for supporting the fleet forces operating there. During this stage the amphibious forces necessary to carry on this offensive will be assembled in the areas and trained; ...available air, amphibious and naval forces will take minor offensive action against enemy advanced positions and against exposed enemy naval forces for purposes of attrition....
- (b) The Second Stage as now envisaged involves a combined offensive by United States, New Zealand and Australian amphibious naval and air forces through the Solomons and New Guinea to capture the Bismarck Archipelago and the Admiralty Islands. Heavy attrition

attacks would then be undertaken against the enemy forces and positions in the Caroline and Marshall Islands.

- (c) The *Third Stage* involves seizure of the Caroline and Marshall Islands and the establishment there of Fleet and air advanced bases.
- (d) The *Fourth Stage* involves an advance into the Netherlands East Indies or, alternatively, into the Philippines whichever offers the more promising and enduring results.⁵⁶

Stage Three reflected the ORANGE plans' Central Pacific agenda, once again neglecting the Gilberts for a thrust directly into the Mandates, but King had taken out some insurance just in case. During the same month in which the Op-12 plan was brought to him for approval, he had requested of the British government, through Field Marshal Sir John Dill, the head of the British liaison delegation in Washington, permission to occupy any British or Dominion islands in the Pacific as might be required in the course of the war. This "blanket authority," as it is described in memos exchanged between King and Dill, cleared the way for current Navy planners to entertain other option besides just those already contemplated by their predecessors.⁵⁷

The next step along the path to GALVANIC was taken at the Casablanca Conference in January 1943. Meetings between the United States Joint Chiefs of Staff and the British Imperial Chiefs of Staff from late 1941 to early 1943 had brought out differences of opinion between the two groups concerning the relationship between the European and Pacific components of the war. Though even Admiral King was dedicated to the ARCADIA resolution to make Germany the first priority in the war, the American Joint Chiefs, particularly King, wanted to make sure that the Pacific was not completely forgotten in the buildup to the anticipated invasion of continental Europe. King was adamant that the Japanese should not be allowed to consolidate their positions nor, most importantly, should they be allowed to initiate offensive action of

their own volition. The American and British planners at Casablanca disagreed as to exactly how such an objective could be met and the Americans became very frustrated with what some saw as British intransigence. Finally, the U.S. Joint Staff Planners drew up a study that sketched their overall plan for Pacific operations in 1943 and they began to circulate this study among the Combined Chiefs and their planning staffs after 15 January. Enclosure B of the study dealt with projected operations in Burma, operations with which the British would have to be involved. Given the fact that they would have to supply men and materiel in Burma, thus taking away from commitments in both Europe and the Mediterranean, the British disagreed with the plan put forward in Enclosure B.⁵⁸

Enclosure A, on the other hand, did not cause them as much immediate anxiety. It dealt with the Pacific, an area the Americans tended to view as the responsibility of the United States alone. Knowing that the British were ever skittish as to American intentions, the U.S. Joint Planners grounded "A" on four specified assumptions:

- that the ultimate objective of the basic global strategy is to bring the war to a successful conclusion at the earliest practicable date,
- that in gaining this objective efforts must be made toward the destruction of the economic and military power of all our adversaries at a rate exceeding their power of replacement,
- that Germany is recognized as the primary, or most powerful and pressing enemy,
- and that the major portion of the forces of the United Nations are to be directed against Germany insofar as it is consistent with the overall objective of bringing the war to an early conclusion at the earliest possible date.⁵⁹

These assumptions made it clear that America still considered Germany the main enemy, but they also served notice to the British that such a determination was not the only factor to consider. The ultimate goal for the Americans was to bring the entire war to a close at the earliest practicable date. They did not believe leaving the Japanese alone in order to concentrate solely on Germany would not accomplish that goal. Japan

had to be contained and controlled, but within the limits set by the "Germany first"

agreement.

With what they saw as the ultimate goal in mind, then, the Joint Staff Planners

suggested that the following operations be undertaken in the Pacific:

- (a) Seizure and consolidation of United Nations forces in the Solomon Islands, Eastern New Guinea up to Lae Salamaua peninsula, New Britain-New Ireland (Rabaul) area.
- (b) Seizure and occupation of Kiska-Agattu (Western Aleutians).
- (c) Seizure and occupation of Gilbert Islands, Marshall Islands, Caroline Islands, up to and including Truk. It is planned that these operations will be undertaken subsequent to Rabaul.
- (d) Extension of occupation of New Guinea up to approximately the Dutch border. This will be an extension of the Truk campaign for the second part.⁶⁰

After much discussion and argument amongst themselves over several days, the Joint

Chiefs of Staff prepared a basic plan for the conduct of operations in the Pacific in 1943

that was based on the JSP suggestions. In general, the Allies could:

- (a) Keep Japan from further expansion, and from consolidating and exploiting her current holdings.
- (b) Maintain the vital Midway-Hawaii line (key to New Zealand).
- (c) Secure the line of communications to Australia and New Zealand.
- (d) Block enemy approaches to Australia
 - (1) from the Northward via Rabaul
 - (2) from the Northwestward via the Malay barrier.
- (e) Attain positions which menace enemy line of communication with the Dutch East Indies, the Philippines, and the South China Sea.
- (f) Open the line of communications with China via Burma in order to make use of Chinese geographical position (as to attack enemy line of communication in Formosa Straits and along the coast of China, perhaps to bomb Japan.
- (g) Make ready to support Russia in case of war with Japan.
- (h) Continue and intensify attrition of enemy strength by land, air, and sea (including submarine) action.⁶¹

The paper also listed seven different offensives the Japanese could undertake

during 1943 and counterbalanced each, point by point, with possible Allied offensives. Possibility number three could be an attack against the Midway-Hawaii line. The Japanese had already tried this and failed, but that did not mean that they might not try it again. The reverse offensive for the United States would be against the Truk-Guam line via Wake and the northwest Marshall Islands. Such an attack would be very useful because it would allow the Americans to retain the initiative, it would help prevent the possible Japanese offensive, and it would draw enemy forces away from the Rabaul area. The fourth possible Japanese offensive could be an attack against the Hawaii-Samoa-Fiji-New Caledonia line. Such an attack would endanger the line of communications to Australia and New Zealand and, as such, had to be counteracted. The Solomons campaign that began in August 1942 made such an offensive unprofitable for the Japanese except by way of the Gilbert and Ellice Islands toward Samoa. To counteract such a move, the Allies would need to advance on the Samoa-Jaluit line via the Gilbert and Ellice Islands. A successful offensive from the Gilberts in the direction of the Marshalls would secure the line of communications to Australia and New Zealand and would also draw Japanese forces away from Rabaul. Admiral King explained the Joint Chiefs' plan to the Combined Chiefs of Staff on 22 January and it was included in the final report sent for approval to President Roosevelt and Prime Minister Churchill. The two leaders signed the report on 23 January and the Casablanca Conference came to an end.⁶²

King, once back in the States, tried to get moving on the Casablanca Conference's decision to advance into the Gilberts. He sent a request to Admiral Nimitz and Admiral Halsey via mail on 9 February for comments concerning operations in the
Gilbert and Ellice Islands. Both men begged off attacking the Gilberts in early 1943, mostly because the United States had not built up enough forces in the Pacific at that time to undertake such a major operation.⁶³ Later, on 21-23 February, King met with Nimitz in San Francisco for another of their periodic conferences concerning the war in the Pacific. King asked his Pacific Fleet commander if he thought that the Japanese would attack Samoa from the Gilberts by way of the Ellices and, before Nimitz could really answer, he suggested that CinCPac could check this threat by going ahead and taking the Gilberts before the Japanese had a chance to mount an offensive from them. Nimitz once again countered King's suggestion by saying that the United States was not in a position as of yet to mount a full-scale offensive against the Japanese in the Central Pacific. Besides, he could not hold the Gilberts at that point, even if he could take them away from the Japanese, because they were within range of enemy land-based aircraft flying out of the Marshalls. Nimitz then reminded King that he had landed marines on Funafuti Atoll in the Ellices and was building an airstrip there to block just the type of move by the Japanese that concerned the Joint Chiefs. King reluctantly agreed that the time was not ripe for beginning the Central Pacific Campaign, but he stressed to Nimitz the importance of keeping the initiative against the Japanese and that the forces allocated by the Combined Chiefs to the Pacific had to be used in order to justify their allocation.64

During the Pacific Military Conference (12-28 March 1943) one point of discussion concerned what to do about South Pacific naval assets while General MacArthur's forces in the Southwest Pacific were securing the Huon Peninsula on New Guinea. On 21 March Admiral King suggested during a concurrent meeting of the Joint

Chiefs of Staff that these naval assets be used somewhere else rather than being allowed to sit, immobilized until MacArthur could complete his operation against Huon. His suggestion: use them against the Gilberts and Marshalls. Nimitz's representatives at the Conference, led by Rear Admiral Raymond A. Spruance who was CinCPac's Chief of Staff at the time, stated that the Pacific Fleet commander wanted first to make sure that Hawaii was secure before beginning any operations in the Central Pacific. To that end, Spruance suggested, part of the immobilized fleet in the South Pacific should be brought back into Hawaiian waters. Nimitz, Spruance went on, wanted to take both the Gilberts and the Marshalls eventually in order to remove the threat from Hawaii, but operations against both island groups would prove unprofitable unless they were continuous. As it stood in March 1943, neither Spruance nor Nimitz believed that forces on hand in the Pacific could sustain such operations.⁶⁵

The Joint Chiefs continued to ponder what would be the best course of action in Nimitz's theater even after the Pacific Military Conference was completed. Also, the United States stepped up efforts to send as many troops and as much materiel to the Pacific as the "Germany first" commitment would allow. The Joint War Plans Committee ordered its Rainbow Team of planners to prepare "an outline plan for advancing into the MARSHALLS, a study of the requirements for the operations recommended, and recommended target dates for initiating the operations." Warning that no specific operations should be undertaken until the effect of each on all other operations was considered, the Rainbow Team's report was sent to the Joint Staff Planners on 10 June 1943. Regarding approaching the Marshalls through the Gilberts, the Rainbow Team suggested that to do so would alert the Japanese before the main

blow against the Marshalls could be landed. Alerting the enemy would allow him to disperse his aircraft over a wide area, providing him with a defense in depth while U.S. forces were in a strategically weak position. Therefore, attacking the Gilberts first was not a good idea.⁶⁶

The Joint Staff Planners took the Rainbow Team's recommendations under advisement. The latter's opinion concerning the Gilberts did not upset anyone too badly - no one, least of all the Army, wanted to attack the Gilberts unless such an attack was absolutely necessary. The preferred plan for taking the Marshalls, dubbed "Plan A," remained a direct assault on Kwajalein, Wotje, and Maloelap, but the Joint War Plans Committee presented an alternate "Plan B" on 18 June to be used in the event that adequate forces could not be found to carry out Plan A. If it became necessary to do so, the JWPC recommended – contrary to the Rainbow Team's warnings – that American forces advance toward the Marshalls from the south through the Gilberts. The first assaults would be against Tarawa Atoll and Nauru, an island 380 miles to the southwest of Tarawa and not a part of the Gilberts chain. The planners stressed, however, that this alternative was "definitely inferior to the MARSHALLS operation," meaning the preferred assault on Kwajalein-Wotje-Maloelap. The Joint Chiefs of Staff liked the idea of boldly thrusting into the heart of the Marshalls and, having determined by this time that a two-pronged approach – through the Central Pacific under Nimitz and from the Southwest Pacific under MacArthur – was the best strategy for the war against Japan, sent Nimitz orders to implement the preferred plan with a target date of 15 November 1943.⁶⁷

Resources and Plans for the Assault of Tarawa

Nimitz immediately put his staff to work producing detailed plans for the implementation of the JCS directive, but, as Spruance studied the situation more and more closely, he came to the conclusion that the preferred plan was unworkable. As he saw the lessons of the North African and Solomons campaigns, time and again it was shown that accurate aerial reconnaissance was a necessity to ensure success in amphibious operations. Such reconnaissance of the Marshalls was impossible in mid-1943 because the United States did not possess airfields close enough to the target islands to allow for it. Carrier-based planes could not at that time provide the needed coverage or photographic detail, so Spruance saw it as imperative that a preliminary operation be inserted in the JCS's plan. In his opinion, that preliminary operation should be the Gilbert Islands. Thomas Buell, in his biography of Spruance, provides a nice synopsis of the reasoning his subject followed in choosing to suggest a course of action that was at odds with the Joint Chiefs' directive:

American aircraft would reconnoiter the Gilberts from airfields in the Ellice and Phoenix islands, less than a thousand miles to the east-southeast of the Gilberts.

Land-based aircraft on these same islands could provide air support to the amphibious assault troops, and air reinforcements could be provided from air bases in the Hawaiian Islands and the South Pacific.

The Gilberts would provide experience for later assaults in the Marshalls. Spruance dreaded using inexperienced troops in a major operation against the heavily defended Marshall Islands. Instead he wanted an objective that was tough enough to try the Americans but not so tough that they would suffer heavy losses – or perhaps even lose the battle. Thus the Gilberts would be a "training ground" in preparation for the greater battles to come.

Most important, the physical objectives had to be strategically valuable. The Gilberts fit the bill by providing bases for an assault against the Marshalls, the ultimate objective. Gilbert airfields would provide the fleet anchorages; Hawaii-South Pacific lines of communication, passing nearby, would be strengthened and improved.⁶⁸

Nimitz did not agree with Spruance at first, but the logic of his Chief of Staff's idea became clearer as the difficulties inherent in carrying out the JCS plan became more and more obvious. CinCPOA requested a change of objectives in mid-July and the Joint Chiefs sent back their approval on 20 July 1943. The name given to the new "preliminary" operation was GALVANIC and its target date was the date originally set for the beginning of the Marshalls operation, 15 November.⁶⁹

Nimitz had not sat around during the first half of 1943 waiting for the Chiefs to make up their collective mind concerning strategy. He was reasonably sure by the early spring that his superiors would authorize him to begin operations in the Central Pacific in the near future and that, along with their authorization, would come many new ships to strengthen the Pacific Fleet. With these possibilities in mind, then, he began to consider whom to name as commander of the striking arm of this expanding armada. The man he chose was his Chief of Staff Raymond A. Spruance. Spruance had already proved himself as a sea-going commander in the Battle of Midway in June of 1942 and had earned Nimitz's personal respect while in his present position at CinCPOA headquarters. He was now set to take on major command responsibilities, and the newly created Central Pacific Force (eventually renamed the Fifth Fleet) would give him the chance to demonstrate to others that Nimitz's trust was not misplaced.⁷⁰ With the additional responsibilities came a promotion to Vice Admiral, and Spruance, still getting used to the three gold stars gleaming on his collar, sat down in mid-June to consider who he wanted on his command team. Having no amphibious experience himself, he

needed someone practiced in the practical aspects of amphibious warfare to organize and direct what is the most important component of a naval force whose job it is to project power from the sea onto land. The man he chose for the job was Rear Admiral Richmond Kelly Turner. Turner was an old friend. He had left the position of head of Op-12, the Navy's War Plans Division, to take command of amphibious forces in the Solomons campaign. With that experience under his belt, he seemed the perfect choice to be Spruance's amphibious commander. An irascible perfectionist and a workaholic, he would begin to whip his new command into shape once it was established on 24 August 1943.⁷¹

Spruance then had to determine who he wanted to command the ground forces of the Central Pacific Force. The Navy wanted the Marine Corps to provide the majority of troops in the Central Pacific Campaign, so Spruance believed that a Marine general officer was the logical choice for this command. He had first met Marine Major General Holland M. Smith at Culebra in the Caribbean in early 1941 when Smith, as a Brigadier General, was the commander of Marines in the Atlantic Fleet under then Rear Admiral Ernest J. King. Spruance was very impressed with Smith at the time. The two men met occasionally during the early course of the war and Spruance, when he began to contemplate the ground forces command question, had only one man in mind for the job. Smith was just as passionate about amphibious perfection as was Turner. In addition, he was exceptionally prickly when it came to the subject of Navy-Marine Corps relations. Smith and Turner would have to work closely together in planning and carrying out each and every Central Pacific operation involving the Fifth Fleet. Their strong personalities clashed often, sometimes violently, but, as Smith later wrote, "Our

partnership, though stormy, spelled hell in big red letters to the Japanese." Smith eventually established his command, composed of the Second Marine Division and part of the 27th Infantry Division along with various reinforcing elements, on 4 September 1943 under the title V Amphibious Corps.⁷²

The command structure for the operation and the list of objectives were changed early in the theater-level planning stages for the operation. Problems encountered at Guadalcanal had led to a doctrinal change concerning the relationship between the commander of the naval assault forces and the commander of the ground forces in an amphibious operation and these changes had been adopted and promulgated prior to beginning the planning for GALVANIC, but Spruance's staff apparently chose not to abide by them. Consequently, Holland Smith found, upon reporting for duty as V Amphibious Corps commander, that he had been placed in a subordinate position to Turner within Spruance's command structure in every respect. Smith, after vociferously stating his displeasure with this arrangement, was able to prompt Spruance to make a change. Turner remained the top amphibious commander during training and during the approach to the beach, but Smith would rank equal with Turner in the echelon of command during the planning phase of the operation and once the troops had been lodged ashore.⁷³

Holland Smith also argued for a change in one of the objectives. He suggested the substitution of Makin Atoll in the Gilberts group for Nauru Island. The hydrographic and terrain features of Nauru, not to mention its strong defenses and distance from the primary target at Tarawa, argued in Smith's mind for the change. Also, he did not believe that V Amphibious Force had the assets at the time to boat and transport two

reinforced divisions along with the necessary garrison and construction echelons for an assault on two well-defended positions. He did believe, however, that there were enough assets on hand for the Second Marine Division (reinforced) to assault Betio Islet in Tarawa Atoll and for the 165th Regimental Combat Team (RCT) of the 27th Infantry Division to assault the lesser target of Butaritari Island in Makin Atoll at the same time.⁷⁴ Major General Julian Smith, commanding general of the Second Marine Division, was alerted in August of 1943 that his unit would be part of the Gilberts offensive. The division, which had been participating in the mopping up of Guadalcanal, was transferred from I Amphibious Corps to V Amphibious Corps in mid-September. Julian Smith and his staff conferred with Holland Smith at Pearl Harbor in early October and then established a liaison between their respective headquarters.⁷⁵

Julian Smith gave the job of taking Betio to Combat Team 2 [2nd Marines (reinforced)], commanded by newly minted Colonel David M. Shoup. Shoup had been one of the planners for the operation, and he would now get to go where few staff officers have gone: he would be the very one to put his plan into action. The plan called for the landing of three Battalion Landing Teams (BLTs) abreast while holding one BLT in reserve. The beach was divided up into sections, west to east, and the assault of each section was the responsibility of a given BLT. Beach Red One, the farthest west, was the responsibility of Major John F. Schoettel's 3rd Battalion 2nd Marines (3/2), while Beach Red Two, the center section, was to be taken by Lieutenant Colonel Herbert R. Amey's 2nd Battalion 2nd Marines (2/2). The job of assaulting the section farthest to the east, Beach Red Three, was given to Major Henry P. Crowe's 2nd Battalion 8th Marines (2/8). The 1st Battalion 2nd Marines (1/2), Major Wood B. Kyle

commanding, was held back as regimental reserve.⁷⁶ Shoup's 2nd Marines were reinforced with medium tanks from Company C of I Marine Amphibious Corps (IMAC) Tank Battalion, a special weapons group from the 2nd Marine Defense Battalion, various combat and shore party engineers, eight shore fire control and air liaison parties, various medical and service units, and one battalion of 75mm pack howitzers.⁷⁷

The 8th Marines were to act as division reserve at Tarawa, but siphoning off its 2nd Battalion to strengthen the 2nd Marines in assault left Julian Smith with only two battalions to fall back on in case of trouble.⁷⁸ What is worse, the division itself had already been weakened as a result of the decision by Holland Smith to use the 6th Marines (reinforced) as his corps reserve for the entire GALVANIC operation. This decreased the potential assault troop strength at Tarawa by one third. As it turned out, the 6th Marines' parent unit, the Second Marine Division, did eventually use them at Tarawa, but Julian Smith was not able to plan for their use in the assault of Betio because of their status as corps reserve.⁷⁹ Doctrine dictated a three-to-one advantage over defenders when attacking a defended beach. Holland Smith's depletion of the Second Marine Division's assault strength gave Julian Smith only a two-to-one advantage over the Japanese defenders on Betio, a ratio with which the division commander was not comfortable. Left with no options and no freedom of action, Julian Smith requested that his orders be drawn up reflecting that these decisions were not his. The Fifth Amphibious Corps commander obliged him.⁸⁰

Holland Smith, his opinion colored by his experiences as he and "his" marines fought their way across the Central Pacific, stated in his post-war memoirs that "[t]he secret of amphibious warfare is concentration of your forces and meticulous co-

ordination of all elements, plus as much naval gunfire and air bombardment as you can pour into enemy positions."⁸¹ Planning for GALVANIC was not, however, dominated by these considerations. Instead, the overweening concern was the completion of the attack with the utmost speed once it was launched. Nimitz and Spruance anticipated a violent reaction from Japanese bases in the Marshalls and they believed that the only way to guard against such a reaction was to complete the operation with dispatch.⁸² This perceived need for strategic surprise argued in their minds against a heavy preliminary aerial or naval gunfire bombardment. Rather than concentrating on the ultimate objective, therefore, air and naval gunfire preparation was spread over several possible objectives, thus keeping the Japanese guessing up to the very end.⁸³ The Americans were unaware in 1943, however, that their operations in the Solomon Islands had drained Japanese naval and air strength from the Central Pacific. By the time of the Gilberts offensive, the Japanese did not have sufficient assets in place to reinforce their Central Pacific garrisons.⁸⁴ Not knowing this, the Americans considered strategic surprise to be both necessary and at least partially obtainable. They did not seek tactical surprise ashore, however. To attempt it would mean not allowing for any bombardment prior to the actual assault, and such an alternative was considered unacceptable. It was decided, therefore, to squeeze as much bombing and naval gunfire as possible into the period between sunrise and H-Hour, thus providing for the artillery support needed by the assault forces and for the protection from naval counterattack required by the naval planners.⁸⁵ In keeping with this compromise, the assault forces of Combat Team 2 would go ashore on Betio Island after their objective had received less than three hours of air and naval gunfire preparation.⁸⁶

Another thorny problem was how to get the troops ashore. Julian Smith, his Chief of Staff Colonel Merritt Edson, and David Shoup decided that the amphibious tractors (LVTs) the Marine Corps had been using for several years to carry supplies to beaches and inland to supply dumps could be modified to allow them to be used tactically. This decision was an innovation. Seventy-five LVT(1)s of the 2nd Amphibian Tractor Battalion, veterans of service at Guadalcanal, were given additional armor and armament so that they could better stand up to the punishment they would receive as they approached the defended beach of Betio. These seventy-five would not be enough, however. Julian Smith located fifty newer LVT(2)s in San Diego and he convinced Holland Smith to work to get them transferred to the Second Marine Division for use against Tarawa. The tractors were shipped to American Samoa in LSTs where the members of a special amphibian tractor company newly formed by the Second Marine Division met them. These fifty LVT(2)s joined up with the division on D-day morning at Tarawa, not having had time for tests or rehearsals.⁸⁷ Even with these additional tractors, however, there were only enough LVTs to lift approximately one half of Combat Team 2 (2nd Marines, reinforced) to the beach. With these numbers in mind, Julian Smith decided that the first three waves of assault troops would be given the LVTs while the remaining two waves, made up mostly of reinforcing elements, would be boated in LCVPs.⁸⁸ As it turned out, the first three waves were indeed able to get over the reef without having to worry about the level of the water – the LVTs did their job in that regard.

The Americans had prepared themselves as best they could in anticipation of a tough fight. They really had no idea how tough it would be. Admiral Shibasaki created

on Betio, an island only 800 yards wide at its greatest width and only two and one-half miles long, a defensive system that he believed would defeat the marines at the water's edge. Under his command were approximately 3,000 effective combat troops and approximately 1,500 construction laborers, mostly Koreans. He set all of them to work emplacing twenty coastal defense guns along the shore of the islet, ranging from 80mm to 8-inch in size, and building concrete tetrahedrons along the reef. These obstacles were designed to force landing craft into routes that would be swept by the smaller coastal defense guns, automatic cannon, and machine guns. In addition to these weapons, the defenders also had ten 75mm mountain howitzers, six 70mm guns, nine 37mm field pieces, at least thirty-one 13mm machine guns, an undetermined number of 7.7mm machine guns, several dual-purpose antiaircraft weapons, and the 37mm guns of seven light tanks. To top all of this off, Shibasaki had his men string a double-apron of barbed wire between the reef and the beach and all along the beaches as well. In case the attackers were able to establish a beachhead, the admiral had a log fence constructed just inland of the beaches and he had antitank ditches and other obstacles positioned such that the attacking force could be contained along a thin strip of sand and wiped out.89

Naval Gunfire at Tarawa – The "Lessons" Learned

The assault on Betio provided the Navy and Marine Corps with the first complete real-world test of the amphibious warfare doctrine the United States sea services had developed during the 1930s. All six of the doctrine's components received a thorough review both before and after 20 November 1943, but this was especially true of naval gunfire. *FTP 167* with the Change 3 modifications represented the concept of "artillery

from the sea," the substitution of naval guns for the attacking troops' organic artillery, as the solution to the problem of supplying those troops with the artillery support they so desperately needed during the early phases of an amphibious assault. Did the crucible of Tarawa prove that theory or did it leave it a smoking, rejected cinder?

The first step in answering this question is to look at the Naval Gunfire Support Plan developed for the operation. A copy of the Marine Corps' version of this plan, designated Annex Baker to Corps Operation Plan No. 1-43, was attached to Holland Smith's Fifth Amphibious Corps Action Report. According to this plan, naval gunfire at Betio was to be divided into three phases. These phases are described as follows:

Phase I	-	Prearranged neutraliztion [sic] and counter-battery fires delivered mainly by the heavy ships at moderately long range. For knocking out heavy turret guns, it may be necessary for heavy ships to close the range to 2000 or 3000 yards, and to employ AP projectiles.
Phase II	_	Close support fires mainly by cruisers and destroyers at close range just before H-hour to support landings.
Phase III	_	Call fires on targets of opportunity controlled by Shore Fire Control Parties after they have landed (not earlier than H plus THIRTY, but continuing possibly for one or more days). Continued slow neutralization fire on target areas 400 to 800 yards or more from the nearest troops. ⁹⁰

As far as how these fires should be carried out, the plan specified that "[f]iring will be deliberate at all times, though a somewhat more rapid rate will be required just before H-Hour when maximum neutralization must be effected to support landings."⁹¹ Further instructions concerning what the Marine Corps considered to be proper firing techniques were promulgated to the commanders of the ships participating in fire support missions. These instructions stated:

"Ship speed should be as low as practicable, especially during Phases II and III, mere steerageway being the best. Unnecessary course reversals shoud [sic] be avoided. For scheduled fires, the firing should be spread out equally throughout the time allotted, and, where an area is specified, spread equally throughout the area. Many duds may result if the trajectory is flat, unless trees are present to burst the projectiles. Pill boxes can best be destroyed by plunging fire at fairly high angles. For firing against personnel in the open, a percentage of the 5" should be times-fuzed, set so that NO bursts are higher than 75 feet above the ground."⁹²

A comparison of this plan to Chapter 5 of FTP 167 with Change 3 modifications shows

that it conforms substantially to the doctrine as specified in October of 1943.

The plan for scheduled fires was based upon the three-phase structure as

presented in VAC Operation Plan 1-43. The two most important time benchmarks were

designated as "W-hour" and "H-hour." "W-hour" was the time when the first scheduled

air bombardment of the day was to end and the Phase I bombardment was to begin.

"H-hour" was the time when the first troops were to set foot ashore. According to Harry

Hill's Operations Report, the original time line was as follows:

0545 – 0615	Scheduled air strike
0615	W-hour (beginning of Phase I bombardment)
0745	Beginning of Phase II bombardment
0830	H-hour ⁹³

As described in the story of the battle on D-day related above, Hill was not able to keep to this schedule. What went wrong? The answer to that question requires a more detailed description of the movements and actions of the naval gunfire support ships on the morning of 20 November.

The fire support ships, with the exception of the light cruiser *Santa Fe* and the destroyer *Gansevoort*, were formed into their designated sections and were operating in their assigned fire support areas by 0400. *Santa Fe* and *Gansevoort* cruised to the south of Betio, independent of the organized fire support groups, making sure that no

Japanese aircraft took off from the airfield on the islet. The battleships *Maryland*, *Tennessee*, and *Colorado* had standing orders to lay counter battery fire on any shore guns that opened up prior to the beginning of the carrier air strikes scheduled to commence at 0545 and the *Santa Fe* was directed to begin firing on the airfield intermittently if any ship began counter battery fire.⁹⁴

The Japanese on Betio fired a red signal flare from the south shore of the islet at 0441 and the order went out for the heavy ships of Fire Support Section 1, the *Tennessee* and *Mobile*, to get into position to deliver counter battery fire when needed. At 0507 shore batteries began firing slowly and erratically on the fire support ships surrounding the islet and on the transport area. The *Colorado* opened up on target areas at the center of Betio while the *Maryland* took a two-gun 8" battery on the southwest tip of the island under fire, knocking it out after delivering ten four-gun 16" salvos. Other heavy ships also delivered fire on enemy gun positions in their sectors of responsibility resulting in large explosions and numerous fires.⁹⁵

Admiral Hill ordered a cease-fire at 0542 in anticipation of the scheduled carrier air strike. The strike, however, did not begin at its scheduled time of 0545. Hill did not know at the time why it was late, but he did not have much time to worry about the problem because, at 0548, another situation presented itself that required his immediate attention. The transports reported at that time that they were under fire from Betio, with *Zeilen, Virgo, La Salle*, and *Thuban* reporting very close near misses from heavy guns on the eastern and northwestern tips the islet. Hill decided that he needed to resume counter battery fire, regardless of status of the scheduled air strike, so the ships opened up once again at 0600. *Colorado* took the shore batteries on the eastern tip of the islet

under fire, *Maryland* opened up on the barracks area on the northern shore, and *Tennessee* blasted the batteries on the northwestern tip. Hill, needing to start the Phase I bombardment as soon as possible and not knowing where the carrier aircraft were, designated 0613 as the new W-hour, but he had to cancel this order when the aircraft showed up at 0612. He then reset W-hour for 0620.⁹⁶

Phase I, in accordance with the new W-hour, began at 0620. The plan for this phase provided for the complete coverage of Betio by naval gunfire with heavy concentration on enemy strong points. Battleships opened fire at 10,000–15,000 yards on the most strongly defended points of the islet – the eastern, northwestern, and southwestern tips - closing to 2,000-6,000 yards. Cruisers followed the battleships at twenty to thirty minute intervals, also closing the range as Phase I progressed. Destroyers screened the larger ships during this phase and delivered some fire against enemy batteries as they came close inshore. At 0735 Phase I ended and Hill took stock of his situation. As far as he could see at the time, the fires appeared to have been delivered accurately and the schedule carried out as planned. Large explosions littered the island with debris all during the bombardment and large fires generated a great volume of smoke, so much, in fact, that ships to the west of the island had to fire on targets using radar control during most of the period.⁹⁷ Admiral Kingman, commander of Battleship Division Two and overall commander of the Gunfire Support Group (TF 53.4) for the Tarawa operation, is less generous in his assessment of the target acquisition problems encountered at this time:

Soon after Phase I bombardment started, BETIO Island was shrouded in a pall of dust and smoke which prevented observation from shipboard. All ships experienced great difficulty in spotting own fall of shot and therefore walked salvos around with arbitrary spots to cover thoroughly the

assigned target area.⁹⁸

Hill reports that the Japanese continued to fire on the transports and the fire support ships all during Phase I (0620-0735) and that the 5.5" coast defense batteries in the northwestern sector of the island were firing as late as 0658. Ships took individual shore batteries under fire at their own discretion and at the direction of higher command in an attempt to silence these guns.⁹⁹

The minesweeper *Requisite* and the destroyers *Ringgold* and *Dashiell* entered the lagoon at 0700. Japanese shore batteries immediately took these ships under fire and the destroyers answered with heavy counter battery fire, but, even with the hail of 5" shells they threw out, large caliber coastal defense guns on the eastern tip of the islet were still firing as late as 0724. *Ringgold* reported heavy fire from these guns, along with others located behind Beaches Red 2 and Red 3, and *Maryland*, *Tennessee* and the destroyer *Russell* directed fire on these positions to silence them. The heavy fire support ships outside the lagoon took up their stations for Phase II, an unanchored stationary position off the western shore of Betio, at 0735 and the fire support destroyers screened the heavier ships to seaward. From this area the larger ships could provide enfilading fire onto the assault beaches. All ships continued counter battery fire until the commencement of Phase II at 0745. Hill officially scheduled H-hour for 0830 at this point and announced the designated time to all hands.¹⁰⁰

Phase II required the fire support ships to concentrate on the landing beaches (Red 1, 2, and 3) on the north (lagoon side) of Betio. Fighter aircraft were scheduled to strafe these beaches from 0825 until the first marines landed, but a delay in getting the first assault wave to the line of departure necessitated pushing H-hour to 0845.

Ringgold, not having the best of days, announced at 0745 that she had received a hit from a Japanese shell that damaged her port engine, knocking it out, and she later reported that she had been hit by three duds, two of which impacted the destroyer below the waterline. The heavy cruiser *Indianapolis* left Fire Support Area 2 at 0819 to take position astern of the heavy cruiser *Portland* at the western end Betio. Meanwhile, *Maryland* positioned herself astern of *Colorado* in the same area and began pumping fifteen minutes worth of fire into the area immediately adjacent to Beach Red 1.¹⁰¹

Hill reset H-hour to 0900 at 0831 because the first wave of LVTs did not reach the line of departure until 0823. Fighters began to strafe the landing beaches at 0825, having not received communication of another change in H-hour, and Fire Support Section 4 (*Ringgold* and *Dashiell*) ceased fire until Hill's air officer and staff cleared the aircraft out of the way. Scheduled fires had to be adjusted with the new H-hour in mind, so Hill set them to begin again at the new H minus twenty minutes. Ships were to fire on targets of opportunity until then. Guns were continuing to fire as late as 0835 from the area on the west and inland of Beach Red 1 and from positions just up from the eastern tip of Betio. The destroyer *Russell* took the latter under fire and the battleship *Tennessee* the former.¹⁰²

Fire Support Ships ceased fire at 0855 to allow for the belated strafing of the landing beaches by fighter aircraft. Heavy smoke roiled over Betio, obscuring the observation of potential targets and generally making it extremely difficult for both airborne and shipboard spotters to perform their jobs. The call went out over all communications systems at 0900 that H-hour had arrived, but the minesweeper *Pursui*t and a number of observation aircraft announced that the first assault wave was still

fifteen minutes out from shore. Hill determined that the amount of smoke and dust in the air over Betio precluded the use of close support naval gunfire, so he called a cease-fire for all ships but ordered that aircraft continue to strafe the beaches so as to neutralize Japanese defenses along the north shore of Betio for as long as possible. *Ringgold* and *Dashiell* continued to fire on gun positions to the west and inland of Beach Red 1 until 0916, however, because reports indicated that a great deal of enemy fire was streaming out of this area onto the approaching LVTs. The first assault troops finally set foot on the north shore of Betio at 0917, marking the dividing point between Phases II and III.¹⁰³

What did the Marine Corps think of the doctrine and techniques that were used at Tarawa? Since marines were principally responsible for developing the overall doctrine during the 1930s, one would assume that they were relatively pleased with its form by November 1943. Such an assumption would be right for the majority of officers in the corps at the time, but there were exceptions. One of these exceptions was Julian Smith's Chief of Staff, Colonel Merritt A. Edson. Edson's opinions are important for the reason that he was an important person in the planning of Second Marine Division operations in the Gilberts. As such, his thoughts should at least be noted. In a letter Edson wrote to Colonel G.B. Erskine, Holland Smith's Chief of Staff, on 11 November 1943, he made it known that he did not place too much faith in naval gunfire support of amphibious operations:

The fact still remains that previous experience in the Solomon Islands and at Attu especially, has not indicated that naval gunfire and aerial bombardment has been particularly effective. From personal observation at Tulagi, Guvutu and Guadalcanal, this preliminary bombardment did not destroy a single Japanese defensive installation, nor, to the best of my knowledge, kill a single Jap....It is true that this bombardment had an indeterminate morale effect on the troops, which I believe will occur. We all realize that in the GALVANIC operation we are getting more aerial bombardment and a much greater amount of naval gunfire support on a comparatively restricted area than has ever been thrown into a similar area in the past. We fully expect that this bombardment will have a disastrous effect upon Japanese installations. No one can predict, however, just how disastrous that effect will be until after H-hour on the target date. Having no real yardstick to go by, it seems best to us, and to me personally, that we should base our estimate upon past experience rather than upon an unknown future component. After D-day, GALVANIC, we will have something that we can definitely figure upon in our next show and I can assure you that it will then be taken into account and get its proportionate weight.

You will note that in this Estimate [of the situation on Betio] we have given naval gunfire and aerial bombardment credit for taking ou[t] the larger caliber guns. I also hope that this bombardment will take out emplaced machine guns which, after all, are perhaps the most dangerous weapon from our standpoint, but until troops hit the beach without encountering such machine gun fire, I still am of the opinion that some automatic weapons will still be operating at H-hour.¹⁰⁴

Edson was clearly not one of those who trusted the Navy's promise to obliterate

Japanese resistance on the island. Did he see the events of 20 November as having

proved his fears or did those events prove them to be unjustified? Fortunately, he

communicated his beliefs in this regard in a letter to a friend, Colonel Gerald C.

Thomas, Chief of Staff at I Marine Amphibious Corps. Historians' speculation, then, is

not necessary. Thomas had served with Edson in the 1st Marine Division on

Guadalcanal. Edson wrote a letter, dated 13 December 1943, to tell his old friend, a

fellow professional Marine Corps officer, about what had happened at Tarawa.

Concerning the effectiveness of naval gunfire, Edson wrote:

Naval gunfire did just about what I expected. It silenced most of the coastal defense guns and heavy AA guns and took out some of the medium AA guns. It did comparatively little damage to the [machine gun] emplacements and covered beach defenses, which are most dangerous to us. Admiral Hill took his ships in within 1,500 yards of the beach as he promised to do and had two destroyers inside the lagoon, one of which

[*Ringgold*] received 3 hits, but none of which exploded. Bombardment just prior to landing was extremely heavy. During most of the bombardment, as a matter of fact, the smoke and dust was so thick after the initial salvos that the fire was in the nature of area fire, and a great deal of ammunition, in my opinion, was wasted by falling short or completely going over the island. I believe that next time a slower and more deliberate rate of fire, except for the final barrage just prior to hitting the beach, may give better results.¹⁰⁵

Edson was not the only person to hold such opinions of the results of the

Tarawa bombardment. The same ideas would reverberate through many of the

lists of recommendations and criticisms that were generated by both naval and

marine officers after the completion of operation GALVANIC. Brigadier General

J.L. Underhill, serving as an observer from the newly formed Fourth Marine

Division, was one such person. He stated in the report of his observations that

"[t]he bombardment [of Betio], both air and naval gun, was said to be aimed at

'destruction approaching obliteration,' and with such a shock effect that

resistance would be light."¹⁰⁶ Did the Navy achieve such a level of destruction?

Underhill did not think so. He goes on to say in his report:

The amount of naval gunfire and air bombardment prior to H-Hour was said to be greater per square unit of ground than previously given in preparation for a landing operation. Nevertheless, it did not prevent very heavy resistance. This is not a condemnation of it for it was excellent and without it the assault would have failed. It is recommended that for future similar operations no less a concentration (proportional to ground covered) be used. A greater concentration is urged, particularly on the immediate beach revetments facing the landing beach and on pill boxes from which flanking fires can be placed along the beach and and [sic] obstacles or cross fires on boats coming in. Direct hits of 500 lb. bombs on some of the larger concrete dugouts had no effect beyond chipping off a corner or disturbing the sand on top. Direct hits by 16" guns (apparently [sic]) on the top of one of the heavy covered emplacements did no effective damage.¹⁰⁷

Dissatisfaction within both the Navy and Marine Corps was such that there were numerous lists of recommendations generated at all levels of command, Underhill's contribution being tiny in comparison. These lists of recommendations would provide the foundation for the legendary corpus known as the "Lessons of Tarawa." One of the men responsible for establishing these "lessons" as the standard against which plans for all future operations would be judged was the man in command of Task Force 53 at Tarawa, Harry Hill. Hill, like Holland Smith, Kelly Turner, Julian Smith, and just about every other commanding officer in the entire Fifth Amphibious Force, generated a list of these "lessons," having his staff pour over the Action Reports of every subordinate commander in his Task Force in order to glean as many nuggets of wisdom as possible. His Summary of Recommendations for Naval Gunfire Support suggested that the following be done to improve Phase I, Phase II, and early Phase IIII bombardment:

- That immediate steps be taken to construct, at home base areas, dugouts, pillboxes and bomb proof shelters duplicating those found on [Betio] Island, and that aerial and naval gunfire bombardment be conducted on these for training and determination of effectiveness of bombardment methods and ammunition....
- 3. That fire support ships be strongly impressed with the necessity for delivering fire at close ranges for effective bombardment.
- 4. That landing plans definitely provide for destroying automatic weapons and small caliber batteries remaining in action after assault waves have landed.
- 5. That, in event of a pre-dawn approach, fire should commence as soon as earliest light permits and before the transport area can be taken under fire by shore batteries.
- 6. That naval gunfire must not be discontinued during delivery of aerial bombing strikes....
- 8. That the bombardment allowance of ammunition be increased and include AP projectiles; that a bombardment allowance of common projectiles be established and made available for 5"/38 and 5"/25 batteries. Percentages of ammunition types must depend upon a study of the problem, but in general the delay action fuze will be required during all bombardment phases except Phase TWO....
- 9. That, if fire support ships can be assigned early, the initial fire support

plans outline only in broad form the overall bombardment effect desired, the general areas to be covered, and the type and amounts of ammunition to be expended for its accomplishment. That the details of fire schedules and their coordination with maneuvers required, track charts, and other details of section and individual ships problems, be delegated to Fire Support Section Commanders for planning and solution.

- 10. That gunfire support plans for future bombardment of enemy held islands similar to [Betio] embody the following:
 - (a) Five general phases of bombardment as follows:
 - Initial counter-battery fire against known strong points using HC and AP projectiles, and commencing at ranges producing an angle of fall of 15 degrees.
 - (2) General area bombardment using HC and AA common projectiles delivered at ranges between 10,000 and 5,000 yards.
 - (3) Destruction of heavy defenses, pillboxes, and dugouts along the landing beaches by slow, accurate, and deliberate fire, using AP and common projectiles. This fire is to be delivered at close ranges using pointer fire if practicable.
 - (4) Heavy concentration fire at close range on landing beach areas during the boat approach.
 - (5) Delivery of call fire by ships assigned after H hour [sic].
 - (b) Use of a rolling barrage system of fire rather than radical shifting of target areas during area bombardment.
 - (c) Restriction of air burst firing for use only as a weapon of opportunity against exposed personnel.
 - (d) Maximum use of 40[mm] batteries whenever range and other conditions permit and control of those batteries by 5-inch gun directors if fire control installation permits.
 - (e) Stationing of close fire support ships in a favorable position relative to the landing beaches, and at closest safe navigation range, so as to provide their continuous observation of assault boat waves, permitting these ships to decide at what time their fire must be ceased for safety of landing personnel.
 - (f) Destruction of hulks, latrines, and similar potential machine gun nests located in favorable beach enfilading positions.
 - (g) Plans for local supply of destroyer and light cruiser replacement ammunition, and depth charges.
 - (h) Readiness for immediate shift to radar controlled gunfire during all phases of bombardment except [numbers] 3 and 5 [of paragraph 10 (a) above].¹⁰⁸

All of Hill's recommendations can be traced back to one or another of the problems he

had to wrestle at Tarawa and number 6 is of special interest in this regard. Fearing that

fire from the close support vessels would come too near the troops as they come ashore, Hill ordered at approximately 0900 that all gunfire ships cease their fire. This meant that there was no naval gunfire support during the all-important period when the marines were making the transition from the sea to the land. On Tarawa, many marines died as they emerged from their landing craft into the teeth of Japanese defenses that were not being neutralized, much less destroyed, when they were most vulnerable. Hill's recommendation number 10(e) was meant to make sure that such a situation never recurred in the future. He elaborated upon this suggestion by saying:

During the last fire or ten minutes before H minus five minutes, a general and heavy neutralization fire must be conducted, primarily by destroyers. These should be positioned relative to the beach in such a manner as to permit the continuation of their fire until the assault waves are close in to the beach. To prevent recurrence of the error made at TARAWA of ceasing this neutralization fire too early, these ships which can actually see the boat wave and accurately determine its distance from the beach at all times, must be authorized to continue this close supporting fire after the general order to cease firing is given, until in the opinion of the Commanding Officer, further firing becomes dangerous to the landing personnel.¹⁰⁹

The commander of an amphibious assault force would never again have to worry about a gap in naval artillery coverage, as Hill found himself doing off of Betio on the morning of 20 November, if he allowed those who provided that coverage to make the decisions, based upon direct observation, concerning if and when gunfire should be lifted or ceased.

The man who was ultimately responsible for providing the naval gunfire support

for Hill at Betio was Rear Admiral H. F. Kingman, Commander of Battleship Division

Two and of the Southern Fire Support Group (TG 53.4). Kingman had some definite

ideas about what needed to be done to improve gunfire support. In a message sent to

Admiral Nimitz after the battle, he not only listed his recommendations but he also

vented his spleen about the deficiencies in the doctrine and techniques of naval gunfire

as he perceived them. Selected entries from this list are as follows:

 From an observer's viewpoint, after witnessing the aerial bombardment, the surface bombardment, and aerial strafing, it seemed almost impossible for any human being to be alive on BETIO Island. Ton after ton of explosives was rained upon an island less than 0.4 miles square, and yet, when bombardment was stopped, Japanese manned machine guns and literally annihilated the first two assault waves.

Superficial examination of BETIO after its occupation revealed that military installations, bombproofs, and machine gun emplacements were, in most instances, practically intact. Our HC [High Capacity] projectiles, with superquick fuzes, made a grand display, but accomplished little if any real destruction of installations or personnel....

- b. ...Soon after Phase I bombardment started, BETIO Island was shrouded in a pall of dust and smoke which prevented observation from shipboard. All ships experienced great difficulty in spotting own fall of shot and therefore walked salvos around with arbitrary spots to cover thoroughly the assigned target area....
- 7. Lessons Learned and Recommendations:
 - (2) Gunfire Support:
 - a. Where practicable, deliver a slow, deliberate, penetrating bombardment with reduced charges from medium-long range (12,000 – 16,000 yards) on D-1 day....
 - c. Repeat [a.] on D-Day before transports approach within range of shore batteries.
 - d. For Phase I and Phase II bombardment, arrange firing schedule so that ships are not firing simultaneously at adjacent or nearly adjacent targets in order that shipboard and aircraft spotters may observe fall of shot more readily. Suggest use of slow, aimed fire.
 - e. ...do not have firing ships jump from target to target: arrange so that salvos can be walked around slowly.
 - f. Do not use HC projectiles with superquick fuzes against entrenchments. Reserve these for anti-personnel firing just prior to H-hour.
 - g. For Phase I and Phase II firing by major caliber guns, use slow, aimed fire for possible destruction. This will likewise accomplish neutralization....
 - h. For latter part of Phase II and for fire on beach objectives, use

destroyer 5"/38.

- i. Destroyer range should be between 3,500 and 7,000 yards....
- j. Use destroyers for called fire. Fire airbursts for anti-personnel effect only.
- k. Destroyers furnishing close supporting fires just prior to H-hour should not be bound by a firing schedule. Commanding Officers of these ships can see boat waves approaching beach and are in a good position to know when to cease fire in order not to endanger own troops....¹¹⁰

Finally, the Second Marine Division, Merritt Edson's own unit, had its own naval

gunfire recommendations to make. Not surprisingly, they reflected the concerns of the

men who had to face what was left after the Navy's "grand display" was finished. Julian

Smith wrote in a letter to Holland Smith dated 2 January 1944:

1. The purpose of naval gunfire is to make possible the landing of troops on the landing beaches with a minimum of casualties from enemy action.

At Tarawa, on D-day, a great deal of ammunition was expended in neutralization of coastal turrets and batteries which were not on the landing beaches themselves, and in general bombardment of the island of Betio. If these enemy installations could have been destroyed prior to D-day, so that the [Naval Attack Force], on Dday, could have expended all ammunition on the landing beaches, except that ammunition reserved for close support of land operations, more destruction of beach installations might have resulted. It was found that only battleship's fire was effective on the steel reinforced concrete emplacements and that this fire should be as follows: (1) long range, high angle of fall, to penetrate the heavy emplacements; (2) close range, direct, slow fire, preferably one (1) gun firing, to destroy those known guns and emplacements above ground. This latter fire should be the equivalent of the artillery's precision adjustment. All battleship fire should be delay action with about 50% armor piercing and 50% high capacity shell....

The beach preparation should have been spread over a longer period of time, with slower fire, to allow ships to observe their targets and determine the effectiveness of this fire. The point of impact should be the beach itself. Depending upon the degree of enfilade fire obtainable, this would have wasted some ammunition as short in the water. However, the beach defenses would have been more thoroughly covered. During the final beach preparation, all guns that can bear on the target should fire at the maximum rate of fire.

The flanks of a landing beach for a distance of at least six hundred (600) yards, and enemy strong points inland that can fire on the beach, should receive the same amount of fire that the landing beach itself receives.

Fire should not be lifted from the beach until the last possible moment. At TARAWA, although acting on the best information available, the beach preparation was lifted too soon. It is recommended that the coordinating plane should carry a Marine Staff Officer to direct the time of lifting the preparation.¹¹¹

The emphasis for the Marines is the amount of time that should be spent working over the landing beaches. This emphasis is also found in FTP 167, though there is no indication in that document as to the amount of time that should be spent softening up an objective prior to D-day. Paragraph 506.b of Change 3 specifies, in fact, that "[t]his chapter is primarily concerned with the requirements of D-day." The only direct allusion to preliminary bombardment is found in Paragraph 506.a, but there is no guidance as to duration: "The over-all requirement [for fire support of the infantry in an amphibious operation] may include fires executed in advance of D-day, such as bombardments for the destruction of enemy supplies and raids to confuse him as to the point of attack."¹¹² With this doctrinal shortcoming in mind, neither the Navy nor the Marine Corps saw themselves as arguing that the accepted naval gunfire doctrine was fundamentally flawed. Since doctrine did not directly address the length of pre-D-day bombardment, then doctrine was not what was at fault. Tarawa, rather than indicating where doctrine needed to be changed, instead showed where the Navy failed in its application of a set of sound guiding principles. In other words, what happened at Tarawa on 20-23 November 1943 was a failure to follow the recognized standard. Guadalcanal had

already taught the lesson that gunfire was ineffective unless emplacements took a direct hit.¹¹³ Marines like Merritt Edson were well aware of what had happened in the Solomons and they, unlike their Navy counterparts, were not so sanguinely optimistic when contemplating what they might find when they got ashore on Betio. The Navy, according to the Action Reports filed after the completion of GALVANIC, just needed reminding of that lesson. This line of reasoning, one that both the Navy and Marine Corps continued to follow throughout the war and afterward, did not recognize that adding a component to the existing naval gunfire doctrine stipulating that an objective *must* be worked over for an extended period of time before D-day was, by definition, *changing* the existing doctrine. By this definition, then, the crucible of Tarawa incinerated the naval gunfire doctrine of pre-November 1943 and provided the impetus for rewriting it.

If the accepted doctrine was to be rewritten then what form would the new doctrine take? Was the old doctrine thrown out wholesale and a completely new one put in its place? No, that did not happen. The changes were incremental rather than revolutionary – but they were important just the same. Probably the most important change as far as the Marine Corps was concerned was what it perceived to be the Navy's sudden willingness to accept the Marine argument that slow and deliberate bombardment over a longer period of time than just two to three hours before H-hour was necessary. Area bombardment for neutralization would not do. The Marines included instructions for this type of bombardment in their naval gunfire plan, but Spruance and Turner decided that surprise was of the essence.¹¹⁴ GALVANIC being the first Central Pacific Campaign operation, no one was certain how effectively the

Japanese fleet would be able to react to the American invasion of the Gilberts. Nimitz told Spruance that he should "Get the hell in and get the hell out," and Spruance followed his boss' instructions to the letter.¹¹⁵ The failure of the Japanese Combined Fleet to mount any kind of significant counterattack against the operation in the Gilberts caused the Navy to rethink this policy. As a result, naval planners were willing to allow for additional gunfire preparation time in the next operation. There would be many problems encountered in the Marshalls, but lack of adequate naval gunfire would not be one of them. The "lessons of Tarawa," at least those concerning the use of naval gunfire, would be learned well and applied decisively at Roi-Namur.

Endnotes

1. James R. Stockman, *The Battle for Tarawa* (Washington, D.C.: Historical Section, HQMC, 1947), 16-17; Henry I. Shaw, Jr., Bernard C. Nalty, and Edwin T. Turnbladh, *Central Pacific Drive*, History of U.S. Marine Corps Operations, Vol. III (Washington, D.C.: Historical Branch, HQMC, 1966; reprint, Nashville, TN: The Battery Press, 1994), 60 (page citations are to the reprint addition); Martin Russ, *Line of Departure: Tarawa* (Garden City, NY: Doubleday & Company, Inc., 1975), 83-84; Joseph H. Alexander, *Utmost Savagery: The Three Days of Tarawa* (Annapolis, MD: Naval Institute Press, 1995; Ivy Books, 1995), 128. The Amey quote is from both Russ and Alexander. Russ quotes Amey as saying "These bastards..." while Alexander

2. Central Pacific Drive, Map I, Map Section.

3. Philip A. Crowl, *Campaign in the Marianas*, United States Army in World War II: The War in the Pacific (Washington, D.C.: Center of Military History, 1960; reprint, Harrisburg, PA: National Historical Society, 1994), 5.

4. Philip A. Crowl and Edmund G. Love, *Seizure of the Gilberts and Marshalls*, United States Army in World War II: The War in the Pacific (Washington, D.C.: Center of Military History, 1955; reprint, Harrisburg, PA: National Historical Society, 1995), 19.

5. Ibid., 32.

6. Stockman, between pages 12 and 13.

7. Ibid., between pages 28 and 29.

8. Ibid., 11.

9. Central Pacific Drive, 53.

10. Commander Group Two, Fifth Amphibious Force, Forwarding of Action Reports, 9 January 1944, Enclosure A, Commander Task Group 53.1 (Commander Transportation Division 18) Report on Tarawa Operations, page 1. National Archives and Records Administration (NARA), Record Group (RG) 38, Box 545, 5th PhibFor Groups, 12-22-43.; Stockman, 12.

11. Stockman, 12; Central Pacific Drive, 53.

12. Stockman, 12; Central Pacific Drive, 53-54.

13. Stockman, 12; *Central Pacific Drive*, 54; Commander Task Force 53, Report of Tarawa Operations, dtd 13 December 1943, Enclosure A, NGF Supplement n.d., page

30. NARA, RG 127, USMC Geographic Files, Box 26, File A3-1, TF 53 Operational Report, Tarawa, Gilberts (referenced hereafter as TF 53 Op Rpt); Commander Task Group 53.4, Action Report, Period 17-22 November 1943, 25 December 1943, page 4. NARA, RG 127, USMC Geographic Files, Box 26, File A5-1, TG 53.4 AR (referenced hereafter as TG 53.4 AR).

14. Central Pacific Drive, 54.

15. Ibid., 54-55.

16. Ibid., 55.

17. Ibid., 54 & 55.

18. *Central Pacific Drive*, 52; Jeter A. Isely and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory and Practice in the Pacific* (Princeton, NJ: Princeton University Press, 1951; reprint, Quantico, VA: Marine Corps Association, 1988), 227-228 (page citations are to the reprint addition).

19. Central Pacific Drive, 55.

20. Ibid., 55-56. The doctrine, as described in chapter two, viewed total destruction as an unattainable and, therefore, unrealistic objective. It is only after Tarawa that the Marine Corps begins to request complete destruction of as many targets as possible.

21. Ibid., 56.

22. Central Pacific Drive, 56-57; Stockman, 15.

23. Central Pacific Drive, 57.

24. Ibid.

- 25. Ibid., 59.
- 26. Ibid.
- 27. lbid., 59 & 60.
- 28. Ibid., 59-60.
- 29. Ibid., 60.
- 30. Ibid., 60-61.

31. Ibid., 61; Shoup quote from Shoup interview with Captain James R. Stockman

dtd 26 May 1947, quoted in source.

- 32. Ibid.
- 33. Ibid., 62.
- 34. Ibid., 62-63.
- 35. Ibid., 63.
- 36. Stockman, 36.
- 37. Central Pacific Drive, 63.
- 38. Ibid., 64-65.
- 39. Ibid., 65.
- 40. Ibid.; Stockman, 27-28; Utmost Savagery, 151.
- 41. Central Pacific Drive, 65.
- 42. Ibid., 65-66.
- 43. Ibid., 66.
- 44. Ibid., 65.
- 45. Ibid., 66-67.
- 46. Ibid., 67; quote from same source.
- 47. Ibid., 67-68.
- 48. Stockman, 25; Central Pacific Drive, 68.
- 49. Stockman, 26; Central Pacific Drive, 68.
- 50. Central Pacific Drive, 68.
- 51. Stockman, 26.

52. Ernest J. King, U.S. Navy at War, 1941 - 1945: Official Reports to the Secretary of the Navy by Fleet Admiral Ernest J. King, U.S. Navy, Commander in Chief, United States Fleet and Chief of Naval Operations (Washington, D.C.: United States Navy Department, 1946), 71.

53. Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945* (Annapolis, MD: Naval Institute Press, 1991), 105 & 247. The Navy's version of War Plan ORANGE went through several evolutions from the time it was first conceived until it was disestablished as a possible national war plan in July of 1941. The chief identifying characteristic of ORANGE was that it was offensive in nature. There were at times two competing basic plans, one calling for a quick thrust, usually to rescue American forces besieged in the Philippines, followed by attacks on Japan, the other calling for a longer, step-by-step movement across the Pacific, rolling the Japanese back as the American Pacific Fleet captured advanced bases and projected its power all the way to the shores of the Home Islands. It was the second of these iterations that eventually served as the basis for the Navy's Central Pacific Campaign during World War II, proving that the basic plan was viable. Miller, *War Plan Orange*, chapters 8-23 & 28-30.

54. Ibid., 247-248.

55. Grace Person Hayes, *The History of the Joint Chiefs of Staff in World War II: The War Against Japan* (Annapolis, MD: Naval Institute Press, 1982), 138.

56. Ibid., 139.

57. Ibid.

58. Ibid., 283-284.

59. Ibid., 284.

60. Quoted in Hayes, 284-285.

61. Quoted in Hayes, 299-300.

62. Hayes, 300-301.

63. Ibid., 310-311.

64. E.B. Potter, *Nimitz* (Annapolis, MD: Naval Institute Press, 1976), 237; Ernest J. King and Walter Muir Whitehead, *Fleet Admiral King: A Naval Record* (New York: W.W. Norton & Co., Inc., 1952; reprint, New York: Da Capo Press, 1976), 430-432 (page citations are to the reprint addition).

65. Hayes, 327-328; Thomas B. Buell, *The Quiet Warrior: A Biography of Admiral Raymond A. Spruance* (Boston, MA: Little, Brown & Co., 1974; reprint, Annapolis, MD: Naval Institute Press, 1987), 177-178 (page citations are to the reprint addition).

66. Hayes, 416.

67. Hayes, 421-424; Quiet Warrior, 180.

68. Quiet Warrior, 181-182.

69. Ibid., 182.

70. Ibid., 167-185; according to Buell, page 188, the ships were designated "Fifth Fleet" at this time while all the forces under Spruance's command – Navy, Marine Corps, and Army – were designated "Central Pacific Force" collectively. In 1944 dropping the latter title and referring to the entire command simply as the "Fifth Fleet" simplified this arrangement.

71. Central Pacific Drive, 25.

72. Central Pacific Drive, 25; Quiet Warrior, 95-96.

73. Isley and Crowl, 202.

74. Ibid., 203.

75. Ibid., 204.

76. Utmost Savagery, 3.

77. Isley and Crowl, 206; Central Pacific Drive, 64.

78. Isley and Crowl, 206.

79. lbid., 203-204.

80. Ibid., 205. This statement takes into account the concept of the use of naval gunfire as a force multiplier. Julian Smith, in his discussions with H.M. Smith concerning the number of marines the 2nd Marine Division could have for the assault on Betio, never viewed naval gunfire as a substitute for the expected three-to-one troop advantage. For him, it was a question of manpower alone.

81. Holland M. Smith and Percy Finch, *Coral and Brass* (New York: Charles Scribner's Sons, 1948; reprint, New York: Bantam Books, 1987), 124-125.

82. Isley and Crowl, 200.

83. Ibid., 201.

84. Ibid., 200-201.

85. Ibid., 201-202.

86. Ibid., 204.

87. Ibid., 208; Utmost Savagery, 62-65.

88. Isley and Crowl, 210; Utmost Savagery, 61-63.

89. Central Pacific Drive, 50.

90. Commanding General, V Amphibious Corps (CG VAC), VAC Operation Plan No. 1-43, 13 October 1944, Annex BAKER, Naval Gunfire Support Plan, page 1. NARA, RG 127, United States Marine Corps Geographic Files Box 26, File A6-2, VAC AR Enc. A, Oper. Plan 1-43, Gilberts (referenced hereafter as VAC NGF Plan).

91. Ibid. In today's parlance, this would be more accurately referred to as a suppression mission. Navy and Marine Corps usage of the word "neutralization" was very broad during World War II.

92. Ibid., 2.

93. TF 53 Op Rpt, 30-32.

94. Ibid., 30.

95. Ibid.

96. Ibid., 30-31.

97. Ibid., 31. U.S. Navy ships had been equipped with radar since the late 1930s. The radar mentioned in the records of the Betio assault could only be used to acquire basic range information when firing at land-based objectives. It could not pinpoint specific targets. The comments made by the various commanders concerning naval gunfire at Tarawa are, in essence, complaints that the smoke and dust forced them to rely upon a method of targeting that allowed them to provide area coverage rather than direct fire.

98. TG 53.4 AR, 5.

99. TF 53 Op Rpt, 31.

100. Ibid. Firing enemy batteries needed to be visible from fire support ships in order for the naval gunners to take them under effective counter battery fire.

101. Ibid., 31-32.

102. Ibid., 32.

103. Ibid.

104. Letter from Merritt A. Edson to G. B. Erskine dtd 11 November 1943, page 1. Edson Papers, Manuscript Division, Library of Congress, Box 5 File 40.

105. Letter from Merritt A. Edson to Gerald C. Thomas dtd 13 December 1943, page 2. Edson Papers, Manuscript Division, Library of Congress, Box 5 File 40.

106. R.F. Whitehead, Report of Observations of Operations at Tarawa, dtd 2 December 1943, Reference (a) Report of BrigGen. J. L. Underhill, USMC, Ser. 00396, dtd 27 November 1943, page 1. Marine Corps University Archives, Quantico, VA.

107. Ibid., 8.

108. TF 53 Op Rpt, 41-42.

109. Ibid., 49.

110. TG 53.4 AR, 2, 5 & 16-17.

111. CG 2nd Marine Division, Recommendations Based on Tarawa Operation, Number 5, Naval Gunfire, 2 January 1944, pages 1-2. NARA, RG 127, USMC Geographic Files, Box 29, File A7-17, 2nd Marine Division Recommendations, Tarawa.

112. U.S. Navy, *Fleet Training Publication 167, Landing Operations Doctrine, U.S. Navy, 1938* with Change 1, 2 May 1941. Paragraph 503.c. Eisenhower Library, Box 38, Walter Bedell Smith Collection of World War II Documents, 1941-1945; *FTP 167* with Change 3, Paragraphs 502.e, 503, and 506.

113. Division Commander's Final Report on Guadalcanal Operation, Phase II (from H-hour to Evening 9 August), [no date], page 8. NARA, RG 127, USMC Geographic Files, Box 39, File A7-2, 1st Marine Div. Phase II, Final Report, Guadalcanal.

114. VAC NGF Plan, 1.

115. Joseph H. Alexander, *Storm Landings: Epic Amphibious Battles in the Central Pacific* (Annapolis, MD: Naval Institute Press, 1997), 49.
CHAPTER 4

OPERATION FLINTLOCK

The Amphibious Landings on Roi-Namur

Rear Admiral Richard L. Conolly's Northern Attack Force steamed through the pre-dawn darkness of 31 January 1944 – the designated D-Day for the American invasion of the Marshall Islands – on its way to take up positions to the northeast of Kwajalein Atoll. Conolly's main operational objective was Roi-Namur, two small islands joined together by nothing more than a spit of land and a man-made causeway. The job of eradicating the enemy presence on this objective fell to Major General Harry Schmidt's Fourth Marine Division (M.D.), the Corps' newest. The Fourth Division's goal for 31 January, in accordance with one of the many "lessons of Tarawa," was to secure several nearby islands for the installation of artillery. This artillery would then supply precision fire support for the D+1 landings on Roi and Namur. Schmidt created a special unit, the IVAN Landing Group, to carry out this mission and he put his Assistant Division Commander (ADC), Brigadier General James L. Underhill, in charge of it. Underhill's force, consisting mostly of Colonel Samuel C. Cummings 25th Marines, Reinforced, was to capture five of the islets to the southwest and southeast of Roi-Namur and, in keeping with the "lesson," emplace units of the division's artillery regiment, the 14th Marines, on them. Possession of two of those islets, Mellu and Ennuebing, served an additional purpose as well. It gave Admiral Conolly control of a deep-water passage through the atoll's surrounding reef and, consequently, access to the huge lagoon within and to the protected beaches that bordered it. As such, they would be his first targets.¹



Map 7 – Marshall Islands²



Map 8 – Kwajalein Atoll³



Map 9 – Northern Kwajalein Atoll, 31 January 1944⁴



Map 10 – Roi-Namur Islands⁵

The transport group carrying IVAN Landing Group took position off Mellu shortly before daylight. Meanwhile, fire support units steamed to their designated areas east of Namur and west of Roi and waited for the sun to appear. At 0651 these ships began pumping shells into their targets, only lifting for eight minutes, beginning at 0715, to allow for a carrier-based air strike. This furious maelstrom would continue until just before the assault troops made landfall. The marines crawled down cargo nets draped over the sides of their transports under this umbrella of fire and steel, getting into LCVPs for the trip to a designated area where they climbed aboard amphibious tractors for the movement ashore. The tractor drivers, not having had adequate time to practice this open-sea maneuver, struggled to perform their tasks in a timely manner. What was supposed to be a well-choreographed ballet degenerated for a short period into a gigantic amphibious traffic jam.⁶

Order was finally restored, however, and the LVTs formed into waves and made their way to the line of departure. This line, marked by the control officer aboard the destroyer USS *Phelps*, was approximately 5,000 yards from Ennuebing and Mellu. The tractors waited there until *Phelps* dropped a flag from her yardarm, the signal to start for shore. When the flag dropped, off they went. Sporadic fire from a 127mm battery on the west coast of Roi splashed nearby while the LVTs made their way beachward, but fire support units quickly silenced it and the marines continued undisturbed. A nineteenknot wind made the sea very choppy and the swells accompanying the wind made the already slow LVTs even slower. Traveling at approximately half-speed (2 mph), the amtracs took much longer to get to shore than allowed for in the schedule. The plan called for simultaneous landings on the ocean side of both Ennuebing and Mellu at

0900, but this was not to be. Conolly delayed H-Hour until 0930 to adjust for the tardiness of the tractors, but doing so did not make them move any faster. Company B, 1st Battalion, 25th Marines, finally went ashore on Ennuebing at 0952. Meanwhile, Company C, 1/25, and the division's scout company, Company D, 4th Tank Battalion, struggled to make it ashore on Mellu. The combination of a rugged segment of reef, strong winds, and pounding surf thwarted every attempt to land on the ocean-side beaches of the islet. Cumming eventually expedited the landing by sending the scout company around the Mellu to its lagoon-side beaches where it went ashore at 0955. A regimental staff officer then got word through to Company C to do the same and it followed the scouts onto the southeastern beach at 1015.⁷

The marines reported Ennuebing secure at 1035. Minesweepers then proceeded into the lagoon through North Pass next to the islet and began their initial sweeps of the areas that were to be used as boat lanes and anchorages for the landings to follow. Small boats and aircraft laid down a blanket of smoke to protect the sweepers from the sharp eyes of Japanese gun crews, but the obscuring smoke did not stop the enemy from firing blindly at the American ships in the lagoon. USS *Phelps* left her position at the Ennuebing-Mellu control line to knock out these persistent Japanese gun batteries, but she ran into a problem. She tried to enter the lagoon through the North pass, but one of the minesweepers reported that the minimum depth through it was fifteen feet. The destroyer drew eighteen feet, so a further delay was introduced as she made her way to the pass west of Mellu. To add to the troubles, she could not act as control vessel while providing gunfire support, so control devolved to *LCC 33*, a shallow-draft boat specially fitted out for just such an eventuality. A communications

glitch, however, resulted in the alternate control craft failing to learn of the change in plans. Someone had to take the reigns, so responsibility for keeping tabs on the landing craft and forming them up for the next phase of the day's operations fell on the submarine chaser *SC 997*. The reason? This little boat embarked General Underhill and his staff and, since the ADC was in command of IVAN Landing Group, then default control fell in his lap. Underhill did not have a copy of the control plan nor did *SC 997* have adequate communications capability to coordinate the movement of the forming waves, but he did what he could to maintain order until such time as *Phelps* could once again exercise control.⁸

Boat waves began to form off of Ennuebing for landings on Ennumennet and Ennubirr as soon as marines were ashore on the first two objectives. *Phelps*, finally in a position to act as control vessel, took up her place on the new line of departure. The boat waves began their journey from outside the lagoon, entering through North Pass and forming up on the line marked by the destroyer. The strong wind once again slowed the progress of the LVTs toward the line and inexperienced tractor drivers allowed their vehicles to drift downwind as they idled their engines while waiting for the assault waves to form. All of this caused further delays, but the additional time was not completely wasted. Naval bombardment and air strikes continued on the next two objectives in the meanwhile and, finally, at 1435, the first wave started for Ennumennet and Ennubirr. The marines landed at approximately 1515 on both islets against light opposition and the two were secured rapidly.⁹

Underhill did not waste any time emplacing artillery on the first two islands taken by IVAN Group. He sent 75mm guns ashore on Ennuebing and 105mm howitzers onto

Mellu while the attack on Ennumennet and Ennubirr was ongoing and guns went in on these last two islets as soon as they were secure. The final D-Day landing, a shore-toshore assault from Ennumennet to Ennugarrett, took place at 1820 after the latter had been softened up by an intense naval bombardment and air attack. Ennugarrett was in American hands by 2000 and artillery was placed ashore immediately.¹⁰ Conolly and Schmidt were now ready for the next day's landings.

Roi and Namur Islands were both subjected to very accurate air and naval gunfire bombardment throughout the day on 31 January. The destroyers USS *Porterfield*, USS *Hopewell*, and USS *Ellet* continued this bombardment intermittently through the night of 31 January-1 February so as to drive the Japanese defenders to distraction. The object was not to actually destroy any targets, an impossibly difficult task given the lack of light, but to keep the enemy from sleeping. To that end, the destroyers fired on areas in which it was believed the defenders might concentrate personnel for the night. They also fired on the southern beaches of the islands in order to support the underwater demolition parties in their efforts to clear the landing areas of obstacles.¹¹

The LSTs embarking the initial landing units rode anchor in the lagoon during the night while waiting for the launching of the attack on 1 February. Other ships of the force put to sea, coming back to the attack area at daybreak. The original plan had called for launching the LVTs from LSTs outside the lagoon on D+1. The LVTs were then to churn under their own power to the line of departure inside the lagoon, travel the final 5,000 yards to the beaches, and begin the assault. This plan was changed after the LVTs encountered problems on D-Day when attacking the smaller

islands surrounding Roi-Namur. The nineteen-knot winds that had slowed the amphibious tractors considerably and had delayed the beginning of assault were a continuing concern for Conolly. With this problem in mind, he ordered LSTs to disembark their LVTs inside the lagoon so that a repeat of the previous day's performance would be avoided. This change was not something entirely new, however. Conolly reports that it was part of an "Alternate Rough Weather Plan" that was already in place and with which everyone was familiar.¹²

Captain E.R. McLean, control officer aboard the *Phelps*, had his hands full in implementing this new plan. The problems encountered the day before while trying to land the 25th Marines on the outlying islands was now causing delays in getting off the D+1 assaults, regardless of the changes instituted by Conolly. The 10th Amphibian Tractor Battalion [ATB] (+ Company A, 11th ATB) was assigned to land the 24th Marines on D+1 after having carried out the landings on 31 January, but the losses of LVTs on D-Day left the 10th ATB short of its full complement of tractors. Time was lost on the morning of D+1 while replacements and alternate means of transport were found. The 4th ATB, assigned to land the 23rd Marines, however, was intact with its full complement of LVTs. It had plenty of tractors to do the job, but it had its own bedeviling problem with which to contend. Confusion reined as the commander of the 4th ATB and the drivers of the LVTs under his command fought with drowned out radios as they tried to communicate with one another. Conolly finally signaled at 0853 that the original W-Hour of 1000 for Roi was to be reset for 1100.¹³

Everything was ready to go for Roi, but the line of departure was not yet established for the run to Namur. Conolly, in consultation with Schmidt, decided that no

more delays could be tolerated. The attack had to go off at this time or not at all. So, to the surprise of the commander of the 24th Marines, Conolly signaled a "go" and the flag dropped at 1112.¹⁴ The 23rd Marines had little trouble in overcoming the Japanese defenses on Roi. Colonel Louis R. Jones, CO of the regiment, radioed General Schmidt at 1311 with the exuberant message that, "This is a pip. No opposition near the beach....Landing teams moving in on 0-1 line." At approximately 1326, Jones follows up with the message, "O-1 ours. Give us the word and we will take the rest of the island." The only real difficulties the regiment encountered were of its own making and were the result of a breakdown in tactical discipline. Shortly after Jones made his excited radio reports to Schmidt, tanks from Company C, 4th Tank Battalion, grew impatient waiting around at the O-1 line for further orders and pushed on past it. Infantry followed the tanks in accordance with doctrine and a platoon of LVT(A)s joined in as well, working its way northward up Roi's west coast. The tanks, infantry, and LVT(A)s fired at any position that might harbor Japanese. The assault plan called for a halt at the O-1 line and then the launching of a coordinated attack to capture the rest of the island. What marines of the 23rd regiment were doing was unplanned and uncoordinated and, though it resulted in the deaths of many of the enemy, it thoroughly disrupted both regimental and division command and control on the island for approximately an hour. Jones finally reestablished order by 1445 and he reorganized his men for the final push across the island. General Schmidt declared Roi secure at 1805.¹⁵

The 24th Marines on Namur were not as fortunate. Elements of the regiment's 3rd and 2nd Battalions made it ashore on Beaches Green 1 and Green 2, respectively, at

1155. Being not much more than an airstrip and the hangar facilities for the aircraft flying from it, Roi's terrain had allowed for the 23rd Marines rapid advance across their objective. Namur was different. Since it was not necessary to clear everything off of the island to make way for an airstrip, then the defenders could be more creative in setting up defensive works. Thick brush and trees covered Namur in places and there were many more buildings than on Roi. The rubble of these buildings and the vegetation provided the Japanese with numerous positions from which to fire on the advancing marines.¹⁶

In addition to all of these terrain obstacles, a freak accident contributed to the slowing of the 24th Marines' advance. At 1305, a revetted building in Company F, 2nd Battalion's zone of action blew up, raining chunks of concrete, pieces of steel, and various shrapnel down on everyone within hundreds of yards of the explosion. Twenty marines died and one hundred were wounded, approximately one half of 2/24's casualties for the entire operation. The explosion resulted from the attempted demolition of what assaulting marines thought was just another blockhouse. It turned out to be a storage facility for torpedo warheads. The immediate results of the accident were four-fold: all coordinated forward movement in 2/24's zone of action halted; the organization of units near the O-1 line was delayed; radio communications between assault companies and battalion headquarters was knocked out; and command and control was disrupted such that company commanders could not organize their men into proper unit order.¹⁷

The 3rd Battalion, 24th Marines, was dealing with its share of problems at the same time that its sister battalion was attempting to press home the assault. Third

Battalion encountered more enemy fire initially than did 2/24 to their right. There was no organized enemy defense, however, because Namur's communications center, the position from which the Japanese were to have coordinated the defense of Roi-Namur, had been destroyed by the American naval gunfire bombardment. Companies I and K made the O-1 line by 1400, but they were ordered to hold their position while the regiment organized to make a coordinated push across the rest of the island at 1630.¹⁸

The coordinated attack kicked off at 1630, but only 3rd Battalion was in a condition to jump off the line on time. 2nd Battalion, still recovering from the torpedo warhead explosion, reorganized as quickly as was possible and finally left the line at 1730. The attack northward consisted of light tank penetration followed by infantry. Thirty-seven millimeter canister shot from tanks blasted away dense undergrowth and killed Japanese. Any defenders who attempted to jump aboard the lead tanks were eliminated by canister shot from the following tanks. This advance was tough going for the tanks. Dense undergrowth, shell holes, and fallen trees presented an obstacle course that proved deadly for some of the marines manning the tanks. The story of Captain James L. Denig, the CO of Company B, 4th Tank Battalion, provides a lesson in just how deadly it could be. Denig became separated from his infantry support and the other elements of his company. After hitting a log and veering off into a clearing, he stopped to get his bearings before continuing on. A group of Japanese climbed aboard his tank as it sat there and one of their number dropped a grenade down a signal port that had been left open to allow engine fumes to vent. The explosion killed Denig and his driver and wounded the other two crewmen. At that point, a squad of infantry and another tank appeared and killed the Japanese attackers.¹⁹

The northward push eventually ran out of steam and Colonel Franklin A. Hart, 24th Marines CO, at 1930 ordered his regiment to halt, to set up a defensive perimeter, to hold the ground they had already captured, and to prepare to resume the attack the next morning.²⁰ The 3rd Battalion jumped off first on D+2 at 0900. Medium tanks spearheaded their advance, firing armor-piercing rounds into pillboxes and other concrete structures to pierce their walls and then pumping HE rounds into their interiors. The 2nd Battalion joined the attack at 1006. Both battalions met at Natalie Point, the most northern position on Namur, at 1215. General Schmidt declared the island secure at 1418.²¹

Strategic and Operational Objectives for FLINTLOCK

The Marshall Islands were part of Germany's North Pacific colonial empire prior to World War I. Japan, entering the war on the side of the Allies and claiming to be helping in Britain's search for a German cruiser squadron commanded by Admiral Graf Maximilian von Spee, raised the Imperial flag over the Marshalls and several other island groups of German Micronesia in the autumn of 1914. The Australian government became alarmed at this expansion of Japanese power and asked London for help. The British, reacting to Australia's concerns, requested that Japan stop its penetration of the German colonies at the equator. To ensure that the Japanese paid attention to their request, they refused to help Japan take any of the southern colonies. Later, in February of 1917, Great Britain agreed to allow continued Japanese control of Micronesia in return for Japan's help in the naval war against Germany. In fulfillment of their part of the deal, the Japanese sent a flotilla of destroyers to the Atlantic. The British were interested in more than just controlling the expansion of Japanese influence

in the Pacific, however. Their ulterior motive for entering into this agreement with Japan was to control the expansion of American sea power. Aware of U.S. interests in the Central and Western Pacific and concerned about having to deal with an increasingly powerful ally during the war and a possible naval arms race with that ally afterward, Britain wanted to make sure that the former German colonies did not fall into American hands. The Japanese were only too happy to help them with their dilemma.²²

The Treaty of Versailles made this arrangement official, granting Japan a Class C Mandate over Micronesia under the auspices of the League of Nations. The League of Nations Mandates figured prominently in the various permutations of the American ORANGE plans of the interwar period. The Marshalls eventually became the first stop on the "Royal Road" to the Philippines, a concept that dominated Navy planning from 1934 through mid-1937. The goal of the thrust through the Marshalls was to provide bases for the eventual taking of Truk in the Carolines, a base from which the final push to the Philippines could be staged, and the accepted procedure for taking the Mandate atolls was basically the one prescribed by Major Earl H. "Pete" Ellis in his 1921 report "Advance Base Operations in Micronesia."²³ This was the historical and conceptual framework within which the United States planners had to work when they began preparations for the Central Pacific Drive in late 1943.

The first mention of the Marshalls as a possible objective along the road to the Japanese home islands was in a campaign outline prepared by the Navy War Plans Division in mid-April 1942. The plan projected a four-staged advance against the Japanese, the third stage of which consisted of the "seizure of the Caroline and Marshall Islands and the establishment there of Fleet and air advanced bases." The

basic concept of using the Central Pacific as a highway to Japan remained intact here, the Carolines and the great naval base at Truk continuing to hold the fascination of wartime Navy planners as they had their prewar counterparts.²⁴

The American Joint Chiefs of Staff (JCS) arrived at the Casablanca Conference in January of 1943 with this idea as just one of several possible directions in which to go in the Pacific, but, not having worked out any particulars beforehand, they were at a loss when their British counterparts almost magically produced papers on practically every aspect of coalition strategy. The British Imperial Chiefs of Staff made it clear that they expected the Americans to adhere strictly to the ARCADIA agreement that Germany was to be viewed as the primary enemy in the war. With that in mind, then, they wanted a decision to be made as to "what situation...we wish to establish in the Eastern Theater in 1943, and what forces will be necessary to establish that situation."²⁵ The Joint Chiefs put their Joint Staff Planners (JPS) to work on the problem and they came back with recommendations for both the Pacific and Burma. The British planners disagreed with the U.S. planners concerning what was to be done in Burma, the British theater of strategic responsibility in the "Eastern Theater," so the Americans presented their views in a study that they circulated as CCS 153. The study included two enclosures, one (denoted "A") concerning the Pacific and the other (denoted "B") concerning Burma. Enclosure "A" was based upon four basic assumptions, the first of which was that "the ultimate objective of the basic global strategy is to bring the war to a successful conclusion at the earliest practicable date." The JPS recommended "that the Japanese be kept under continual pressure sufficient in power and extent to absorb the disposable Japanese military effort" so that the ultimate objective could be most

efficiently brought about, and, with this idea in mind, they presented a plan calling for the taking of four major actions in the Pacific in 1943. The third action looked very similar to the third stage of the campaign envisioned by the Navy planners in April of 1942: "Seizure and occupation of Gilbert Islands, Marshall Islands, Caroline Islands, up to and including Truk. It is planned that these operations will be undertaken subsequent to Rabaul."²⁶

Further discussions with the British helped to clarify the plan further in the minds of both coalition partners. Talk turned to the subject of Pacific strategy on the next to last day of the conference, 23 January, and decisions were made, with great reluctance on the part of the British, as to the general direction to be followed. According to the JCS memo entitled "Conduct of the War in the Pacific Theater in 1943," one of Japan's potentialities for offensive action in 1943 was an attack on the Hawaii-Samoa-Fiji-New Caledonia line. An attack on this line was considered dangerous because it served as cover for the line of communications to Australia and New Zealand. Operations against the Japanese in the Solomons during 1942 and 1943 made an enemy offensive against the aforementioned line unprofitable except for by way of the Gilbert and Ellice Islands toward Samoa. American offensive action with the highest probability of stopping this move would be to reverse the route and advance on the Samoa-Jaluit line by way of those same groups of islands. To do so would make the all-important Australia-New Zealand line of communications secure and it would also draw Japanese forces away from Rabaul.²⁷ So, with the decision made to go to the Gilberts first and then to the Marshalls, the Joint Chiefs went back to the United States to begin implementing the overall strategy agreed to by the coalition partners.

The usual focus of the United States Navy's various ORANGE War Plans was a thrust across the Central Pacific through the three islands groups of the Japanese Mandate: the Marshalls, the Marianas, and the Carolines. Use of the British-owned Gilberts as a staging area for such a movement into the Mandate was suggested and discussed from time to time, but the perceived strategic and tactical realities dictated by the ORANGE Plans always argued against their use and the idea was dropped each time. It was not until mid-1941, when Franklin D. Roosevelt became interested in entering into a Lend-Lease arrangement with the British to use their Central and South Pacific islands as bases, that the possibility of going at the Marshalls from the Gilberts once again became an item for discussion.²⁸ As it turned out, a Lend-Lease swap became a moot point when the Japanese tide of conquest washed over the Gilberts on 9-10 December 1941. When the Navy planners began contemplating in April 1942 at least limited offensives in the Pacific, Admiral King requested and received "blanket authority for U.S. forces to occupy any of the Pacific Islands under British or Dominion jurisdiction as may be required."²⁹ Legally and diplomatically, the decks were cleared for whatever action was deemed necessary.

The end of fighting on Guadalcanal in early February presented King and Marshall with the question of what to do as a follow-up. King put the Navy War Plans Division to work on a plan that, in accordance with the decisions made at Casablanca, would send American forces into the Gilbert and Ellice Islands. The objective for these operations was the overall strategic advancement of U.S. forces and the diversion of Japanese forces from the Solomons. The ultimate goal of movement into these two island groups was the long-anticipated capture of the Caroline and Marshall Islands.³⁰

On 9 February, while meeting with Nimitz in Pearl Harbor, King asked his Pacific commander for his opinion as to the seizure of the Gilbert Islands in the near future. Nimitz, usually an advocate of the bold stroke, advised caution at this time. He did not believe that American forces were built up sufficiently in the Pacific as of early 1943 to allow for the undertaking of major operations like those being proposed. King, reluctantly, agreed that the beginning of a Central Pacific offensive would have to be postponed until such time as the additional ships, materiel, and men could be amassed.³¹ King and Nimitz agreed that that point was reached by June 1943. From that point on, the move against the Gilberts and Marshalls became two separate, yet related, operations and the 20 July Joint Chiefs directive ordering the taking of the Gilberts made the separation official.

Resources and Plans for Landings on Roi-Namur

For the prosecution of the Marshalls operation, codenamed FLINTLOCK, Nimitz chose to use the same team he had employed for GALVANIC: Vice Admiral Raymond Spruance once again commanded the Fifth Fleet, Rear Admiral Richmond K. Turner commanded the V Amphibious Force, and Major General Holland M. Smith commanded V Amphibious Corps. As before, they would be responsible for turning Nimitz's strategic and operational directives into operational and tactical realities. The Marshall Islands is composed of over 800 reefs arrayed across an expanse of more than 400,000 square miles of ocean. These reefs lie in two roughly defined chains, the Ratak – or "sunrise" – to the east and the Ralik – or "sunset" – to the west.³² The mid-30s War Plan ORANGE emphasized beginning a campaign in the eastern chain, mainly because those islands were closer to Hawaii.³³ Influenced by ORANGE and in accordance with

both the Navy War Plans Division's February conclusions and directives issued by the

Combined Chiefs of Staff at the QUADRANT Conference in August, Nimitz proposed

the following theater plan to the Joint Chiefs:

- (a) Simultaneous seizure of key islands on the KWAJALEIN, WOTJE, and MALOELAP atolls, followed at once by the reduction of the remainder of the islands of those atolls.
- (b) Contain and neutralize JALUIT and MILLE.
- (c) Mount operation both from OAHU and South Pacific bases.
- (d) Use ELLICE and GILBERT positions as staging points.
- (e) Employ NAURU, GILBERT positions, and BAKER for photographic reconnaissance, search, and for repeated air strikes to soften up the MARSHALLS.
- (f) Target date 1 January 1944.³⁴

Probably the most difficult logistical problem presented by the plan was the availability of an adequate supply of shipping. The Joint Staff Planners of the Joint Chiefs of Staff began to work on this problem in earnest after the JCS returned from the QUADRANT Conference in August. The JPS estimated, barring any additional losses, that there would be a shortage of nine attack transports and ten attack cargo ships in the Central Pacific on 1 January 1944. The planners believed that the deficit could be made up before the ships would be needed for the operation, but Army planners, worried that the projected Marshalls operation would interfere with MacArthur taking the final steps to isolate Rabaul (a far-flung operation codenamed CARTWHEEL), wanted to make FLINTLOCK contingent "upon the availability of shipping." As preparations began for the operation Gen. Marshall became alarmed at the number of ships being requested by planners, more ships than Lieutenant General George S. Patton required in landing 34,000 troops on the coast of North Africa. Marshall recommended that the Joint Staff Planners study the effect this one Central Pacific operation would have on the availability of shipping to other operations in the Pacific. The JCS approved the

recommendation and the Joint Planners got to work. They determined that, except for a shortage of personnel shipping, FLINTLOCK would not cause any problems. Converting some cargo vessels to troop transports would alleviate this shortage, however. The report satisfied Marshall and the other Chiefs that the operation would not interfere unduly with other Pacific actions and, so, they authorized it.³⁵

The high number of casualties at Tarawa caused Spruance, Turner, and H.M. Smith to question the feasibility of assaulting three strongly held atolls at the same time. Conferring with one another after returning to Hawaii from GALVANIC, the three decided to voice their concerns to CINCPAC. They suggested that the operation be divided into two phases: Wotje and Maloelap first and then Kwajalein using bombers based on the two previously secured atolls. Nimitz understood their concerns and decided to scale down the operation, but he proposed a different alternative plan – go straight for Kwajalein and completely bypass the eastern islands of the chain. CINCPAC's chief of staff, Rear Admiral Charles H. "Soc" McMorris, and his chief planner, Rear Admiral Forrest P. Sherman, both believed that the plan would work. The JCS ordered Nimitz to send the Fifth Fleet's fast carriers to the South Pacific immediately upon completion of the Marshalls operation so that they could support Admiral Halsey's amphibious operations in that theater, but Sherman thought that the loss of the carriers would not matter. He reasoned that carrier air could be used to knock out Japanese airfields on the atolls surrounding Kwajalein before the assault took place and then land-based air from the two newly won airfields on that atoll, along with bombers from the Gilberts, could maintain neutralization after the carriers left.³⁶

Nimitz presented this plan on 7 December to the three men who would be responsible for implementing it, and all three of them argued that it should not be done. Spruance, in particular, was determined to change Nimitz's mind. He stated that, contrary to Sherman's assurances, he would not be able to maintain neutralization of the airfields on the bypassed islands once he lost the fast carriers to Halsey. Nimitz gave his Fifth Fleet team time to ponder his proposal. Meanwhile, CINCPAC began to receive intelligence that indicated the Japanese were strengthening their defenses in the eastern Marshall Islands at the expense of Kwajalein. Like Nimitz's subordinates, they expected the next American blow to fall there. At a meeting with all his Fifth Fleet flag and general officers on 14 December Nimitz put his proposal to a vote. Every single one of them voted to take the eastern islands first. Nimitz, calmly, told them that the decision was made - the objective would be Kwajalein. Turner and Spruance stayed behind after the meeting to argue their point further. Nimitz, after they had exhausted their arguments, put the matter to them bluntly – they could either carry out his orders or he would put someone in command who would. They chose to do as their boss directed.³⁷

Allan Millett argues that Japanese naval and air assets based the choice of Kwajalein over Wotje and Maloelap on CINCPAC's confidence in the ability of the Fifth Fleet to isolate amphibious objectives from intervention. He also postulates that the American ability to decode Japanese radio messages could have given Nimitz and Sherman knowledge of Tokyo's decision to defend a line running through the Marianas and Carolines, leaving the Marshalls virtually undefended.³⁸ As it turned out, the Japanese military had not only decided to pull back the defensive perimeter to the

Marianas and Carolines, but it had also decided that the most likely islands of the Marshalls to be attacked were those in the eastern chain. Consequently, most of their efforts at fortifications were expended there.³⁹ Nimitz, Sherman, and McMorris, in other words, were correct in picking Kwajalein as the initial target in the Marshall Islands.

Admiral King was adamant that relentless pressure be applied to the Japanese. With this in mind, he insisted on a 1 January 1944 D-Day for FLINTLOCK. Nimitz argued for and eventually convinced King to accept 17 January as the earliest possible date, but events were to lead to a further postponement. Spruance, not happy at having to accept CINCPAC's plan making the capture of Kwajalein the lynchpin for the Marshalls operation, requested on 26 December that Majuro Atoll in the eastern Marshalls be added to the list of objectives. It was known to be lightly held and could serve as a valuable Fleet base to support operations further up the Marshalls chain. He also argued that his forces would not be able to undertake operations against Kwajalein and Majuro until 1 February. Nimitz agreed with Spruance's reasons for wanting to postpone the invasion until 1 February, but the best he could do with King was to reach a compromise setting D-Day at 31 January. Spruance met this date by placing artillery on the relatively undefended islets surrounding Kwajalein Island and Roi-Namur, setting the date for the main landings on 1 February.⁴⁰ Turner reports that the capture of Eniwetok, an atoll 360 miles northwest of Kwajalein and the main conduit for Japanese aircraft being fed into the Marshalls from the Marianas and Carolines, was discussed early in the planning stages of FLINTLOCK. Taking Eniwetok was not prescribed in the original directive for the operation, however, because no one was certain of how great a percentage of available troops would be absorbed by the capture of Kwajalein. Plans

for the capture of Eniwetok were drawn up, nonetheless, just in case they might be needed. Turner and his staff wanted to be prepared in case the Kwajalein operation progressed rapidly enough to justify extending the operation farther to the west.⁴¹

Naval Gunfire at Roi-Namur – The "Lessons" Applied

Such were the basic operational plans for taking the Marshalls. How naval gunfire was to be used to reach the ultimate goal of the operation was a question to be answered by Turner, Conolly and their various subordinates who were directly concerned with the planning and execution of the naval gunfire mission. According to doctrine and established practice, these men were to work together to produce an outline and then a detailed plan that listed everything from general target areas to specific responsibilities for individual ships. The "Lessons of Tarawa" were heavy on the minds of all these men and the influence of that earlier bloodletting showed through in the naval gunfire annexes produced at every command level of the Fifth Amphibious Force. For Turner, as the chief architect of the amphibious plan used in the Gilberts, the motivation to erase the flaws inherent in that plan was particularly strong. In his post-operational report, he recognized this motivation when he pointed out the four advantages planning for FLINTLOCK enjoyed over that for the earlier operation:

- (a) More time than was available for GALVANIC.
- (b) Lessons learned from GALVANIC.
- (c) More appreciation by all hands of the problems involved gained by experience.
- (d) More equipment and material available.⁴²

He also listed a single disadvantage. Dwelling on this perceived flaw in the thought processes that came together to produce the Marshalls' gunfire plan would affect the way Turner and his staff approached planning for future operations:

Over-emphasis of certain problems which experience at TARAWA had exaggerated in the minds of those concerned. This caused general doubt regarding the effectiveness of our weapons and tactics, and much time and effort was expended on dubious and fruitless schemes.⁴³

The preliminary air and naval bombardment of Marshall Island objectives began once the airfields obtained through the invasion of the Gilberts were activated. Rear Admiral John H. Hoover commanded all land-based air during FLINTLOCK as he had for GALVANIC. His planes increased the frequency of attacks on Marshalls targets and the tonnage of bombs dropped until a peak was reached on D-10. The attacks continued at this high rate until the end of D-Day. Mille, Jaluit, Wotje, and Maloelap, the objectives Nimitz chose to bypass in going straight to Kwajalein, garnered most of Hoover's attention. Neutralization of the airfields on these islands was foremost in everyone's minds, naturally, but the attacks served the additional purpose of deceiving the Japanese as to ultimate American intentions. Surface bombardment began on 29 January when the new fast battleship USS North Carolina and the destroyers USS Sterett and USS Lang took up positions off of Roi and, over the course of the late evening and night of D-2 and D-1, lobbed shells onto the island. The mission was "to keep the airfield inoperative, restrain aircraft from landing, prevent personnel from repairing the airfield, and for general nuisance value." At 1100 on 30 January these three ships joined the rest of Task Unit 58.2.2 (new battleships USS South Dakota and USS Alabama and the destroyers USS Stack, USS Hickox, and USS Hunt) to pump ordnance into Roi and Namur as well as islets to the southeast of Namur, stopping only to allow for periodic air attacks.⁴⁴

Turner's rules for determining the proper range from which to fire on bombardment targets varied depending upon the type of target engaged. If it was a

beach defense that stood upright, then direct hits from accurate, deliberate, pointer fire delivered from close range (deemed to be 2,000 yards or less) was the prescription. On the other hand, if the targets on the beach were low and flat or if the targets were not on the beach but somewhere in back of it, then plunging fire from moderately long range (usually in the neighborhood of 5,000 - 8,000 yards) was to be used. Turner states that both types of fire were incorporated into the gunfire plan.⁴⁵

The choice of which projectiles and fuzes to use was up to Turner. He says that he adopted the following policy after considering the results of ongoing research and the advice of ordnance experts:

- Armor-Piercing Projectiles To be used only against exceptionally [thick] and strong structures, and then only when a reasonable percentage of direct hits is obtainable.
- (2) Common Same as for armor piercing.
- (3) High-Capacity and A.A. Common For all other purposes. Percentage of point-detonating fuzes to be 75% when covering an area, and 25% for all other purposes. Air bursts to be used only when requested by shore fire control parties or against enemy troops actually observed in the open [or] in open trenches....
- (5) Mark 32 Fuzes <u>Not</u> to be used for shore bombardment....⁴⁶

Turner's job as Commander of the Joint Expeditionary Force (TF 51) placed

upon him the responsibility of dictating the basic rules that everyone else, including

Rear Admiral Conolly, had to take into account when making their own plans. The most

pertinent sections of Turner's plan, and his reasons for adopting them, were as follows:

(d) <u>Timing of close support fires</u> – These fires should start at about H minus 30 and continue at the landing beach until the last possible moment. This is when the first wave is about 300 – 500 yards from the beach for 5" and smaller calibers, and about 1000 yards from the beach for larger calibers. Ther[e] should be no cessation of the fire even at H-Hour but it should be shifted to the flanks, or lifted to the

back areas, for a period of time which varies with the speed of advance of the troops and the contour of the island. It was decided that close-in naval gunfire and artillery fire support would offer the best cover for the landing waves. Therefore the air strike in direct support of the landing was to be started and completed well before the first wave of boats reached the beach, the travel of boats from the line of departure to the beach being covered by ships gunfire and artillery fire. All conflicting gunfire was to be checked during the air strike (H-35 to H-20, W-50 to W-25).

- (e) <u>Time of commencement of scheduled fires</u> was scheduled at the first crack of dawn, using star-shells as necessary for spotting. This tends to protect the transports and other ships from coastal batteries....
- (g) <u>LCI Gunboats</u> Twelve of these were available (recently converted so as to enable to fire 40MM .50 caliber and 4." 5 [sic] barrage rockets as well as the 20MM originally installed) and were used to support every landing. The tactical plan for these gunboats was to slightly precede the first wave on each side of the boat lane firing rockets at 1100 and 800 yards, and machine guns when within range. To avoid blanking the fire of supporting destroyers, cruisers, and battleships it is necessary for the LCI's to remain close to the boat lanes at all times.
- (h) <u>Night Activities</u> At night it was considered necessary to:
 - (1) Furnish intermittent fire all night to harass the enemy and reduce his activities.
 - (2) Furnish illumination for the aid of advancing troops ashore.
 - (3) Prevent movement of enemy from island to island across the reefs.

Task (1) can be accomplished by any type vessel which has the ammunition, preferably a battleship. A destroyer is the most suitable type for (2), while LCI's are quite suitable for (3)

- (i) <u>Rolling Barrage</u> just ahead of the troops is best accomplished by the artillery. Naval gunfire was scheduled to supplement this and call fires were continuously supplied in addition.
- (j) <u>Areas of responsibility</u> for each ship were established by assigning adjacent target areas to a ship for a long period of time. In GALVANIC ships exchanged areas frequently in order to ensure that all areas would be covered to some extent even if one or more firing ships dropped out for any reason. By <u>not</u> exchanging targets better accuracy of fire was achieved and definite areas of responsibility established for counter-battery and target of opportunity fires.

- (k) <u>Permissable [sic] zones of fire</u> In GALVANIC there were several instances after our troops had landed when ships observed excellent targets of opportunity, but were unable to obtain, from the troop commander, permission to fire in time to do so effectively. [Steps were taken in this operation to ensure that this situation would not present itself again.]...
- (n) <u>Aerial spotting for shore fire control parties</u> was provided for using observation aircraft. In GALVANIC shore fire control parties had usually been unable to find a suitable observation point due to flatness of the areas. The need for aerial observation had therefore been felt.
- (o) <u>Shorts in the water</u> are necessary when sho[o]ting perpendicular to the beach at the beach defenses in order to place the MPI [mean point of impact] of the salvo on the target. An effort was made to indoctrinate personnel in this principle because the general attitude is to avoid "wasting shots" by putting them in the water....
- (t) <u>Grid system</u> To ensure that all hands used the same coordinates a standard grid system for the MARSHALL Islands was prescribed by JICPOA.
- (u) <u>A combined sequence of events</u> was issued showing how the air support, artillery and naval gunfire fitted together into one overall program.
- (v) <u>Delay of H-Hour</u> after firing schedule has begun will result in a period of silence unless some provision is made to avoid this. A simple solution was accepted, i.e. to repeat all fires for the otherwise silent period exactly as scheduled, but with a greatly curtailed allowance of ammunition....⁴⁷ [underlining in original]

These rules addressed all of the most important general flaws, as Turner saw it,

in the amphibious plan used in the Gilberts. But Turner was not the only person to have

learned lessons at Tarawa. Vice Admiral Spruance underwent a total conversion as a

result of the high casualty rate on Betio, and his subordinates Turner and Holland Smith

were totally on board with him. For Spruance, the proper way to execute an amphibious

assault was to "use violent, overwhelming force, swiftly applied."⁴⁸ He elaborated on

how his experience at Tarawa led him to accept this philosophy in a speech he made

after the war to an audience of Marines:

On going into action for the first time, we found that our best thought-out plans required later modification in the light of actual combat experience, and that exceptional valor in the troops was called for in order to make good unforeseen deficiencies in our planning. As a matter of fact, even with the best of planning and of preliminary training, I always have had the feeling that the margin between success and failure in an amphibious operation conducted against strongly defended positions was a narrow one. I would never want to conduct such an operation with troops poorly trained, poorly led, or of poor quality. To do so would be to court defeat, and I do not think we can afford to risk defeat in an amphibious operation.⁴⁹

To make sure that Spruance's philosophy could be carried through at Roi-Namur, Turner provided Conolly with enough ships that could deliver a massive quantity of ordnance onto the objectives. Rear Admiral Jesse B. Oldendorf's Northern Support Group (TG 53.5), a combination of old battleships and cruisers, was the result.⁵⁰

Once the assignment was made, it was up to Conolly to integrate them into the overall plan for the Northern Attack Force and then to rehearse them so that their crews could perform their jobs effectively. The Fire Support Group assigned to Task Force 53, with the exception of USS *Indianapolis*, trained off of San Clemente Island, California. The rehearsals were patterned as nearly as possible on the actual bombardment plans to be used at Roi-Namur.⁵¹ Ship training commenced on 10 December 1943 with destroyers simulating gunfire missions into the Aliso Canyon (Camp Pendleton) area near San Diego. Two fire support units conducted firing exercises on San Clemente Island on 27 and 28 December and the complete fire support group, less *Indianapolis*, also fired on the island on 2 and 3 January 1944. The destroyers assigned to fire support units finished the rehearsals by firing on the island on 10 January, paying particular attention to practicing the delivery of destruction fire on beach targets at point-

blank range.⁵² Shore Fire Control Parties, members of the 1st Joint Assault Signal Company (JASCO), completed their training during the period from 10 December 1943 to 13 January 1944. Conolly states that the small size of the objectives in comparison to the large number of troops to be landed led him to believe that not many call-fire missions would be necessary during the upcoming operation, but the fire control parties were trained as though they would be needed continuously after the landing. He states that "[i]n a manner of speaking, the shore fire control parties were 'insurance' for the success of the operation, as regarded naval gunfire."⁵³

Conolly's staff studied the landing force's attack plan in conjunction with all of the available intelligence on Roi-Namur and the surrounding islets. After developing a plan that they believed took all of this information adequately into account, they turned over the completed bombardment plan on 8 January 1944. This plan was then coordinated with Conolly's overall plan as well as the air support and artillery plans. He then sent out word to the various planning groups that their plans should be modified based upon the latest intelligence from the objective. The bombardment plan was divided into two parts, one for D-Day and one for D+1. Each part contained all pertinent maps, time schedules, detailed procedures, and communications enclosures.⁵⁴

Turner was concerned that an adequate amount of bombardment ammunition be on hand aboard each class of vessel at the end of D-Day and D+1, so Conolly made sure that the ammunition allowances prescribed by the Commander Fifth Amphibious Force were used. Conolly reports, however, that the firing schedules did not prescribe use of ammunition on a minute-by-minute basis. True, the schedules were timesensitive, but the relevant bombardment time periods were determined by the time and

place of the various landings. Rather than micromanaging the bombardment himself, Conolly gave the Fire Support Unit Commanders the freedom to use their own judgment as to what calibers to use, what rates of fire to prescribe, and what ranges to employ, as long as they stayed within limits set forth by Turner. He did, however, order that certain provisions be made for the time of the landings themselves, specifically that the rate of fire of all bombardment ships be increased when a landing was taking place, and he retained for himself the authority to check or lift naval gunfire relative to the position of the landing force.⁵⁵

Both the needs of the landing force and the hydrography of the atoll dictated the composition of the various fire support units. Cruisers and battleships could not enter the lagoon, so they had to deliver fire from the seaward side of the main objectives. Destroyers, on the other hand, could enter the lagoon and they consequently provided fire, in combination with LCI(G)s, from the lagoon side of the main objectives on D+1. They were the principal fire support for the 25th Marines going into the surrounding islets on D-Day because the small size of these objectives precluded the use of vessels carrying larger caliber guns. Finally, they provided harassing fire on Roi and Namur at night and they made sure that the Japanese could not reinforce adjacent islands while the attack was ongoing. The fire support areas within which the fire support units operated were clearly demarcated so that ships would not inadvertently fire into others of the bombardment group. The bombardment plan addressed the problem of overs and ricochets encountered at Tarawa by placing heavy ships in positions that would prevent their wayward shots from landing in fire support areas opposite them. Despite the care taken in this matter, however, shells from USS Indianapolis narrowly missed

USS *Louisville* and fragments from one of these near misses caused damage to *Louisville*'s stern plating and superficial injuries to several crewmen.⁵⁶

Conolly stresses in his report that the Fire Support Commanders were given wide discretion in the execution of the fire support schedule, but there was one time when he exercised his prerogative as overall commander to change the decision of a subordinate. He describes the incident very nonchalantly in his report: "On one occasion...Commander Fire Support Unit TWO was directed by the Force Commander to send MARYLAND in very close to ROI ISLAND to destroy blockhouses and enemy installations." He received the respectful sobriquet "Close-in Conolly" from the marines for his willingness, as in this instance, to send heavy ships "close in" to the point where their keels scraped coral, usually from 1,200 to 2,000 yards out, so that the cruisers and battleships could lay direct pointer fire on tough targets with their 8, 12, 14, or 16-inch guns. The bombardment plan was structured so as to take maximum advantage during the landings of both the strengths and the weaknesses of naval gunfire, particularly its accuracy in deflection and its dispersion in range. Destroyers positioned inside the lagoon placed fire on the flanks of the landing force as it came ashore while cruisers and battleships from without placed enfilade fire across the front lines. Conolly reports that this arrangement allowed for overs from the big guns of the heavy ships to hit profitable targets without endangering the landing force inordinately.⁵⁷

Conolly reports that he and his staff realized during the planning period that the destruction of reinforced concrete pillboxes, blockhouses, and other similar strong points required close range accurate fire from large caliber naval guns. Plunging fire – that is, fire that falls upon a target at a sharp angle from above – requires long gun

ranges and, therefore, is not accurate enough to produce a high enough percentage of hits on such small targets. Rather than naval gunfire, Conolly recommends that aircraft bombs be used for such attacks. On buildings twenty – by – thirty feet, however, major caliber naval guns delivered approximately ninety percent hits from 2,000 yards. Based upon this data, he recommends that the "best employment of available weapons" would be, first, to silence remaining shore batteries using air bombs and naval guns firing from medium range (6,000 – 8,000 yards) and then to close the range so that definite identification of targets can be made. This closer range leads to a higher percentage of hits on hardened targets, especially by major caliber guns, because it allows cruisers and battleships the most effective use of pointer fire and direct flight spotting of targets. Penetration of these hardened targets by major caliber naval gunfire was expected to kill personnel within the structures and to destroy materiel and supplies stored therein. Air bombs, particularly 500-, 1000-, and 2,000-pounders, could be used as follow-up to naval gunfire bombardment, destroying structures already weakened by the naval guns by delivering the "plunging fire" coup de grace. The results of the bombardments by Fire Support Units 1 and 2 provide some support for Conolly's conclusions. Unit 1 fired from the eastern side of Namur from a range of approximately 3,500 yards. The vessels of the unit hit targets and breached some of them, but their accuracy was not as high as that of Unit 2. Firing from the 1900 yards to the west of Roi, Unit 2 registered more direct hits than did Unit 1. Bombing, as Conolly saw it, provided the required plunging fire.58

Conolly and his staff gave a great deal of thought to the selection of targets. He states in his report, reemphasizing the process already described earlier:

All available intelligence information, plus the tactical plan of the landing force, determined the targets on which fires would be delivered. Large and heavily constructed and steel reinforced enemy installations were assigned to battleships and cruisers. Beach installations and areas of a more vulnerable nature were assigned to 5 inch batteries. All ships were prepared to deliver point blank range fire on blockhouses and other heavy installations. Intelligence information received enroute was retransmitted to support units and additional targets assigned as required.⁵⁹

The planners assigned direct fire support ships to each assault battalion and provision was made for the modification and augmentation of these assignments once the landings had begun. This is where the flexibility of the plan showed itself. Time periods indicated in the firing schedules took a back seat to the observed progress of the shipto-shore movement. Regardless of what the firing schedule said, fire being delivered perpendicular to the beach was not to be lifted inland until the troops were 500 yards from the beach and enfilade fire was not to be redirected until they were 300 yards out. Conolly would send the command to lift fire over the naval gunfire common channel (2504 kcs) and the TBS channel, or just the TBS channel if the common channel was overloaded or otherwise not working. Conolly designated certain additional vessels as relief for the direct support ships. The commanders of these vessels were to listen to the naval gunfire common channel for the command to join the bombardment, at which time they were to switch to whatever frequency to which they were directed and to listen for further orders. The designation of relief vessels gave Conolly insurance that he could cover any eventuality.⁶⁰

Conolly believed that naval gunfire, at least in his part of Operation FLINTLOCK, was quite effective. It achieved both neutralization and destruction on Roi-Namur, allowing the first four assault waves to land on the two main objectives without having to face any significant opposition. Post-operational investigation revealed that

blockhouses, pillboxes, and gun emplacements all received direct hits by major caliber naval guns and that both HC and AP 14-inch and 16-inch penetrated as much as fortyfour inches of heavily reinforced concrete. Coverage of both islands was so thorough and accuracy so high that only one blockhouse remained unbreached between the two. The number of enemy dead congregated in the penetrated blockhouses indicated that fragmentation upon penetration was more than adequate. Smaller caliber guns penetrated pillboxes with ease and 5-inch gun emplacements, while not hit directly by naval gunfire, were rendered inoperable by shell fragments from near misses. Finally, naval gunfire destroyed troop shelters, ammunition dumps, and fuel storage areas.⁶¹

The recommendations Conolly makes in his report on naval gunfire are sprinkled throughout its sixteen pages, but he includes a 16-point summary near the end of it.

This list is reproduced below in full:

- 1. That the entire Fire Support Group be assembled and participate in the final training periods and rehearsals conducted by the landing force.
- 2. That all Fire Support Units be briefed in detail before proceeding to the combat zone. **(This is particularly important)** [emphasis added]
- 3. That Fire Support Unit Commanders and fire support ship commanding officers be given as much leeway as possible in determining the details of their scheduled fires. This includes calibre [sic.], rate of fire, and range to use.
- 4. That destruction fire be the primary objective of all naval gunfire against atoll targets, with neutralization fire as an important objective immediately preceding a landing.
- 5. That against reinforced concrete structures heavy Fire Support Units be used at very short ranges (about 2000 yards) when hydrography permits, in order to obtain a high percentage of hits on definitely identified targets.
- 6. That every effort be made to outline fire support areas in such manner as to prevent ships or units from firing into each other.
- 7. That destroyers be sent inside lagoons to provide support in operations where atolls are to be seized.
- 8. That naval gunfire lines of fire be considered so that the known

dispersion in range of naval gunfire may be capitalized upon in enfilading enemy targets. Also the excellent deflection performance of naval guns must be considered, and it must be realized that naval gunfire can be placed very close to own front lines when the line of fire is parallel to the front line of the troops.

- 9. That LCI's [sic.] (converted to gunboats) be used in all landings to precede and protect the assault boat waves. The use of rockets is particularly recommended since their particularly recommended since their psychological effect alone is tremendous. Their destructive effect has been well demonstrated.
- 10. That all fire support ships be cautioned to base their close support not on the rigid time schedule (furnished as a guide only) but on the position of the leading assault boat waves. Fire should continue on the landing beaches until leading assault waves are 500 or 300 yards from the beach, depending upon whether the line of fire of supporting ships is respectively perpendicular to the beaches or parallel to them (in enfilade).
- 11. That air observers and close support destroyers report the position of assault waves so that supporting fires can be checked or lifted by the Task Force Commander in order to avoid firing into own boats, but at the same time to provide safe and effective support up to the last possible moment before troops land.
- 12. That regimental naval gunfire liaison officers, with their radio personnel and equipment, be assigned each regimental commander by the Attack Force Commander. These officers should assist in the training and equipping of the three shore fire control parties assigned to each of their regiments working in close cooperation with the landing force naval gunfire officer and with the Attack Force Commander's gunnery officer.
- 13. That destroyer gunfire be employed to keep the enemy awake and harassed during all the nights of the assault phase (most of the captured Japanese on ROI and NAMUR ISLANDS were in a state of near collapse from the steady incessant attention that was paid them, day and night during the entire assault). Star-shells should be fired to silhouette enemy movements and to confuse him, but should not be placed where they will interfere with own units, for example, demolition parties destroying beach mines and defenses.
- 14. That the Army type SCR-694 radio be substituted for the TBX and the SCR-284. This light, paratroop design SCR-694 radio is ideal for amphibious operations. Using the SCR-694, both the naval gunfire liaison officer and the forward observer would have the same radio equipment. A casualty to one would not interrupt the scheme of things. The other could immediately take over the functions of the casualty. They are trained to do just that.
- 15. That, if the SCR-694 radio be adopted, arrangements be made with Commander Central Pacific Force [Spruance] to assign a higher
frequency to insure ability of SCR-694 radio to come up on it. (In KWAJALEIN operation, 2504 kcs was assigned Northern Attack Force as naval gunfire support common. The SCR-694 radio cannot guard this low frequency). [sic.]

16. That all radios used by shore fire control parties be completely waterproofed.⁶²

These recommendations can be seen as the ultimate validation of the naval

gunfire "lessons" taught at Tarawa. The problem was that only one man seemed to

truly understand that that was the case, and it was not Richmond Kelly Turner. That

man was Richard Conolly and he would show and not just say that he understood these

concepts by once again turning in a stellar performance as attack force commander at

Guam later in the year.

The Fifth Amphibious Corps Naval Gunfire Officer, in his Action Report, stated

that the "salient features" of naval gunfire employment in FLINTLOCK were:

- A It was delivered on a larger scale than in any previous amphibious operation
- B A continuous bombardment over a period of several days was fired on several objectives.
- C Gunfire support ships moved in to short ranges for deliberate destructive fires and in one case a battleship at anchor inside the lagoon supported the landing at a range of 800 yards.
- D There was extensive use of LCI(L) Gunboats also equipped with rockets for close support.
- E A high degree of flexibility in the application of naval gunfire was attained
- F Naval gunfire was continued on the landing beaches until leading assault waves were 300 to 500 yards from the beach before it was lifted to the flanks and inland.⁶³

The marines were paying attention to the same "lessons" as was Conolly. All of these

features, features Conolly himself insisted upon, were considered of the utmost

importance to the assault troop commanders because they saved lives.

Holland Smith, Kelly Turner, and others remarked numerous times that

GALVANIC and FLINTLOCK proved that the Navy-Marine Corps doctrine for amphibious warfare worked and that these two operations allowed the United States to perfect its use against Pacific atolls. Smith also warned that there would be additional lessons to learn in adapting the doctrine to non-atoll objectives, but he still maintained that Tarawa and the Marshalls laid the foundation for those changes.⁶⁴ Both Smith and Turner were most pleased with the effectiveness of naval gunfire at Roi-Namur and Kwajalein Islet as opposed to its ineffectiveness at Tarawa. FLINTLOCK, in their minds, proved that carefully aimed, massive quantities of ordnance – 2,655.1 tons over a threeday period on Roi-Namur alone – made a significant difference in the outcome of amphibious assaults. There are two problems with this conclusion in the case of the invasion of Kwajalein Atoll: first, Smith was right to point out that the lessons learned in the atolls would not necessarily translate to action against larger objectives, and second, a comparison of Kwajalein to Tarawa was essentially an apples-to-oranges analogy.⁶⁵

As far as the first of these problems is concerned, Betio Islet and both of the principal objectives in Kwajalein Atoll were tiny specks of land that rose no higher than twenty feet above sea level. A person standing on the upper decks of a warship just offshore of any one of them could see the ocean on the other side without difficulty. In the case of Betio, the entire islet was rightly considered all invasion beach, and Roi-Namur was not too dissimilar. Even taking smoke and dust into account, it was relatively easy to thoroughly bombard every meaningful square inch of these targets. The main variable in being able to do a good job was time – how much time was the United States Navy willing to spend to saturate the objectives with precisely placed

shells. At Tarawa, the plan only called for a three-hour area bombardment before the assault and the marines paid the price. At Roi-Namur, Conolly took the extra time, relative to the assault on Betio, given him to work over all of the targets within his area of responsibility with care and deliberation. The result was that the only real difficulties the marines encountered were self-inflicted.

To describe the comparison of Tarawa to Kwajalein Atoll as an apples-tooranges analogy does not mean that no meaningful comparison could be made at all. The problem was that the most obvious comparison, that between the defenses of the two objectives, was the one foremost in the minds of the planners and commanders during the period in which Spruance and his subordinates put the FLINTLOCK operation together and then the period of euphoria immediately following its completion – and that comparison was a flawed one. Samuel Eliot Morison provides us with documentation of this error in the volume of his history covering the Marshalls operation:

Kelly Turner was right when he predicted that Roi-Namur would be a tougher nut to crack than Betio. Of even smaller extent, it was more heavily defended with fixed emplacements and had a bigger garrison in proportion. The comparative ease of the assault was due almost entirely to the length and strength of the preliminary bombardment, and to the application of the other lessons learned at Tarawa.⁶⁶

The error was in believing, based more on supposition than hard intelligence, that the Japanese must have built up the Marshalls more than they had hardened the Gilberts because they had been in control of the former for a much longer time than the latter.

The basis of the supposition was true enough, the Japanese had been in control of the Marshalls for many years longer than they had been in control of the Gilberts – but that was not the determining factor in the equation. As pointed out earlier in this

dissertation, two important bits of information were unknown to the Americans at the time: the Japanese had decided to make their stand in the Mariana Islands and not the Marshalls, and they did not foresee the Americans bypassing the eastern chain of Marshalls to strike at Kwajalein.⁶⁷ Add to this that the American submarine campaign against Japanese merchant shipping was already taking a toll on the Imperial Navy's ability to supply the Emperor's far flung garrisons in the Pacific and that the American campaign in the Solomons in combination with the wide-ranging use of U.S. Navy fast carrier task forces against the air pipeline from the Home Islands was quickly destroying Japanese air power and one can see that Kwajalein was not the hardened target American planners believed it to be.⁶⁸ It is interesting that Philip A. Crowl and Edmund G. Love, in a work published just four years after Morison's volume, contained a more accurate assessment of Kwajalein's defenses:

Kwajalein Atoll had been the hub of Japanese military activity in the Marshalls since August 1941....Reinforcements coming into the Marshalls almost invariably passed through Kwajalein, to be parceled out from there. Supplies were usually distributed from this atoll, which was the closest major base to Truk and to the supply lines from the homeland....Kwajalein was the center of communications not only for all other bases in the Marshalls, but for the Gilberts, Nauru, and Ocean as well. The air base on Roi commanded all Japanese air forces in the Marshalls and Gilberts. All this gave Kwajalein some of the characteristics of a rear area, with more red tape than bullets, far from the front-line outposts on the periphery of the Marshalls....The three most heavily defended islands of the atoll were Roi-Namur, Kwajalein, and Ebeye..., in that order of strength. Roi-Namur was somewhat better fortified than Kwajalein Island, but neither approached Tarawa as to the size and number of weapons or the construction and concentration of positions.⁶⁹

If Kwajalein had been a more heavily defended target than Betio Islet and the Navy-

Marine Corps team had been victorious over its defenses after having adjusted their

doctrine and technique according to their experience in the Gilberts, then it would be

correct to conclude that the modified doctrine of gunfire preparation was without serious flaw. That was not the case here, however. Application of the doctrine easily overcame Japanese defenses at Roi-Namur and Kwajalein Islet, but those defenses were easy to overcome. It could be argued that the Japanese on Roi and Namur could have been defeated with acceptable losses, though higher in number than what was actually suffered, even if Turner and Conolly had not lavished three days of careful bombardment on them. This is not to say that the three days should not have been taken to do the job right. The argument here is simply that the results obtained by naval gunfire in the Marshalls could not be indicative of the effectiveness of the newly modified doctrine because, first of all, the targets were not sufficiently hardened so that they could act as an adequate test of that doctrine, and second, the lessons learned in the atolls could not apply directly to the problems to be encountered in assaulting larger, more heavily defended targets. The next operation would clearly show the inadequacies of the doctrine and the fact that those who were supposed to apply it had not, despite their loud assertions to the contrary, really learned the lessons at all.

Endnotes

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2. Robert D. Heinl, Jr., and John A. Crown, *The Marshalls: Increasing the Tempo* (Washington, D.C.: Historical Section, HQMC, 1954), 3.

- 3. Ibid., 26.
- 4. Ibid., 44.
- 5. Ibid., 22.
- 6. Central Pacific Drive, 144-145.

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8. Central Pacific Drive, 148-149; Crowl and Love, 307; COMINCH P-002, 1-23.

- 9. COMINCH P-002, 1-23.
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13. Samuel Eliot Morison, *Aleutians, Gilberts and Marshalls: June 1942 – April 1944*, History of United States Naval Operations in World War II, Vol. 7 (Boston, MA: Little Brown and Company, 1951), 238; Heinl and Crown, 66-67.

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15. *Central Pacific Drive*, 161-165; quotation from page 163.

16. Heinl and Crown, 85; Central Pacific Drive, 169-170.

17. Crowl and Love, 325-327; Central Pacific Drive, 170-171.

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44. Ibid.; Commander Task Unit 58.2.2, Action Report of Bombardment of ROI-NAMUR Islands by Task Unit 58.2.2, 30 January 1944, pages 1 and 2. NARA, RG 127, USMC Geographic Files, Box 208, File A16-1, TU 58.2.2 – Action Report of Bombardment, 30 Jan 44 – ROI-NAMUR.

45. TF 51 Report of Operations, 1-2.

46. Ibid., 2.

47. Ibid., 2-5.

48. Buell, 235.

49. Quote from Buell, 235. This statement is very interesting considering the inconsistent way Spruance allowed the "modification[s] in the light of actual combat experience" to be applied by his subordinates in later operations.

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- 55. Ibid., 3 and 4.
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- 59. Ibid., 5.
- 60. Ibid., 5-6.
- 61. Ibid., 9-10.
- 62. Ibid., 12-14.
- 63. COMINCH P-002, 3-32.
- 64. Isley and Crowl, 302.

65. Tonnage figure from Fifth Amphibious Corps Naval Gunfire Report on the FLINTLOCK Operation, Appendix A, pages 5 and 6. MCUA, HAF, Box 34, Folder 641 [No Date].

66. Morison, Aleutians, Gilberts and Marshalls, 240.

67. Crowl and Love, 212 and 218.

68. Ibid., 303.

69. Ibid., 212 and 213.

CHAPTER 5

OPERATION FORAGER

The Amphibious Assault of Saipan

At 0520 on the morning of 15 June 1944 transports and LSTs carrying the Second and Fourth Marine Divisions dropped anchor off of Saipan in the Mariana Islands. The United States was about to take the first steps toward taking back from the Japanese what had been taken from them at the beginning of the war. Guam, the largest of the Marianas, had been an American possession before the war, and losing it to the enemy at the very outbreak of hostilities still stuck in the craw of many a Navy man and marine. Richmond Kelly Turner, newly promoted to Vice Admiral and in command of the naval attack force for another major American amphibious operation, waited for daybreak to issue the order to "land the landing force." The order went out at 0542 and Turner set H-Hour for 0830. Delays in getting the LVTs into the water from their parent LSTs caused him to postpone it to 0840, but, aside from this slight delay, the first scheduled events of the assault went off without a hitch. LVTs circled almost lazily in the ocean, waiting to form up for the movement toward the line of departure.¹

Naval gunfire preparation began at dawn and continued as the landing craft fell into their assault waves and began to move toward the shore. The cruisers and battleships providing this support lifted the fire of their main batteries when the tractors were 1,000 yards from the beach as a precaution against hitting the assault troops. To ensure that the marines would have artillery support on the beaches as long as possible, the majority of the gunfire support ships waited until the landing craft were only 300 yards from shore before lifting the fire of their 5-inch secondary batteries. The USS



Map 11 – Mariana Islands²



Map 12 – Southern Mariana Islands³



Map 13 – Saipan Island⁴



Map 14 – Saipan Island, Plans for Landing⁵

Birmingham and USS *Indianapolis* continued to pump six- and eight-inch shells, respectively, into Afetna Point, a projection of shoreline located between the landing areas of the two marine divisions, until the last possible second.⁶

A few rounds of enemy artillery fell among the LVTs of the first assault wave as it left the line of departure at 0812, but the amount of ordnance coming their way did not overly concern the marines at first. This turned out to be a rather false sense of security, however. According to captured documents, Japanese plans for a reception were not cordial. Enemy artillery units on Saipan intended to hit the approaching landing craft with fifteen percent of their ammunition and then savage the landing beaches with another fifteen percent, guaranteeing a disagreeable welcome for the approaching marines. This plan sprang into action as the LVTs crawled over the reef. Automatic weapon, antiboat, field artillery, and mortar fire ripped into the approaching tractors in earnest as the first amphibious tractors waddled across the reef and plopped into the water on the other side, and the fusillade grew more and more intense and accurate as each succeeding wave approached the shore.⁷

Navy carrier-based aircraft attacked the beaches ahead of the assault waves with rockets, 100-pound bombs, and machine guns from the moment the tractors reached a line 800 yards from shore, continuing up until the first LVTs emerged from the water. The pilots began to advance their strafing inland when the tractors came within 100 yards of the beach and they maintained a 100-yard safety interval from that point on.⁸ Armored amphibious tractors of the 2nd Armored Amphibian Battalion (USMC) and the 708th Amphibian Tank Battalion (USA) made up the first wave ashore. They commenced firing 300 yards from the waterline and continued to blast away at anything

that looked like a target as they emerged from the surf.⁹ The first troops in all sectors hit the beach at approximately 0843 and 700 LVTs carrying 8,000 troops stormed ashore within the next twenty minutes.¹⁰

The Second Marine Division, commanded by Major General Thomas E. Watson, landed north of Charan Kanoa while the Fourth Marine Division, commanded by Major General Harry Schmidt, landed adjacent to and to the south of the town. Within the landing zone of the Second Division, the 2nd and 3rd Battalion Landing Teams (BLTs) of the 6th Marines were supposed to go ashore over Beaches Red 2 and Red 3, respectively, while the 3rd and 2nd BLTs of the 8th Marines were supposed to land over Beaches Green 1 and Green 2. The 3rd and 2nd BLTs of the 23rd Marines and the 2nd and 1st BLTs of the 25th Marines were to simultaneously assault Beaches Blue 1 and Blue 2 and Beaches Yellow 1 and Yellow 2, respectively, in the Fourth Division landing zone. The 2nd Marines and the 24th Marines were to make a diversionary landing movement toward the town of Garapan, located to the north of Charan Kanoa, just before the main landings were to begin and then go into reserve for their parent divisions while the Army's 27th Infantry Division (ID) served as floating reserve in case Japanese resistance stretched the operation beyond the timeframe allotted by the schedule.¹¹

All did not go according to this plan for the Second Marine Division, however. To put it bluntly, the ship-to-shore movement for the Second Division was a failure and at times it bordered on chaos. LVTs carrying 2/8 veered north and ended up jamming marines onto Green 1 in the midst of 3/8. At the same time, the 6th Marines also jogged to the left and ended up going ashore across Red 1 and 2 instead of Red 2 and 3 as

planned. There are a number of theories as to why this happened. One holds that the tractors were veering away from heavy fire coming from Afetna Point despite the pounding being meted out by Birmingham and Indianapolis. Another attributes the course change to compass error on the part of the Navy guide boat assigned to the Second Division's landing craft. A third takes everything out of the hands of man and blames the foul-up on a strong northerly current running between the reef and the beach that the Underwater Demolition Team (UDT) had not detected during its survey of the beaches and the reef on 14 June. Whatever the reason, 2/8's veer to the left opened up a much wider gap between the Second and Fourth Marine Divisions than was intended. It took three days of hard fighting to establish firm contact between the two divisions as a result. As if this were not enough, the Second Division faced another not insignificant problem as well. Some of the LVT(A)s were overtaken by faster LVTs carrying the assault troops as the assault waves made their way toward the beach after crossing the reef. The LVT(A)s were forced into column formation as the nimbler troop carriers shouldered passed them, breaking down the echeloned structure of the ship-toshore movement. To make matters worse, some of the LVTs masked the fire of the LVT(A)s as they passed in front of the latter, decreasing the effectiveness of gunfire support at the most crucial time, as the tractors emerged from the water and deposited their embarked troops ashore.¹²

Starting off on the wrong beaches was just the first incident of a most difficult day for the Second Marine Division. Troops of both the 6th and 8th Regiments encountered heavy, organized resistance at the waterline, mainly because the Japanese defenders maintained good discipline during the landings and did not waste themselves in useless

"banzai" charges like Japanese troops had done so many times on other islands. Instead, enemy observers emplaced along the ridges that formed the O-1 Line, the first inland objective for the invaders, directed artillery and mortar fire down on the heads of the marines. Machine gun bullets mingled with the artillery's explosions and shrapnel to inflict heavy casualties on the invasion force. The 6th Marines on Red 1 and 2 were hit so hard that they could force only a shallow 75-100 yard deep beachhead extending across the coastal road just inland from the shoreline.¹³

Within the first few hours of the battle for Red and Green Beaches all four commanders of the Second Division's assault battalions were casualties. Congestion and confusion reigned on the beaches as artillery and mortars landed in and around each battalion's command post (CP), drawing blood all too often. Death delivered from a distance was not the only danger on the beach that day, however. At a little after 1000, as Colonel James P. Riseley established the regimental CP for the 6th Marines practically at the water's edge on Red 2, between fifteen and twenty-five Japanese attacked southward along the shoreline. Marines in the vicinity promptly cut down the attackers, but it was unnerving to meet such opposition on the beach. Naval gunfire was supposed to take care of such opposition, was it not?¹⁴

Riseley was in a tough position. Casualties robbed him of momentum, something he desperately needed if he wanted to get out from under the firestorm breaking over the landing beaches. It was too early to be calling in his regimental reserve, but he needed help. At 1040 this reserve, 1/6, began landing, but by 1105 he had only advanced his front line another 300 yards with the additional forces. Twenty minutes later he had to pass 1/6 through 3/6 to take over the push toward the O-1 Line

because the third battalion's casualties were so heavy that it could not maintain necessary offensive pressure against the Japanese. First battalion was to revert to regimental reserve after gaining the O-1 Line, allowing 3/6 to take up the offensive once again, but the plan fell through because Japanese opposition prevented 1/6 from reaching its objective. As it turned out, it did not really matter anyway. Heavy casualties forced Riseley to put all three of his infantry battalions in the line just so that he could maintain a frontline that increased as the 6th Marines advanced.¹⁵ Compounding the regimental commander's problems was a growing gap between his marines and the 8th regiment to his right. The 6th Marines landing 400 yards north of their assigned beaches originally caused this gap, but it was growing as the two regiments advanced in diverging directions. Riseley ordered Companies K and L, 3/6, to close it, but they were only partially successful. A 300-yard wide hole still remained even after K and L expended the best effort they could muster and all Riseley could do was cover the space by fire and continue with his advance.¹⁶

The Japanese launched two tank-based counterattacks against the 6th Marines as Riseley struggled to maintain his regiment's momentum. The first, at 1200, began as two enemy tanks left their camouflaged positions in front of 2/6 and began to travel south down the coastal road. They stopped to get their bearings and, as one of them opened his turret, Company F, 2/6, used bazookas and antitank grenades to destroy both of them. The second counterattack began at 1300 as three Japanese tanks attempted to penetrate the American line between 1/6 and 2/6. Marines destroyed two of these tanks destroyed short of the line, but one made it to within 75 yards of Colonel Riseley's CP before it was dispatched. The 6th Marines were catching it hard and

approximately thirty-five percent of Riseley's effectives were killed or wounded by 1300.¹⁷

Meanwhile, on the Green Beaches, the 8th Marines had its own problems with the Japanese. Third Battalion, in what was an unusual occurrence for the Second Marine Division on 15 June, pushed inland from Green 1 and met its first objective on time. Second Battalion, however, had landed 700-1000 yards north of its assigned beach and, as a consequence, it spent most of D-Day fighting to secure the beach over which it should have come ashore. To do this, Company G attacked south along the beach toward Afetna Point. Seizing this piece of land that projected out into the ocean was important because the Japanese fired anti-boat guns at the invading forces from it. An added bonus for taking it was that control of it gave the Americans control of the only channel through the reef in the immediate area. Tank-carrying landing craft could be sent through this channel so that tanks could be landed as early as possible in the battle. Companies E and F, meanwhile, attacked to the southeast, fanning out as they went. This scheme of maneuver caused the three companies to diverge from one another, complicating their coordination and destroying their ability to support one another. As E and F advanced inland, they approached a swamp just to the north of Lake Susupe. Elements from Company F crossed the swamp but did not stay there for long. Realizing how isolated they were, they decided to pull back and establish a line along firm ground to the west of the swamp.¹⁸

Company G met strong Japanese resistance as it pushed through the sand dunes on the beach to begin its mission. The company's objective was a series of nine mutually supporting pillboxes located on Afetna Point that contained 37mm and 47mm

guns. Riflemen in trenches protected the pillboxes, a fact made guite clear to the marines as they approached the enemy positions from below. As Company G advanced, Japanese emerged from their defensive positions to attack the marines with bayonet and sword. Since an assault on Afetna Point meant that 2/8 would be firing rifles in a direction almost perpendicular to the advance of the 23rd Marines over Beaches Blue 1 and 2, the 8th Marines carried ashore a lethal but shorter-ranged weapon - the shotgun. Company G was issued the 8th Regiment's entire supply of shotguns, enough for one weapon for every two men, because their position in the line made them point for an attack in the direction of friendly forces. The marines blasted away at the Japanese coming at them from the front with buckshot, stopping them in their tracks, and when enemy riflemen fired on Company G's left flank from the east side of the Charan Kanoa airstrip, the company's organic 60mm mortars and machine guns took them out.¹⁹ The pillboxes the Japanese were trying so hard to defend were positioned so that the guns inside them could fire seaward at oncoming landing craft. The enemy soldiers manning the guns were totally dedicated to their jobs; so dedicated, in fact, that they did not turn their weapons on advancing Company G. Consequently, the marines simply went around the pillboxes and attacked them from the rear, attached combat engineers using bazookas, demolitions, and flamethrowers to take them out one by one. By nightfall, Company G had overrun seven of the nine and the marines controlled all of Green 2.20

Colonel Clarence R. Wallace, CO of the 8th Marines, landed between Beaches Green 1 and 2 at 0945 and took stock of the situation ashore. He ordered his reserve battalion, 1/8, ashore at 0950 and proceeded to use it to shore up his line. He then

attached Company B to 2/8, using it to cover Company G's left flank as the latter advanced against the pillboxes on Afetna Point, and he committed Co's A and C between 2/8 and 3/8 and ordered them to attack east into the swamp just north of Lake Susupe. Darkness, however, forced the withdrawal of both companies to the line set up by Co's E and F on the west side of the swamp before they could establish a defendable perimeter.²¹ Needing more reinforcements, Major General Watson committed his division reserve, 1st Battalion, 29th Marines, during the early afternoon and attached it to the 8th Marines. Colonel Wallace ordered Company B, 1/29, to fill a gap between Co's E and G in 2/8's zone of action, but, ignorant of the terrain and setting out without any guides, the reserve battalion ended up 600 yards north of the position where it was needed. Company A, 1/29, set out at 1730 to fill the same gap, but the rapidly encroaching darkness caused the marines to lose their way. The Japanese took advantage of Company A's predicament and took it under fire with artillery as the lost marines groped around in the gathering twilight. Meanwhile, Company B finally found the position to which it had been sent in the beginning. Since Company B was filling its slot, Company A's continued efforts became unnecessary and the order went out for A to settle in for the night where it was. It would act as a general reserve for the next day's attack along with the other uncommitted units of 1/29.22

At 1800, 3rd Battalion, 2nd Marines came ashore over Red 2 and attached to the 6th Marines, taking up a position on the Second Division's left flank. An hour later, Company F and the Headquarters echelon of 2/2 came ashore over Red 2 and moved to a point north of the Charan Kanoa airstrip. This would be the last ship-to-shore activity for Watson's command on D-Day. At 1900 word came down that all LCVP-LVT

transfers at the reef were suspended and that there would be no more landings for the night. An LVT carrying part of Second Marine Division's Headquarters almost swamped as early as 1730 and sea conditions continued to deteriorate as the evening went on. When huge waves began to crash over the reef, Second Division's commander decided that it would be best to wait for the morning to finish bringing his marines ashore.²³

The Fourth Marine Division faced a similar set of problems on 15 June, but there were plenty of twists to make its experience unique. Generally speaking, the 23rd Marines, landing over Beaches Blue 1 and 2, was not able to make a coordinated drive toward the O-1 Line once it made landfall. Eight LVTs and three LVT(A)s carrying elements of the 3rd Battalion penetrated all the way to O-1 from Blue 1, but, like elements of 1/8 attacking across the swamp at Lake Susupe to their north, they had to fall back to battalion lines for the night because of lack of support.²⁴ The 2nd Battalion, on 3/23's right flank, did not fare as well. It debarked from its LVTs at different distances inland causing its line to be staggered and discontinuous. As a result, a battalion-level attack could not be coordinated and fighting degenerated into a series of small-unit actions. The battalion commander, Lieutenant Colonel Edward J. Dillon, did not gain effective tactical command and control until mid-afternoon. Meanwhile, three LVTs and five LVT(A)s carrying elements of the 2nd Battalion penetrated to the O-1 Line, but they, like the tractors from 3/23, had to be recalled at nightfall. There were several reasons for the 23rd Marines' lack of progress beyond the beach. The first was the hail of artillery and mortar fire slamming into the marines at the waterline. The second and third reasons, however, had nothing to do with the Japanese: to the north there was a swamp and a lake and to the south was a vertical incline of between four and five feet.

Both of these obstacles, the second of which was not detected in aerial photographs, effectively stopped the advance of any LVTs that made it through the hell of the beach. Col Louis R. Jones, wanting to gain control of the situation and drive his regiment inland as quickly as possible, came ashore shortly after noon and temporarily set up his CP in a slight depression between Beaches Blue 1 and 2. Once on the beach, however, Japanese artillery and mortars pounded Jones and his staff mercilessly for the rest of the day.²⁵

Farther to the south on Beaches Yellow 1 and 2 the 25th Marines were in an even tougher bind. Lieutenant Colonel Hollis U. Mustain's 1st Battalion on Yellow 2 took the brunt of the punishment, penetrating only twelve yards beyond the shoreline by 0943. The main source of Mustain's woes was Japanese pillboxes and mortars firing from Agingan Point, but that was not the only source. There were also four or five 75mm direct fire artillery pieces located on the high ground 800 yards to the battalion's front that poured ordnance onto the beach. This heavy shelling pressured the LVT drivers of the Army's 773rd Amphibian Tractor Battalion to spend as little time on shore as possible. They unloaded troops, but that was about all. Communications gear, crewserved weapons, and ammunition were left onboard and, as a result, 1/25 was short of these items for the next three days, particularly communications equipment.²⁶ At 0930 1/25's situation became even more dire. The Japanese counterattacked from the ridge at the O-1 Line and simultaneously from Agingan Point. Lieutenant Colonel Mustain called in air strikes and naval gunfire against the attacking Japanese and requested that tank support and an additional rifle company from reserves be sent as soon as possible. Regimental command sent Mustain his requested reinforcements once the reserve

battalion, Lieutenant Colonel Justin M. Chambers' 3/25, landed. First Battalion, newly recharged, then attacked Agingan Point. Progress was slow, however, because the Japanese had covered part of the point with camouflaged spider holes in which defenders remained concealed until a marine fire team passed by. The Japanese then emerged to shoot the marines in the back. Difficulties encountered in clearing out these spider holes insured that the threat to the 1/25's right flank could not be completely eliminated in a timely manner and nightfall found the situation ongoing.²⁷

To the north of Mustain's 1/25, Lieutenant Colonel Lewis C. Hudson, Jr's 2nd Battalion on Yellow 1 fared better. LVTs deposited about half of the battalion's assault marines 500-700 yards inland to the cover of a railroad embankment despite heavy mortar, artillery, and small arms fire. Japanese small arms fire peppered the battalion from just beyond the embankment until the LVTs defiladed themselves behind it, but mortar and artillery fire from the same location continued to hit them for some time afterward. Fire also came from the direction of Nafutan Point and from two Japanese mortars 500 yards to the rear of 2/25's advance elements. Air support took out the two mortars before anyone sent a request to do so, but the other fire continued to cause problems for the battalion as it pushed forward towards its objectives. Despite the continuous plastering by Japanese artillery, mortar, and machine gun fire, however, the 25th Marines as a whole penetrated farther inland on D-Day than any other unit of the Second or Fourth Marine Divisions - over 2,000 yards. Col Merton J. Batchelder, CO of the 25th Regiment, came ashore by mid-afternoon and established his CP against the west side of the railroad embankment where, unlike Col Jones of the 23rd Marines, he and his staff were protected from Japanese defensive fire.²⁸

Major General Watson established the Second Marine Division's CP ashore on Beach Red 2 at 1730.²⁹ Major General Schmidt came ashore on Yellow 2 at 1930 and did the same for the Fourth Division. At first, Schmidt's CP was nothing more than a group of foxholes approximately fifty yards from the beach. Enemy light artillery firing from the high ground 1,500 yards inland made the job of coordinating the actions of his division difficult, to say the least. Schmidt later recalled, "Needless to say the command post during that time did not function very well. It was the hottest spot I was in during the war, not even excepting Iwo Jima." Despite the problems getting ashore, the marines were on Saipan to stay once both Watson and Schmidt were settled in for the night, but it would take them until 9 July to secure the rest of the island. ³⁰

The Amphibious Assault of Guam

Dawn, 21 July 1944 – over a month after American forces had first stormed ashore in the Marianas. Captain Geary R. Bundschu, commander of Company A, 3rd Marines, had an awful lot on his mind as he looked out at the first rays of light beginning to streak across the darkness from the eastern horizon. Pre-combat fear and nervousness was a given for every man in the outfit, and Bundschu was no exception, but he had to put such thoughts aside while he dealt with the myriad tasks of preparing his command for its mission. The plan called for the 3rd Marines to storm ashore over the left-hand beaches of the Third Marine Division's zone, to secure Adelup Point on their left, and to secure Chonito Cliff and the high ground to its southeast.³¹ Company A was assigned the neutralization of a 400-foot high, 200-yard square ridge that planners had unceremoniously named after the man whose task it was to carry out the mission.



Map 15 – Landing Plan and Scheme of Maneuver, Asan Beachhead, Guam^{32}



Map 16 – Landing Plan and Scheme of Maneuver, Agat Beachhead, $Guam^{33}$

Bundschu was flattered, but he did not spend too much time gloating over the honor. There were numerous Japanese mortars and machine guns among the rocks of this terrain feature and he knew that they would exact a high price from his marines in return for their lives.³⁴

The assault on the island of Guam was to be Phase II of Operation FORAGER, and it was to have begun on 18 June 1944, three days after the beginning of the invasion of Saipan to the north. Difficulties encountered in taking that island forced Admiral Raymond Spruance to push back W-Day, as the first day of the assault on Guam was termed, to 21 July. The invasion would prove to be different from the Saipan operation in a number of respects and one of the most obvious was apparent from the beginning: it would consist of two totally separate military operations that were meant to expend their early momentum in joining together inland from the landing beaches. The combined force would then complete its mission by terminating the Japanese presence on the island. This meant that there would be two sets of landing beaches, one set just west of the town of Agana and the other just south of the town of Agat with several miles and much difficult terrain separating them.³⁵

The first set, referred to as the "northern" beaches, were the objective of Major General Allen H. Turnage's Third Marine Division. His plan called for landing all three of his infantry regiments abreast of one another across 2,500 yards of beach. This width of sand was subdivided into codenamed beaches designated, from left to right, as Red 1, Red 2, Green, and Blue. The 3rd Marines would land its 3rd and 1st Battalions across Beaches Red 1 and Red 2, respectively, in line abreast while the 9th Marines would land across Beach Blue on the right and the 21st Marines would land across Beach Green in

the center, both in column. At either end of the landing beaches were terrain features that the marines dubbed "the devil's horns" – Adelup Point to the left and Asan Point to the right.³⁶

A brand new entity, the 1st Provisional Marine Brigade, would take on the second set of beaches, usually referred to as the "southern" beaches to differentiate them from the Third Marine Division's objective. BrigGen Lemuel C. Shepherd, Jr. commanded this unit, a hybrid made up of two battle-tested regiments, the 4th and the 22nd. The addition of the 77th Infantry Division's 305th Regiment as a reserve brought Shepherd's command up to division strength, but it would be the marine units that carried the brunt of the amphibious assault on W-Day. The plan called for the 22nd Marines to land on the left, just south of the town of Agat, over Beaches Yellow 1 and Yellow 2. The 4th Marines, meanwhile, were to land on the right, just north of Bangi Point, over Beaches White 1 and White 2. The 305th Infantry, after acting as reserve for the landing, would come ashore, pass through the 4th Marines, and take up a position on the right of the beachhead, securing it for the 1st Provisional Marine Brigade's drive inland.³⁷

The first of the Third Marine Division's LVTs headed for shore at 0740. Naval gunfire support on the landing beaches reached a fever pitch by 0822 and continued at that level until the tractors were 1,200 yards from shore. Large caliber guns then shifted inland while 5-inch guns continued firing until the leading LVT(A)s crossed the reef. These armored amphibians touched shore on the northern beaches at 0829 and by 0832, only two minutes passed the H-Hour set by Adm Conolly, troops were going ashore in both the north and the south. It was at this point that the Japanese began to open up on the marines.³⁸

Enemy fire was very accurate as Company A came ashore. Mortars and artillery claimed some marines while they were still on the water and several more died once they came onto the beach. Bundschu assessed the situation for a few minutes and reorganized his remaining men. He sent two platoons in assault across the dry rice paddies that lay between the shore and the ridge and kept one platoon in reserve. At 0920 Japanese mortar and machine gun fire had his lead platoons pinned down in a gully to the west of the ridge, unable to move, so he had to commit his reserve platoon to the east side of the attempted advance to try and get things going again. The additional men allowed Bundschu to push to within 100 yards of the top of the ridge, but his unit paid a heavy price for their success. At about 1400 he requested permission of Major Aplington, his battalion CO, to disengage, but Company A was too heavily involved at the time to be allowed to drop back. Colonel Hall, commander of the 3rd Marines, ordered another attack on the ridge and Bundschu, though doubtful of the results, once again reorganized what was left of his men and prepared to try to take the last 100 yards. Toward nightfall the attack commenced. Marines tried to advance toward the ridge, but the same withering machine gun fire that had stopped the initial advance came at them out of the gathering darkness. As men in the vanguard were cut down, they fell to the flat ground at the foot of the steep slope. Geary Bundschu was among the fallen. Support from the 40mm guns of Battery I, 14th Defense Battalion, eventually allowed a "thin line" of men from Company A to reach the crest of the ridge, but the position proved to be untenable and they had to fall back. At the end of the day, the Japanese still held the position and the ridge bearing Captain Bundschu's name had become his memorial.³⁹

The experience of Company A, 3rd Marines, was not unusual among the units fighting in the battle for the northern beaches on W-Day. Col W. Carvel Hall, 3rd Marines CO, anticipated stubborn Japanese resistance to his regiment's advance and accordingly drew his first objective line (O-a) along the first high ground inland. He expected to use his reserve, 2nd Battalion, either at the center of the objective line if the assault battalions reached it or, if they did not, he would pass it through the left-hand company of 3rd Battalion so that it could take Adelup Point on the far left of the Third Marine Division's zone of action. Japanese opposition to the landing did not disappoint Hall for the 3rd Marines faced the most determined opposition on W-Day. In fact, over the next four days Hall's regiment essentially disappeared, requiring help from the adjoining 9th Marines to continue the fight. Chonito Cliff, northeast of Red 1, was covered with caves. The Japanese set up a system of cave defenses from which Hall's men had to extract them. The defenders had a perfect view of the landing beaches from these positions and they poured fire mercilessly upon the marines coming ashore.40

Companies I and K of 3rd Battalion were supposed to rush across the beach and, carried along by their momentum, they were expected to overwhelm the Japanese on Chonito Cliff before the defenders could recover from the effects of the bombardment. To the chagrin of the marines, however, the Japanese appeared to have recovered just fine by the time of the assault. Company I, attacking to the right, attempted to move up a draw just to the south of the cliff. Company K, meanwhile, attacked to the left, crossed the beach and pivoted in an attempt to flank the cliff. Heavy enemy fire halted both attempts. Sgt Cyril O'Brien later recalled the scene that day:

Nearly half my old company lies dead on the barren slopes of Chonito Cliff. Four times they tried to reach the top. Four times they were thrown back. They had to break out of a twenty-yard beachhead to make way for later landing waves. They attacked up a 60-degree slope, protected only by sword grass, and were met by a storm of grenades and heavy rifle, machine-gun and mortar fire

The physical act of forward motion required the use of both hands. As a consequence they were unable to return the enemy fire effectively. Most of the casualties were at the bottom of the slope. They had been hit as they left cover.⁴¹

Lieutenant Colonel Ralph L. Houser, 3rd Battalion CO, used flamethrowers and tanks from Company C, 3rd Tank Battalion, to break this impasse and followed it up by committing his reserve, Company L, creating a breech in the Japanese defenses at that point. Momentum carried them all the way to the flat land to the north of the cliff and, by noon, Chonito Cliff was cleared of enemy resistance. The tanks then turned their guns on Adelup Point. Destroyers and LCI(G)s had been working this enemy strongpoint over since early morning but their bombardment had failed to knock out all of the enemy guns that were firing on the Third Division's left flank. These guns were finally silenced later in the afternoon when marines from 3/3 attacked Adelup Point supported by tanks and LVT(A)s. Even with all of this progress, however, the 3rd Marines had not made contact with the 21st Marines to its right at the end of W-Day.⁴²

The assault waves of the 21st Marines received little resistance coming ashore across Beach Green. The Japanese had abandoned their organized shoreline defenses in the regiment's zone of action, saving their strength for when the marines moved inland. Col Arthur H. Butler, having to send his men in over a single beach, landed his battalions in column in reverse sequential order with Lieutenant Colonel Wendell H. Duplantis' 3rd in assault followed quickly by Lieutenant Colonel Eustace R. Smoak's 2nd. Lieutenant Colonel Ronald R. Van Stockum's 1st Battalion, upon coming ashore, would mop up behind the other two and then go into division reserve. The 21st did not disappoint its commander. Third Battalion quickly secured the high ground immediately inland of the beach and then used it as an assembly area where it could reorganize before attacking the cliffs farther inland. Enemy mortar fire from those cliffs began to pepper the marines as they prepared for the drive into the interior of the island, increasing in intensity until the shells were falling every few seconds. By the time regimental headquarters landed in the eleventh wave, fire on the beach area was so heavy that Col Butler, seeking protection from the rain of fire and steel, had to set up his CP temporarily in a ditch near the shoreline.⁴³

Part of the plan for the 21st Marines called for it to secure the line of cliffs inland from the landing beaches and then to defend its position until the division was ready to expand the beachhead. Third Battalion prepared to execute that part of the regiment's mission when, by mid-morning, it reached the high ground in back of Asan Village. Second Battalion then passed through 3/21's Company K at 1250 so that it could begin the assault on the cliff area beyond. The battle for the cliffs went on for days. Remembered as "The Battle for Banzai Ridge," it was actually a series of battles involving several different cliffs "where every ridge gained by the 21st Marines disclosed another pocket of the enemy behind it."⁴⁴ Approximately one mile from the beach, 2/21 encountered a steep 100-foot cliff as it moved up a narrow passage in the terrain. The cliff cut diagonally across the battalion's axis of attack leaving Lieutenant Colonel Smoak no option but to take it on and, since there was no room for maneuver, a frontal

assault would be necessary to do it. Company F led the attack with Company E echeloned to the right rear. Company G served as reserve, waiting below the cliff until needed. The Japanese decimated Company F's rifle platoons as the marines pushed the assault up three indentations in the face of the cliff and Company E, following behind, suffered heavy casualties as well. Some marines, showing the effects of long shipboard confinement before landing, could not make the climb. At the top of the cliff the marines were immobilized by heavy machine-gun fire from enemy positions on a ridge only about fifty yards away. Smoak prepared his defenses for the night as the first units to the top held the position under increasingly heavy artillery and mortar fire. Company G held down his left flank while Company E secured his right. Company F, battered but still functioning, defended the center while continuing to absorb punishment from the Japanese on the ridge in front of them.⁴⁵

As Smoak dug in for the night, Lieutenant Colonel Duplantis attempted to tie in his 3rd Battalion to 2nd's right flank. Dense jungle vegetation made contact difficult, so the best that could be done was a connection through outposts. While 2nd and 3rd Battalions slugged it out on the front lines, 1st Battalion performed its mopping up duties in the rear. Not having encountered many of the enemy in the process, it went into division reserve as planned. A deep ravine, choked with jungle vegetation, separated the 21st Marines from the 3rd Marines to its left. The gap was 150 yards wide and, despite efforts by patrols from both regiments to make contact, it could not be closed by nightfall. The 3rd MarDiv Special Action Report states that the gap was "well neutralized," however, because "[e]nemy mortar fire kept [it] open; our own kept out the enemy."⁴⁶

Terrain was not as much of a problem for Col Edward A. Craig's 9th Marines as it was for Third Marine Division's other two regiments and, even though it encountered stiff enemy resistance, it made the most progress of the three on W-Day. Like the 21st Marines, Craig's regiment had to come ashore over a single beach, codenamed Blue, so he also landed his battalions in column: Lieutenant Colonel Walter Asmuth, Jr's 3rd in assault, Lieutenant Colonel Robert E. Cushman, Jr's 2nd in support, and Lieutenant Colonel Carey A. Randall's 1st in reserve. Third Battalion was to capture the high ground immediately inland from the beach, including Asan Point, and then hold its position. First Battalion and 2nd Battalion were then to pass through 3/9 to attack the regiment's O-1 objective, a line 1,000 yards inland from the beach and just short of the Tatgua River, while the 3rd Battalion went to regimental reserve.⁴⁷

Company I stormed ashore on 3rd Battalion's right. Enemy fire from the high ground directly in front and from Asan Point on the right flank poured down on the marines' heads as the company tried to move inland, but momentum from the ship-to-shore movement could not be maintained against the increasingly destructive barrage coming from the Japanese guns. The attack stalled out and Lieutenant Colonel Asmuth was forced to commit his reserve, Company L, to try and get it going again, but to no avail. The battalion commander requested tank support, the Shermans having landed at 0940 as scheduled, and Companies I and L began to advance slowly as the tanks fired their 75mm guns over the heads of the assaulting marines.⁴⁸

Company K, 3/9's left-hand assault company, was in the meantime rapidly moving inland. It crossed the dry rice paddies just inland of the first high ground above the beach and took its first objective, a ridge fronting its line of attack. This was a most
important movement for the Third Marine Division because the capture of the rice paddy area near the mouth of the Asan River allowed the division artillery regiment, the 12th Marines, to set up and begin delivering supporting fires for the infantry assault from the northern beaches. By 1350 all of 3rd Battalion was at its first objective line and the time had come for the next phase of the attack. That phase began at 1415 when the 1st and 2nd Battalions, after passing through the 3rd, attacked toward the Tatgua River. The advance, though resisted by the Japanese, was consistent and rapid and ended within only 400 yards of the river at 1600. Col Craig, having reached his regiment's objective for the day, ordered his marines to dig in for the night and, by 1830, the regiment had tied in to the 21st Marines on the right.⁴⁹

Major General Geiger was generally pleased with the performance of the Third Marine Division's performance on 21 July. Though not perfect, things went as well as could be expected. The division bled (105 KIA, 536 WIA, and 56 MIA), but the losses never seriously impeded its ability to carry the fight to the Japanese. By the time Major General Turnage came ashore and assumed command at 1715, the Third Marine Division was firmly established ashore on the northern beaches and well on its way to consolidating III Amphibious Corps' position on Guam.⁵⁰

Where terrain, with the exception of the 3rd Marines, proved to be the most determined obstacle for the marines to the north, such was not the case in the south. The 1st Provisional Marine Brigade found plenty of enemy in its zone of action and had to slug its way through them to the interior. Col Merlin F. Schneider's 22nd Marines came in over the northernmost beaches, 1st Battalion over Yellow 1 and 2nd Battalion over Yellow 2. Both assault battalions suffered considerable losses while landing and

reorganization on the beach was difficult as a result. Enfilading fire from one 75mm and one 37mm gun on Gaan Point on the right front of Beach Yellow 2 complicated the reorganization even further. Pulling surviving men and equipment together as quickly as possible under the firestorm on the beaches, the 22nd's units began to move fitfully toward their first objectives. Progress became easier once the first assault marines had moved about 200 yards inland, a distance that put them out of range of the Japanese guns flailing their comrades as they come ashore, but this would turn out to be only a momentary reprieve.⁵¹

Enemy artillery began to register hits on Lieutenant Colonel Donn C. Hart's 2nd Battalion at approximately 1200 after it had advanced 1,000 yards inland to the high ground above the beach. Weathering the pounding for fifty minutes, Hart started his marines off toward their portion of the brigade's first-day objective hoping that the shelling would let up. No such luck. Progress slowed to a crawl as the fire increased and stopped completely when a Japanese dual-purpose antiaircraft gun opened up on Company E. Hart requested an air strike to take out the position, but the pilots ended up doing about as much damage to his men as they did to the enemy. Bullets from strafing airplanes ripped into 2/22's front lines and bombs slammed into Company F. This friendly fire incident prevented 2nd Battalion from resuming its attack by the time the order came down to dig in for the night.⁵²

Lieutenant Colonel Walfried H. Fromhold's 1st Battalion turned left after coming ashore and began battling toward the town of Agat. Company B advanced up the beach on the left and met stiff opposition as it approached the perimeter of the village. Naval and air bombardment had destroyed the buildings, but the resulting rubble

provided the Japanese defenders with excellent cover from which to snipe at the advancing marines. Company A, meanwhile, moved rapidly to the right across the inland rice paddies, encountering little opposition as it went. As a precaution, Fromhold committed his battalion reserve, Company C, to his seaward flank. First battalion was in control of most of Agat by 1020 and at 1030 the commander ordered the rest of the village captured. At 1245, after completing this task, 1/22 jumped off on its drive toward the O-1 Line. Col Craig attempted to send his reserve battalion, the 3rd, ashore at 0930 so that it could help with the push toward O-1, but a communications failure meant that its commander, Lieutenant Colonel Clair W. Shisler, did not receive orders to land until 1236. Such a late start prevented the majority of the battalion from participating in the action on W-Day, but Craig went ahead with the advance toward O-1 despite the lack of reserves.⁵³

Captain Charles F. Widdecke's Company C, 1/22's reserve, ran into some tough going as it covered Fromhold's left flank during the advance toward O-1. The company was making good time until heavy machine-gun fire from a rather innocent looking hill just to the east of Agat brought a halt to its progress. Widdecke attempted a flanking movement around the hill at about 1500, but enemy fire stopped it as well. The machine-gun on the hill kept Company C pinned down for over an hour, even after a reserve rifle platoon from Company I, 3/22, was sent up to join in the attack. The day's action took a heavy toll on Widdecke's command. At 1705 he reported that he had only 100 men left, including the men from the reserve platoon, and he requested more help. Fromhold sent him another reserve platoon, but the attack still went nowhere. Finally, the battalion commander ordered Widdecke to fall back fifty yards and tie in with

Company B. By 2000 all units of the 22nd Marines had dug in for the night.⁵⁴

Action on the White beaches to the south proved to be no less dynamic. Lieutenant Colonel Alan Shapley sent his 2nd Battalion in over Beach White 1 and his 1st Battalion in over Beach White 2. Major Bernard W. Green's 1/4 landed with Companies A and B in assault. A machine gun opened up on Company B while its LVTs were still about thirty yards from the beach, killing two marines. The pillbox responsible was destroyed and its five defenders were killed. Company A was more fortunate coming ashore, but one of its platoon leaders died as he crossed a rice paddy that lay behind the landing beach. Green's reserve company, Company C, landed when both A and B had reached approximately 700 yards inland. It wheeled to the right after coming ashore and attacked Hill 40 and Bangi Point. The point had been devastated by naval gunfire and was easily overrun. The Japanese, however, still heavily defended Hill 40 with machine guns and fire from these weapons brought Company C's attack to a halt. The machine guns also fired on Company A. Neither company could take out the Japanese positions without suffering heavy casualties. Green requested armor and two tanks came forward and supported a second successful assault on the hill.55

Major John S. Messer's 2nd Battalion encountered a rise ten to twenty feet in height only 100 yards in from the shoreline that did not show up on any maps. Japanese defenders lay in defilade behind the rise and peppered Messer's men with ordnance. Progress was slow, but Lieutenant Colonel Shapley reported at 0947 that elements of 2/4 had penetrated 700 yards inland. By noon the pocket of resistance was reduced completely and both 2/4 and 1/4 were ready to advance to their O-1 objectives. On brigade order, 4th Marines resumed the attack toward O-1. One of the regiment's

goals was the capture of the peak of Mt. Alifan. Pushing through scattered enemy resistance, the marines reached the foot of the mountain by 1700. The regiment then dug in for the night. There were many gaps in the 1,600-yard-long line held by 4th Marines, but strongpoints were chosen to allow for covering these gaps with fire. Also, Lieutenant Colonel Shapley tied in his Reconnaissance Platoon and an engineer detachment to the left of Company A and he kept Company C in reserve near the regimental CP just in case it was needed.⁵⁶

Strategic and Operational Objectives for FORAGER

The Mariana Islands are located along an approximately north-south line stretching from 20° 32' N, 144° 54' E to 13° 15' N, 144° 43' E. Ferdinand Magellan discovered the fifteen volcanic islands in 1521 while on his circumnavigation of the globe. Spain controlled the island group from that time until the late 19th century, a period during which Spanish power in the world waned significantly. As if to prove her impotence, Germany forced the Spaniards to give up ownership of the islands in 1899 in return for \$4 million and the United States took Guam, one of the four larger southern islands, as part of the spoils of the Spanish American War. Another change in ownership occurred at the end of World War I when Japan received the other three large southern islands – Saipan, Tinian, and Rota – as part of the League of Nations mandate. Thus was created the interesting juxtaposition of U.S. and Japanese forces in the Marianas between the wars – the U.S. in Guam and the Japanese in the rest of the Marianas. This juxtaposition provided the foundation for more than one ORANGE plan during the 1920s and 1930s.⁵⁷

Up until February of 1944 the United States' Central Pacific Drive followed the basic route prescribed in these plans. It is at the point of deciding where to go after the Marshalls that a divergence occurs. According to the two most popular general ORANGE Plan scenarios of the '20s, either the U.S. would plow right across the Pacific and relieve Manila in the Philippines, or the Navy would attack through the Marshalls toward the Carolines, taking Japanese positions on the way. Eniwetok in the Marshalls and Truk in the Carolines, according to this plan, would be developed into major service and staging bases for attacks farther into the western Pacific, the exact direction of those attacks to be determined later based upon the situation after Truk had been conquered.⁵⁸

Neither of the plans did any more than flirt with the idea of taking the largest of the Japanese-held southern Mariana Islands. The harbors of Saipan, Tinian, and Rota were considered to be too small and too exposed to the ferocity of Pacific weather for them to be worth the blood and sweat that would be expended to secure them from the Japanese. Airfields could be constructed on them, but they were too far off of the main track of attack across the Pacific for the short-ranged aircraft of the 1920s to be of any use in furthering the war. Guam's harbors were not much better than those of the other southern islands and it suffered from the same disadvantages as far as potential airfields were concerned. Some admirals strenuously argued from time to time that a major base ought to be built on Guam, but, in the end, Congress decided that nothing more than a tiny garrison of marines should occupy the island. The theory was that the marines would be defeated and captured by the Japanese early in a Blue-Orange war, a fate that would also befall a major base before the U.S. could mobilize to protect it

from Japanese attack. There was no use losing any more men and naval assets to the Japanese at the beginning of a war than were absolutely necessary. Isolationist congressmen during the 1930s doggedly refused to even consider spending money for a base on Guam, a base that the Japanese would most certainly view as a threat and would react accordingly.⁵⁹

The Navy, then, was not all that excited during the interwar period about the prospect of seizing the Japanese Marianas, viewing them as of no strategic value. The Army, however, saw things differently. According to a work-sharing agreement between the two services, the Army's responsibilities included studying the Marianas with an eye toward possible operations therein. Colonel Walter Krueger, the head of the Army War Plans Division in the mid-1930s, was particularly interested in the potential use of the Marianas in an overall plan for war against Japan and he embodied his ideas in the Army Strategic Plan of 1936. He expected strong resistance on the part of the Japanese, but overcoming that resistance would be worthwhile for a number of reasons. First, taking the Marianas would allow the Navy to establish bases for a trade war against Japan. Second, American forces in the Marianas could interdict Japanese traffic with the Philippines. Third, taking the Marianas would clinch the conquest of the Palaus. Fourth and most importantly, taking the Marianas would, in Krueger's estimation, lead directly to the defeat of Japan because attacking the Marianas could draw out the Imperial Japanese Fleet whereupon the United States Navy could then engage it and destroy it. With its destruction the Japanese could no longer effectively project power beyond the Home Islands nor could they effectively defend themselves against further American attacks. For Krueger the key to the Japanese "Main Line of

Resistance" (MLR), or the place at which the Japanese would have to make a stand, was Saipan. Losing Saipan would, according to Krueger, "force the Orange fleet to give battle soon to avoid collapse at home." Going against years of Army planning, he argued that attacking Japan at what was essentially the fulcrum of its defenses would bring on a climactic battle far sooner than would an attack on the Philippines. To round out this clairvoyant tour de force, Krueger also saw the Marianas as being an important staging place for long-range aircraft, though he did not foresee a decisive, strategic role for them given the range of the bombers of the mid-30s. The Army's interest in a war against Japan was short-lived, however. Shortly after Japan invaded China in mid-1937, the Army decided not to support a Central Pacific offensive, preferring to concentrate on defending the homeland through adopting a defensive posture in the Pacific.⁶⁰

The Joint Board of the Army and Navy decided in November of 1938, given the state of the world at the time, to address the possibility that the United States might find itself at war with Germany, Italy, or Japan, either separately or in combination. As far as a war against Japan was concerned, the Joint Board planners decided that the Philippines and Guam would not be able to hold out and that the U.S. would have to fight its way back to the western Pacific. The proposed lines of attack were the same as had been studied since the early years of the century: (a) by way of the Aleutians; (b) directly to Luzon by way of Pearl Harbor and Midway Island; (c) in stages from Hawaii by way of the Marshalls, the Carolines, and possibly the Marianas, Yap, and the Palaus; and (d) to the southern Philippines by way of Samoa and New Guinea. It is out of this concern for war that the various Rainbow Plans were developed, Rainbow Five

being the one the United States implemented at the beginning of the war.⁶¹

The Pacific war unfolded in both foreseen and unforeseen directions in late 1941 and early 1942. As expected, the Philippines and Guam fell within a short period of time after the beginning of hostilities. The virtual destruction of the Pacific Fleet at Pearl Harbor on 7 December, however, made impossible the implementation of any form of the ORANGE plans, at least for the time being. The Marianas were hardly on the minds of those who had to stop the Japanese in their relentless march across the western Pacific. By early 1943, however, Admiral Ernest J. King was ready to start planning for the downfall of Japan, and the sooner the better. At an afternoon meeting of the Combined Chiefs of Staff at the Casablanca Conference on 14 January 1943, King laid out what he believed should be the direction of operations against Japan once the Rabaul campaign was finished. King said that Allied forces should attack the Marshall Islands as soon as possible and should follow that attack up by assaulting Truk in the Carolines. Forces should then invade the Marianas, the ultimate goal being recapturing the Philippine Islands. This was the first of many times that King would stress the importance of the Marianas in his vision of how to defeat Japan. He explained his reasoning by saying that the Marianas were "the key to the situation because of their location on the Japanese line of communications." Without control of them, Allied forces could not hope to maintain momentum against the enemy.⁶²

King once again presented his ideas concerning Pacific strategy to the Combined Chiefs four months later at the TRIDENT Conference in Washington. In commenting on CCS 239, a revision of the Joint Chief's document JCS 304, "Operations in the Pacific and Far East in 1943-44," King essentially restated the position he had held earlier at

Casablanca, elaborating somewhat in the process. The objectives, as he saw them, should be severing Japanese lines of communication and recapturing the Philippines. The best route for attaining these two objectives lay through Truk and the Marianas in the Central Pacific. An important point for King, one that he would emphasize again and again, was that unremitting pressure had to be maintained against the Japanese. Allied forces must never let up. New offensives needed to begin as old ones were completed. According to King, the Joint Chiefs had chosen objectives in the Pacific for 1943 and 1944 with two criteria in mind:

- (a) Would [an operation] further threaten or cut Japanese lines of communication?
- (b) Would [an operation] contribute to the attainment of positions of readiness from which a full-scale offensive could be launched against Japan?

After modifications based upon comments by the American and British Chiefs were

incorporated into the final draft, the objectives for 1943 and 1944 as stated in CCS 239

were as follows:

- (1) Conduct of air operations in and from CHINA.
- (2) Operations in BURMA to augment supplies to CHINA.
- (3) Ejection of the Japanese from the ALEUTIANS.
- (4) Seizure of the MARSHALL and CAROLINE ISLANDS.
- (5) Seizure of the SOLOMONS, the BISMARCK ARCHIPELAGO, and Japanese held NEW GUINEA.
- (6) Intensification of operations against enemy lines of communication.

The Marianas were not specifically mentioned as objectives, but King was able to get a

mention of operations against Japanese lines of communications included. He would

build on this tiny foundation.⁶³

King had not mentioned the Southwest Pacific in his discussion of Pacific

strategy at TRIDENT. General MacArthur feared that King and others in Washington

wanted to change the direction of strategy in the war against Japan, a change that he believed would take the emphasis off of his theater and shift it to an area over which the Navy could exert more direct control. On 28 June 1943 the Joint Strategic Survey Committee (JSSC) issued a study to the Joint Chiefs that threatened to do just that. The JSSC argued that the only reason the South and Southwest Pacific had received so much attention during the first part of the war was because it was necessary to meet and stop the Japanese offensive that was plowing its way through those areas. Political as well as military considerations dictated a strategy of moving against the enemy northward from Australia, essentially reversing the Japanese offensive and following the same path they had taken against the Allies. The JSSC argued that to do so was not wise. The Japanese would be in a better strategical position than the Allies at all times, making progress against their defenses more difficult than it had to be. Rather than follow this course, they reasoned, why not take advantage of increasing Allied naval strength in the Pacific and shift the emphasis from the South and Southwest Pacific to the Central Pacific through the Marshalls and Carolines? Admiral King agreed wholeheartedly with the JSSC proposals, but he was alone. The other members of the JCS were not ready to accord full priority for a Central Pacific Campaign over the Southwest Pacific. The paper, as a result, was sent to the Joint Staff Planners for further consideration and the Chiefs went on to other matters.⁶⁴

On 6 August 1943, in preparation for the upcoming QUADRANT Conference, the Joint Chiefs began discussing a report submitted to them by the Rainbow Team of the Joint War Plans Committee. Entitled JCS 446, the report outlined 1943-44 operations in the Pacific. The five projected for the Central Pacific Campaign were as follows:

- 1. 15 November 1943 Gilbert Islands (Nauru, Tarawa, Makin)
- 2. 1 January 1944 Marshall Islands (Kwajalein, Wake, Kusaie)
- 3. 1 June 1944 Ponape (in the Carolines)
- 4. 1 September 1944 Truk (in the Carolines)
- 5. 31 December 1944 Palau Islands

The planners emphasized that momentum be maintained against the Japanese by

transferring forces and equipment between areas of the Pacific, never allowing any

Allied assets to remain idle for long. If conflicts over men and materiel arose, JCS 446

stated that "due weight should be given to the fact that operations in the Central

PACIFIC promise more rapid advance." Admiral King was the only member of the Joint

Chiefs to offer any objections to the contents of the report. He was not happy that

mention of the Marianas had been left out. He reminded his fellow Chiefs that

occupation of the Marianas would be considered a serious threat by the Japanese while

the Palaus were nothing more than a staging area on the way to Philippines. At his

recommendation, then, the following was added to the report:

...It may be found desirable or necessary to seize Guam and the Japanese MARIANAS, possibly the BONINS, in conjunction with the seizure of the western CAROLINES, and in particular with the attack on the PALAUS. The MARIANA-BONIN attack would have profound effects on the Japanese because of its serious threat to the homeland....

This statement left open the possibility of heading in the direction of the Marianas once

the conquest of the Carolines was completed.⁶⁵

The Joint Chiefs presented the revised JCS 446 at the QUADRANT Conference

as the combined paper CCS 301. The British Chiefs asked three major questions of

their American counterparts during discussions of the paper, only one concerning the

Central Pacific: Would it not be a better idea to limit operations in the Japanese

Mandates in order to release resources for use in the upcoming European Theater

Operation OVERLORD? The American Chiefs argued that the requisite forces for operations in both the Central and Southwest Pacific were already in theater and could not be used effectively in Europe. Therefore, it made better sense to use the men and materiel where they were and treat OVERLORD as something entirely separate. Admiral King defended the American strategy of attacking along two paths in the Pacific by arguing that each route was complementary to the other and that both were essential for ultimate victory. Their existence provided Allied forces with options: either the two routes could converge on the Philippines or the Central Pacific forces could turn north from Truk to attack the Marianas. The Americans further assured the British that the planned operations for the Pacific would not interfere with the invasion of Nazi-held Europe. The British appeared to be satisfied with the American responses to their questions and gave CCS 301, with a paragraph concerning China added, their tacit approval. The QUADRANT Conference, upon its closing on 24 August 1943, signaled the end of the idea that the Allies should hold the line against the Japanese until such time as Germany was defeated. The American offensive was on in the Pacific.⁶⁶

United States planners were rather optimistic about the possibilities 1944 held for the war against Japan by the time the next Allied conference rolled around in November of 1943. The supply of men, materiel, and shipping was growing, and it began to make sense that the increase justified a reexamination of plans for the coming year. Accordingly, the Joint War Plans Committee drafted a new report on recommended operations against Japan in 1944 that were aimed at

obtaining positions and reducing Japan's military strength to such an extent as will permit the eventual invasion of Honshu not later than the spring of 1946, in order to force her unconditional surrender at the earliest practicable date.

The report listed the following operations for the Central Pacific:

- 1. 1-31 January 1944 Marshall Islands (including Eniwetok and Kusaie)
- 2. 1 May 1944 Ponape (in the Carolines)
- 3. 20 July 1944 Eastern Carolines (Truk area)
- 4. 1 October 1944 Guam and the Japanese Marianas
- 5. 31 December 1944 Palau Islands

The Joint Chiefs looked at this report on their way across the Atlantic to attend the SEXTANT Conference at Cairo, made a few comments, and sent the paper to the Joint Staff Planners for revision.⁶⁷

The Chiefs made comments that were more detailed when the revised paper came back to them. General Marshall questioned whether or not the JCS could say with certainty that they wanted to go into Ponape and Truk. Admiral Cooke, one of the Joint Staff Planners, explained that this was a tentative list and that objectives could be changed depending upon how the war unfolded. Admiral King requested the removal of the Palaus from the list of objectives, but General Marshall wondered whether that island group ought not be an objective for both the Central and Southwest Pacific Areas. Since there was time to consider whether or not the Palaus should be taken, they were dropped from the list for the time being. General Arnold then brought up the question of how the new long-range B-29 was to be used in the Pacific war. The plan so far was that the bombers would fly against Japan from bases in China. Arnold and his advisors, however, had reservations about this decision. Security of the Chinese bases was proving to be a problem and, as the Japanese pushed farther and farther into China in the direction of the airfields, the bombers had to fly farther and farther distances to get to their targets in the Home Islands, thus necessitating a decrease in bomb tonnage so that fuel efficiency could be increased. The Mariana Islands offered a

solution to these problems. Their distance from Japan was well within the range of the new bomber and, once taken, they could be fairly easily defended against the Japanese attack. At Arnold's suggestion, then, the Joint Chiefs set 31 December 1944 as the date by which B-29 operations would begin from the Marianas.⁶⁸

The Combined Chiefs of Staff approved the American Joint Chief's program for Central Pacific operations in 1944 at the SEXTANT Conference on 6 December 1943. The approved plan was a significant acceleration over the previous QUADRANT chronology. Rather than ending the year 1944 in the Carolines and Palaus heading toward the Philippines, the new plan placed Allied forces in the Marianas by October on a heading for the Home Islands and had very long bombers operating against the Japanese by the end of the year. This acceleration is especially impressive, however, when one compares the SEXTANT plans with the timetable of action prepared by the Combined Planning Staff during their meeting in Washington 31 July – 8 August 1943. This timetable sketched out a campaign against Japan that would have lasted into 1947 and possibly even 1948. As it turned out, the acceleration in actual execution would be even greater than the one on paper.⁶⁹

The general outline of what the United States would do in the Pacific during 1944 was in place, but now those general plans had to be translated into something the theater commanders could use. Once American forces were in control of the Marshall Islands a firm decision would have to be in place as to the next target for the Fifth Fleet juggernaut, but there was no agreement as to exactly what that target should be as the new year dawned. Admiral King flew to San Francisco on 2 January for one of his periodic meetings with Admiral Nimitz to discuss Pacific strategy. Nimitz presented

King with a plan, entitled GRANITE, that the CinCPOA staff had developed based upon the program set forth at SEXTANT. This plan called for, among other operations, the taking of Truk in the Carolines on or shortly after 1August and the simultaneous seizure, if possible, of Saipan, Tinian, and Guam around 1 November. GRANITE allowed for bypassing Truk and either taking the Palaus and the Marianas in sequence or simultaneously, but it provided no target dates for such an eventuality. King did not seem to have a problem with what the theater planners had in mind, but he made a point of reminding them that the key to the Pacific was the Marianas because of their position relative to Japanese lines of communication and their use as bases from which American forces could strike the Home Islands. Capturing the Marshalls, an operation that was already in the works, would bring the Marianas much closer and make the success of an invasion more likely. Rear Admiral Forrest P. Sherman, Nimitz's chief planner, suggested that Saipan, Tinian, and Guam could be attacked next if Truk could indeed be bypassed. King left San Francisco on 5 January believing that Nimitz and his staff agreed with him about the importance of the Mariana Islands in overall Pacific strategy.⁷⁰

King was mistaken. At a conference of Pacific Ocean Areas and Southwestern Pacific theater representatives at Pearl Harbor on 27-28 January CinCPOA backpedaled away from his boss' concept of the war, going so far as to offer no effective rebuttal to General MacArthur's Chief of Staff, General Sutherland, when he recommended that all forces in the Pacific be concentrated on one axis of attack, from the Southwest Pacific. Nimitz and his staff, in fact, evidenced opposition to the general idea of going into the Marianas, King's pet project, and especially the idea of using the

islands as a base for B-29s. These men, who King thought to be his advocates, never

even mentioned Cominch's main arguments for operations against the Marianas -

endangerment of Japanese lines of communication, neutralization of the Carolines, and

protection of American lines of communications to the Philippines.⁷¹

The men meeting in Hawaii could not make overall strategic decisions for how

the war in the Pacific would be fought, and King knew this, but when he read the

minutes of the Pearl Harbor Conference he was furious. He shot a message to Nimitz

on 8 February that laid out his thoughts in no uncertain terms:

Apparently, neither those who advocated the concentration of effort in the Southwest Pacific, nor those who admitted the possibility of such a procedure, gave thought nor undertook to state when and if the Japanese occupation and use of the Marianas and Carolines was to be terminated. I assume that even the Southwest Pacific advocates will admit that sometime or other this thorn in the side of our communications to the western Pacific must be removed. In other words, at some time or other we must take out time and forces to carry out this job....

A number of conferees, particularly [Deputy CinCPac CinCPOA John H.] Towers, stated, and his statements were allowed to go unrefuted, that the object of taking the Marianas was to provide for B-29 bombing attack against the Japanese Empire. Of course, that was never the object. That was merely one of the results that would ensue from this operation, which was to be taken to dry up the Carolines, facilitating the capture or neutralization of the Carolines, and to speed up the clearing of the line of communications to the northern Philippine area....

The idea [espoused by General MacArthur] of rolling up the Japanese along the New Guinea coast, throughout Halmahera and Mindanao, and up through the Philippines to Luzon, as our major strategic concept, to the exclusion of clearing our Central Pacific line of communications to the Philippines, is to me absurd. Further, it is not in accordance with the decisions of the Joint Chiefs of Staff....⁷²

In order to drive his point home with Nimitz, King presented his own strategic plans for

the defeat of Japan:

- (1) Japan will ultimately be forced to her "inner ring" of defense Japan, Korea, Manchuria, Shantung, etc.
- (2) Everything that we do must be related to (1).
- (3) (1) requires use of China as a base and of Chinese manpower to secure and maintain the base.
- (4) (3) requires availability of ports in China none of which are accessible north of Formosa.
- (5) LUZON is the key point for opening up sea routes to ports in China.
- (6) Central Pacific general objective is LUZON.
- (7) (6) requires clearing Japs out of Carolines, Marianas, Pelews and holding them.
- (8) (7) cuts Jap lines of communications to Netherlands East Indies east of Philippine Islands – also protects flank of advance from S.W. Pacific to Mindanao.
- (9) (7) has priority over advance from S.W. Pacific to Mindanao.
- (10) Occupation and use of Mindanao will not open communications with ports in China – Mindoro Strait is controlled from Luzon – Balabac Strait is too far to southward.
- (11) Occupation and use of Mindanao is primarily to effect reoccupation of Philippine Islands which will roll-up against tremendous difficulties.
- (12) (10) and (11) emphasize (5), (6), (7), (8).

King also sent a message to General Marshall on 8 February in which he let the Army

Chief of Staff know how much he disagreed with MacArthur's ideas. He also

recommended that Marshall require MacArthur to submit a plan for implementing the

operations already designated by the Combined Chiefs of Staff for his theater.⁷³

On the same day King wrote these messages to Nimitz and Marshall, Admiral

Sherman and General Sutherland attended a meeting of the Joint Chiefs to discuss

their respective commander's plans. Sherman presented an accelerated GRANITE

plan, arguing that an invasion of either the Carolines or the Marianas could be

undertaken in June if Eniwetok could be taken in February instead of April and if the

Japanese Navy could be neutralized. Sutherland recommended that U.S. forces be

concentrated along the New Guinea-Mindanao axis of attack with the object of taking

Mindanao by 1 December. An important objective of both plans was the taking of the

Philippines, though they differed as to how that would be brought about. Since the successful completion of both required the assignment of South Pacific Area forces to their respective theaters, General Marshall suggested and Admiral King agreed that the JSSC give advice as to which line of attack was best.⁷⁴

The JSSC, as it had so many times before, recommended in its 16 February report that the principal route to Japan should be the one across the Central Pacific. Operations in other areas, such as the Southwest Pacific, should support this main effort. They argued, in terms reminiscent of King's argument to Nimitz, that the principal objective of the war against Japan was reaching and attacking what they referred to as "the Japanese citadel" – Japan, Korea, Manchuria, and Shantung – and that the China coast should be used as a base. The line from Luzon to Formosa to the China coast, therefore, should be the focal point of the attack on the "citadel." General Marshall did not disagree with this conclusion, but he questioned whether or not the JSSC had taken into account such important questions as how amphibious craft, that most precious of commodities, should be allocated and how airpower would best be employed in the suggested campaign. For Marshall, one of the most important considerations was that plans in the Pacific be kept as flexible as possible and, since the JSSC had neglected to suggest a time schedule, how could the theater commanders be expected to coordinate with one another? Admiral King reminded Marshall that the Central Pacific Campaign was in an excellent position to be accelerated as a result of the swift and early completion of the Marshalls operation. The way was open either to seize Truk or, if Truk were to be bypassed, to attack either the Marianas or the Palaus or both. King did not mention a target date for any of these possible operations, but Nimitz had already

assigned a tentative date of 15 June for an operation against Truk or an alternative objective. After further discussion, General Marshall recommended that the JCS hold off on sending any directives to the Pacific theater commanders until the Chiefs heard from Admiral Nimitz who was due to arrive in Washington shortly for consultation.⁷⁵

Nimitz, accompanied by Admiral Sherman, attended the JCS meeting on 7 March and he presented his opinion of the state of the war in the Pacific. The Joint Chiefs listened to what Nimitz had to say and, after several days of discussions and deliberations that involved the various JCS planning agencies, they issued a directive to the two theater commanders on 12 March informing them of the strategy the Chiefs had adopted. The directive, as it affected Nimitz's plans for the Marianas, stated:

...the Joint Chiefs of Staff have further decided that the most feasible approach to the Formosa-Luzon-China area is by way of Marianas-Carolines-Palau-Mindanao area, and that the control of the Marianas-Carolines-Palau area is essential to the projection of our forces into the former area, and their subsequent effective employment therefrom. Examination leads us to the decision that effective lodgment in the former area will be attained by the following main courses of action:....

- d. Establish control of Marianas-Carolines-Palau area by POA forces
 - (1) By neutralization of Truk.
 - (2) By occupation of the southern Marianas, target date June 15. The objective is to secure control of sea communications through the Central Pacific by isolating and neutralizing the Carolines and by the establishment of sea and air bases for operations against the Japanese home land.

Nimitz now knew what he was to do next: Truk was to be bypassed and he was to

attack the Mariana Islands.⁷⁶

Resources and Plans for FORAGER

Nimitz designated the three men he had grown to trust most - Spruance, Turner,

and Holland Smith – to evict the Japanese from the Marianas. According to his 23 April

Operation Plan 3-44, Spruance once again commanded the Fifth Fleet. Turner, Spruance's immediate subordinate, acted as affected tactical command of the amphibious operations directly at Saipan and indirectly through his two immediate subordinates Admiral Hill and Admiral Conolly at Tinian and Guam, respectively. General Smith, while exercising command over all landing troops in the operation as Commanding General, Expeditionary Troops, acted directly as landing force commander at Saipan while General Schmidt performed the same function on Tinian and General Geiger on Guam. Nimitz, knowing that the operation would be much bigger and more complicated than the previous two undertaken in the Central Pacific, assigned three Marine Divisions, one Marine Brigade, and two Infantry Divisions with various reinforcing elements to FORAGER for a total of 105,859 assault troops - 66,779 for Saipan and 39,080 for Guam. The landing on Saipan was assigned to the Fifth Amphibious Corps – the Second and Fourth Marine Divisions, designated Northern Troops and Landing Force (NTLF) – while the 3rd Amphibious Corps – the Third Marine Division and the 1st Provisional Marine Brigade, designated Southern Troops and Landing Force (STLF) – were to take Guam. The Army's 27th Infantry Division were to serve as Expeditionary Troops reserve and the brand new 77th Infantry Division remained in Hawaii as a strategic reserve, waiting to be brought to the Marianas on D+20.77

Holland Smith and Roy Geiger submitted their Operation Plans on 1 and 11 May, respectively. For the NTFL, Smith had in mind a two-division attack across an 8,000yard front along the southwestern coast of Saipan. The marines would have to cross an extensive barrier reef to get to the beach and Smith made sure that his forces had

plenty of LVTs to get the job done. Believing himself to be taking into account the lessons learned thus far in the war, he allowed for what he considered to be sufficient preliminary and pre-landing bombardment and he decided to try an innovation in the use of the amphibious tractors. Rather than stopping at the water's edge to debark troops, Smith wanted the LVTs to go inland a distance before disgorging their human cargo. His objective was to establish as quickly as possible a beachhead of a sufficient breadth and depth to allow for efficient and rapid penetration inland. As explained above, the Fourth Marine Division followed this plan and suffered for it, whereas the General Watson, the Second Division's commander, requested and received permission to deviate from the plan in this respect. Geiger's plan for the STLF at Guam had the Third Marine Division and the 1st Provisional Marine Brigade landing across a fringing reef on beaches that were approximately five miles apart, separated from one another by the Orote Peninsula. The two units would then penetrate inland, pinch off the peninsula and destroy Japanese resistance thereon, and unite with one another for a drive across the island.⁷⁸

The 12 March JCS directive had set D-day for the recapture of the Marianas at 15 June. Spruance determined that Saipan was to be the first island taken, and he assigned 18 June as the date for the invasion of Guam. The timing for the second invasion changed, however, as a result of two developments. First, the well-laid plans for the conquest of Saipan began to break down almost immediately upon the approach of the troops to the shore. Holland Smith found that he had to commit his Expeditionary Troops reserve, the 27th Infantry Division, earlier and more completely to the battle than he had estimated. Needing a replacement, he designated Geiger's III Amphibious

Corps as floating reserve, effectively postponing the Guam invasion. Second, the Imperial Japanese Navy reacted to the invasion of the Marianas by sending a major portion of its fleet to attack and destroy Spruance's forces. Second, the Battle of the Philippine Sea (19-20 June) forced Spruance to divert his attention from prosecuting the Marianas operation to the defense of Turner's amphibious forces against the threat posed by the Imperial Japanese Navy. As a precaution, Spruance ordered III Amphibious Corps out of floating reserve and back to Eniwetok to await the results of the sea battle. The Guam operation was not given a new date at the time. In early July Spruance, in conference with his subordinate commanders, decided to reschedule for 25 July. Admiral Nimitz wanted an earlier date, 15 July, but Spruance explained that the fighting on Saipan indicated that commitment to an invasion without adequate reserves in place was not wise. The complete 77th Infantry Division could not reach the Marianas from Hawaii by 15 July, so, he reasoned, the 25th was the better date. Nimitz deferred to Spruance and set the invasion of Guam on 25 July, but an earlier arrival in Eniwetok of the 77th Division than had been anticipated caused Spruance to up the date by four days to 21 July and there it stayed.⁷⁹

Naval Gunfire in Operation FORAGER

Naval Gunfire at Saipan – The "Lessons" Modified

Richmond Kelly Turner, in much the same fashion as in Operations GALVANIC and FLINTLOCK, was given two hats to wear in the Marianas. His first hat was as commander of Task Force 51, the Joint Expeditionary Force. In this position, he was Fifth Fleet boss Raymond Spruance's top amphibious commander. His second hat was as commander of Task Force 52, the Northern Attack Force. This billet put him in the

position of implementing the plans for Saipan and Tinian that he issued as commander of TF 51. Turner promulgated on 6 May 1944 his Operation Plan A10-44 for FORAGER. Annex (D) of this plan, entitled "Instructions for Bombardment by Ship's Gunfire," laid out the basic naval gunfire plan for the operation. He stated at the very beginning that this annex, along with other referenced documents, was to be used as a guide for scheduling and executing naval gunfire against shore targets, but he also stated that the instructions that followed should not be viewed as restrictive. He ends his "General Directive" by stating that "[i]t may become necessary for responsible Commanders to depart from certain of these instructions as the circumstances warrant, particularly in regard to ammunition expenditure, but this should not be done without good reason."⁸⁰ These words in the directive then beg the question what Turner would consider to be a "good reason."

Many aspects of the plan set forth by Turner on 6 May would hold for both the Saipan and Guam assaults, so they will be laid out at length here and referred to later on when discussing naval gunfire at Guam. The invasion of the Mariana Islands was to begin with a bombardment of gun positions on both Saipan and Tinian on D-2 by the fast battleships and aircraft of Vice Admiral Marc Mitscher's Task Force 58. Turner wanted Mitscher to pay particular attention to the following:

- (a) Destruction of enemy aircraft and disabling of airfields.
- (b) Destruction of enemy guns and emplacements; location of enemy field artillery installations, and promulgation of this information.
- (c) Covering fire during the minesweeping of the shelf to the westward of SAIPAN.
- (d) Destruction of enemy fuel and ammunition dumps.
- (e) Firing of all unburned cane fields lying south of the general line MUTCHO POINT CHATCHA Village.
- (f) Bombardment of enemy reserves and possible reserve areas.
- (g) Harrassing [sic.] fire by Destroyers from time of departure of heavy

ships until arrival TF 52 Bombardment Group.

(h) Destroyers and DMS [Destroyer-Minesweepers] will be stationed so as to interdict movement of troops between islands.⁸¹

On D-1 the destroyers, cruisers, and old battleships of the bombardment group would

take over. Their principal objectives would be:

- (a) Bombardment of gun positions on SAIPAN and TINIAN, and the beach defenses on SAIPAN by vessels of TF 52 and TF 53. All detailed objectives listed above for [D-2] should again be covered, where necessary. In addition thereto, enemy gun positions in MAGICIENNE BAY (particularly in the North portion thereof) must be destroyed on [D-1] to prevent obstruction to the landing in that area. [Early in the planning stages of the assault on Saipan the landing of 1st Battalion 2nd Marines on the east coast of the island on the night of 14-15 June was considered. The objective of 1/2 was to be the crest of Mount Tapotchau, the highest point on Saipan. This part of the plan was eventually abandoned.] Beach defenses and installations in the neighborhood of CHARAN-KANOA and TAMAPAG [sic.] HARBOR, and gun positions which can bear on the landing beaches, boat lanes and transport areas must be destroyed to the greatest possible extent. Particular attention should be given to positions which would enable the enemy to deliver flanking fire at beach areas. Mobile artillery positions and mortar positions bearing on the landing beaches should be taken under fire after aerial reconnaissance to verify the actual presence of enemy weapons. Spotting planes must be available from OBB's, CA's, and CVE's.
- (b) Covering close range fire for continuation of minesweeping tasks and for Underwater Demolition Team personnel engaged in beach reconnaissance and clearing obstacles. This coverage should be maintained throughout [D-1] day, when necessary, and continued during the following night, until Underwater Demolition Team activities terminate.⁸²

D-Day received most of Turner's attention. His plan dictated that all cruisers and

battleships that were not needed for screening duties had to support the landings on

Saipan and the work of the Underwater Demolition Teams. He then listed, in general

order of priority, the objectives for naval gunfire on the day the troops stormed ashore.

Those dealing with the preparation of the beaches for invasion were as follows:

- (1) Counter battery fire, commencing near dawn, and covering known and suspected positions of enemy coast defense guns, anti-aircraft, dual purpose and field artillery batteries on SAIPAN and TINIAN, and at probable observation and command post sites. Full utilization should be made of last minute intelligence information, and very careful observation, in order that this bombardment coverage may be as complete as is possible.
- (2) Destruction of beach defense[s]. Those defenses in and near landing areas, and possible flanking positions should be bombarded by close range fire, commencing at low waterline and extending 400 yards inland. This fire should generally progress from the south end of the beach northward toward GARAPAN in order that evacuation of laborers and natives may be forced toward the north, thereby interfering with any southward movement of enemy reserves. This firing must be planned to furnish the maximum possible support to Underwater Demolition Teams.
- (3) Supporting fire in the TANAPAG HARBOR Area covering the ships and landing craft which make the demonstration landing.
- (4) Area bombardment of secondary defenses, particularly of supply installations, barracks and bivouac areas, and possible reserve assembly areas. The use of roads should be denied the enemy in order that reserves may not be moved toward landing areas. Consequently, interdiction fire should be placed at critical points on the road net leading west from the ASLITO Airfield Area, the coastal road near AGINGAN POINT and CAPE OBIAM, and the coastal road to the south of GARAPAN Town.
- (5) Counter-battery bombardment of installations on TINIAN which present possible interference to landing operations on SAIPAN. This will be accomplished partly by vessels of TF 53, but these vessels particularly will exercise economy in ammunition expenditure. Total expenditures by those ships on [D-1] and [D-Day] will approximate 20% of their bombardment ammunition.
- (6) Close supporting fire commencing shortly before [H-Hour] and delivered at both the CHARAN-KANOA beach area and the TANAPAG HARBOR area, the latter being in support of the demonstration landing and on a smaller scale than for the main landing. Close supporting fire should include close range fire by battleships, cruisers, destroyers and LCI(G)'s. Air bursts should be used when firing with AA batteries at open trench systems. When the leading wave arrives approximately 1200 yards from the beach, battleship and cruiser main batteries will lift fire to Phase Line O-1. 5

inch batteries will similarly lift fire to Phase Line O-1 when the leading wave arrives 300 yards from beach. Fire will be maintained at Phase Line O-1 until the order is given by the Division Commanders to lift the fire, at which time fire will be lifted 1000 yards beyond Phase Line O-1 and shifted to the flanks....

(10) Commencing at approximately [H-5] and continuing until otherwise directed, intermittent fire should be delivered at the north flank of the landing beach area. This fire should be placed 300 yards north of the line of friendly troops and should extend from the beach to a point approximately 1000 yards inland.⁸³

The instructions for D-1 and D-Day follow the basic doctrine promulgated in FTP-

167, Change 3, fairly closely. Where there are differences, they are the result of Turner's faithful adaptation of the doctrine to specific circumstances presented by the assault on Saipan. It will be noted that under D-1 (a) Turner attempted to address the problem of enemy inland artillery and mortar positions that could rain fire down on the landing beaches. Lifting fire in front of the advancing troops on D-Day was supposed to destroy any of these positions that survived the D-1 bombardment. It was also supposed to keep those not touched directly by the rain of metal neutralized until such time as naval guns, advancing troops, or land-based artillery could take them out. How successful the plan was in getting this job done is one of the stories of D-Day on Saipan.

On 20 May 1944 Turner issued a revised version of Attack Order A11-44 as Commander Task Force 52. This was the plan that would implement his CTF 51 Operation Plan A10-44 for Saipan. In his naval gunfire plan (Annex C, revised), he divided up his bombardment group into eight Fire Support Units and assigned each unit responsibilities that fulfilled various of the prioritized objectives specified in A10-44. One of the "lessons of Tarawa" that apparently stuck in his mind and the minds of his

staff, at least during the planning stages of the Marianas operation, can be seen in three

of his instructions concerning the delivery of scheduled fires:

(d) Ships will use every opportunity to close the range and employ direct fire for destruction of guns, pillboxes, dugouts, concrete shelters, and blockhouses.

(e) Individual ships while scheduled to fire at assigned target areas will be responsible for prompt counter-battery fire and suitable engagement of targets of opportunity within those areas, particularly when shore fire is against transports, LST's or troops embarked in boats and LVT's. Observation aircraft must be alert to discover enemy batteries and designate them to firing ships. Commanders of Fire Support Units will be responsible for the engagement of targets of opportunity within their Fire Support Sector but outside of individual ship target areas.

(f) Assigned targets must be covered by fire, even though interruptions necessitate a reduction in volume.⁸⁴

The various subordinate commanders over the next weeks prepared their own gunfire support plans based upon Turner's preliminary guidance and, as these plans were completed, they were promulgated to all those involved in the planning process for FORAGER. By 15 June, Turner and the Joint Expeditionary Force had in place a naval gunfire plan that he believed would carry U.S. forces ashore on Saipan with an acceptable level of casualties.

The first bombardment of the Mariana Islands immediately preceding the invasion occurred on 11 June when planes from Mitscher's Task Force 58 attacked enemy positions on Saipan, Tinian, Rota, and Guam. Preliminary naval gunfire bombardment began on the morning of D-2, 13 June, with the arrival off Saipan of seven fast battleships from TF 58 along with a contingent of destroyers. The battleships fired 2,432 HC 16" shells over the course of the day and the combination of battlewagons and destroyers lobbed 12,544 5" shells at the island for good measure. The results

were less than stellar. The big ships were not allowed any closer to Saipan than 10,000 yards because they were considered too valuable to be sent into the shoal waters near a reef-encircled island. Since the fast battleships spent their time steaming over the Pacific providing antiaircraft protection for the fast carriers of TF 58, they never got a chance to practice shore bombardment at the Kahoolawe gun range. Their lack of proficiency in the proper techniques of shore bombardment were much on display on this day. Many shots were wide of their mark and most of the damage actually inflicted was on large targets that were of no military value, such as farmhouses and the sugar mill at Charan Kanoa. Samuel Eliot Morison reports one enlisted sailor's take on the day's activities. He said that the bombardment was "a Navy-sponsored farm project that simultaneously plows the fields, prunes the trees, harvests the crops, and adds iron to the soil."⁶⁵

The results of D-2 were, unfortunately for the marines who were tagged to make the landing, a harbinger of things to come. On 14 June, Turner's bombardment group, under the command of Rear Admiral Jesse Oldendorf, pummeled Saipan with tons of ordnance in preparation for the next day's landings. At dawn on 15 June, Oldendorf's ships closed to within 2,500 yards of the shore and released a scheduled fusillade of fire on the beach and its immediate flanks to begin the pre-landing bombardment. At 0700 fire lifted to allow an air strike that ran parallel to the beach. Battleships and cruisers resumed fire when the air attack was completed and continued to fire on the beach until the LVTs were approximately 1,200 yards from shore. They then lifted their fire inland. Destroyers continued to fire 5" shells onto the beach until the troops were 300 yards from the shore at which time they too lifted fire inland. At the same time as the lift of fire

inland, LCI(G)s ran in close to shore and let loose on the landing beaches with 20-mm

and 40-mm machine cannons and fired their 4.5" rockets in order to keep the Japanese

neutralized as long as possible.⁸⁶

What were the results of these two days of naval gunfire on the beaches of

Saipan? The report prepared by the Expeditionary Troops Naval Gunfire Officer,

Lieutenant Colonel E. G. Van Orman, says it best. Regarding the D-2 bombardment, he

states:

- a. This bombardment was executed by ships of Task Group 52.17 [Oldendorf's command], nearly all of which had had considerable experience in shore bombardment. Their fire, delivered with both air and ship spot, was very effective, including direct hits on many important installations.
- b. Some of the factors that limited the effectiveness of this bombardment were:
 - (1) Shortage of time with respect to the very large number of targets, all of which required slow, painstaking adjustments of time. The result was, in several cases, area coverage rather than specific destruction of important installations.
 - (2) Lack of training on the part of air spotters in distinguishing important targets ashore.⁸⁷

Van Orman is more critical of the results of the D-Day bombardment:

- a. This firing was executed by ships of Task Group 52.17. It destroyed or neutralized a great many important targets and neutralized the beaches sufficiently that the assault troops were able to effect a landing.
- b. Important targets did, however, escape this bombardment, of which the most important were enemy mortars and artillery which continued to fire on the beaches, and light gun and troop positions in the low ground immediately behind the beaches. The size of the island, the large number of defense installations, the enemy's excellent use of camouflage, and the mobility of many of his weapons contributed to prevent complete neutralization or destruction of all targets. Other important factors were:

- (1) Lack of sufficient time to allow sufficient fire on all targets.
- (2) Requirement that, prior to H hour, all targets over 1000 yards inland be left to air support.
- (3) Difficulty of getting accurate information to the ships regarding the locations of active enemy weapons.
- (4) Necessity that ships of Task Force 53 conserve ammunition for the bombardment of GUAM, expected to take place within a few days.
- c. As a result of Naval Gunfire and air bombardment, many coast defense guns were destroyed and the enemy was, according to POW statements, forced to evacuated his prepared beach defenses except for a small delaying force. Foward [sic.] slopes facing seaward were rendered only temporarily tenable to the enemy, and his supply, transport, and communication facilities and organizations were reduced to a state of chaos. The ton of CHARAN KANOA was heavily damaged, although many buildings were left standing. The CHARAN KANOA sugar mill, as well as many vital installations at TANAPAG, GARAPAN, and AGINGAN POINT, were demolished. Mortar and artillery positions immediately behind the beaches, however, were not detected or fired on, so that the enemy was able to inflict many casualties on our troops. [emphasis added]⁸⁸

Even though he tried to put the best face on his analysis that he could, Van Orman could see that one of Turner's objectives for the D-1 bombardment, destruction of mobile artillery and mortars within range of the beach, was not met.

One marine who seemingly could not make up his mind as to what he thought about the naval gunfire preparation at Saipan was Expeditionary Troops commander Holland Smith. In his report on FORAGER, Smith wrote concerning naval gunfire that it "was a decisive factor in the conduct of operations...."⁸⁹ He would apparently change his mind as to the importance and the effect of naval gunfire later when recording his opinions in *Coral and Brass*. Regarding naval gunfire support at Saipan he would write: The Japanese never before had displayed the type of mobile defense they employed at Saipan. Lessons learned previously were of no value against the improvised defenses they had installed here....Naval and air bombardment, aided by very good air reconnaissance, had knocked out most of the big coastal guns, pillboxes and permanent installations but enemy resistance was not effectively diminished....

We faced the heaviest and most diversified assembly of weapons and the best developed system of terrain defenses we had encountered....The initial mistake we made at Saipan was this: we did not soften up the enemy sufficiently before we landed.

For Saipan we could use no preliminary artillery bombardment from neighboring islands, as we had done at Kwajalein. There was no continuous naval and air preparation, a fault we remedied later at Guam and Tinian. Three and a half days of surface and air bombardment were not enough to neutralize and enemy of the strength we found on Saipan.

A more significant reason for the partially ineffective Saipan bombardment is one which I have never seen in the operation reports, and that is the fact that most of the pre-landing shelling was delivered by the new battleships and cruisers of Task Force 58, the mighty carrier task force which was always on the march in the Western Pacific....

Through no fault of their own...the Task Force 58 ships, which were almost always at sea, covering the carrier sweeps and bringing the war to Hirohito's front door, had little if any opportunity to go through our Kahoolawe bombardment mission, they were far less experienced than the Marine-trained older ships in finding, hitting, and evaluating the critical and less obvious targets.⁹⁰

Based upon this description, one would have to read Smith's earlier comment to mean

that naval gunfire was a decisive factor in insuring excessive casualties in a very short

period of time after the marines hit the beach on 15 June. To be sure, the casualty

count stood at approximately 4,000 by D+1, more than at Omaha Beach, so one could

say that Smith was more accurate upon reflection than he was in the immediate

aftermath of Operation FORAGER.⁹¹

The comments and recommendations from the Marine units in assault are always

educational. Harry Schmidt took command of the Northern Troops and Landing Force

on 12 July 1944, after the infamous "Smith vs. Smith" controversy resulted in Holland Smith's removal from that position. Schmidt stated in the NTLF Operations Report on the Saipan operation that:

- (1) The fire support ships were aggressive, enthusiastic and cooperative in the support of the troops on SAIPAN....
- (2) Preliminary bombardment commencing on [D-2] by fast heavy battleships was continued by other fire support ships until the time of landing. Undoubtedly naval gunfire destruction played a large part in the success of the landing on and capture of SAIPAN....⁹²

The first statement is rather general on his part. The question, however, was not how enthusiastically the sailors provided the fire support but how effectively. The second statement is more specific but no less meaningless. Unlike Holland Smith's belated criticisms, Schmidt passes over the question of the effectiveness of TF 58's fast battleships and states a truism naval gunfire that appears quite often in the reports of the higher command echelons. Yes, naval gunfire "played a large part in the success of the landing," but, once again, this is not the real question. Could its part, however large, have been played more effectively? Holland Smith would later say that it most certainly could have been. Schmidt comments on the gunfire doctrine itself by saying:

(3) ... The doctrine established is basically sound and effective support improves with every operation and continued training....⁹³

Then he nonchalantly tosses in one final comment pertaining to that doctrine:

Provision should, however, be made to ensure continuous fire on areas inland from beaches from which light artillery and mortars can harass troops after landing.⁹⁴

Using the word "harass" to describe the wholesale slaughter of men under one's command is interesting in itself, but – more to the point – Schmidt was touching on a very important concept, one that some of the Action Reports from lower command

echelons would address more directly.

One of those lower echelons was the Fourth Marine Division, the division Schmidt himself commanded on D-Day. In the naval gunfire section of the Operations annex of its Operational Report, the Fourth Division stated:

- a. Pre-[D-Day] fires were, in general, designed to destroy aircraft, aircraft installations, coast defense, and anti-aircraft batteries. It is essential that fires be scheduled during this period against located or suspected artillery and mortar positions which can cover the landing beaches. Because of the excellence of the camouflage to be expected from more seasoned enemy troops to be met in future operations, it will be impossible to locate all such positions from aerial photographs but, from a study of the probable defensive plan, fires must be scheduled on logistical locations of mortars and artillery batteries in order to neutralize and destroy as many of these installations as possible prior to [D-Day].
- b. Information from enemy documents captured on SAIPAN reveals that the enemy took advantage of the failure to engage these inland artillery positions stating "those away from the water's edge were able to last four days."⁹⁵

An additional criticism stands front and center in the Special Comments section of

Annex E of the same report. According to this comment, it was not so much a question

of a complete lack of naval gunfire coverage beyond the beaches but of less intense

coverage. In the report's words:

During close support phase, scheduled fires must lift inland to predetermined areas with same intensity as used in beach preparation to cover the landing from enemy artillery and mortar fire.⁹⁶

Why are these weapons, weapons of known lethality and capabilities, being

overlooked? The blame here is being placed squarely on the shoulders of the planners.

They should have taken into account that the enemy would use mortars and field

artillery of known capabilities to defend against an invasion. This was hardly a new

idea, however. Fleet Training Publication 167 states:

...In the absence of definite information to the contrary, it must always be assumed that the assault will be met by an organized defense, and a suitable fire plan must be executed based on this assumption with probable targets located by a study of the terrain....

...Any active defense of an area suitable for landing operations will normally be supported by both field artillery and coast artillery batteries....

...Field artillery is mobile and can move rapidly from place to place in the accomplishment of its mission to place fire on attacking troops. The location of field artillery batteries will rarely be known prior to the attack, but from a study of the terrain, positions suitable for batteries can be determined and fires should be planned for these areas. Naval gunfire must be prepared to place fire immediately on field artillery batteries discovered in position whether or not they are actually firing.⁹⁷

In this instance, apparently, the FORAGER planners chose to modify this very basic

doctrinal point, choosing to emphasize destruction of visible beach defenses to the

exclusion of probable mortars and artillery that would be equally as deadly to the troops

coming ashore.

Placing an emphasis on the beach defenses did not mean, however, that the

men performing the job did so in an effective manner. The Second Marine Division's

Operations Report includes these words concerning naval gunfire:

It is believed that there will be no radical changes necessary for naval gunfire in future operations....It is further recommended that in effecting landings in future operations, where resistance is thought to be heavy, a more concentrated beach preparation be delivered. The visible effects of the beach preparation on SAIPAN in this Division's zone of action were not considered adequate. Assault wave units reported several instances of Japs in relatively open emplacements still active and untouched at the time the first waves hit the beach.⁹⁸

Here is an indication of another modification at Saipan, and this is more directly a

modification of the "lessons" supposedly learned at Tarawa and then proven at Roi-

Namur. Tarawa taught that long, slow preparation was necessary and Roi-Namur

showed what such preparation could do to Japanese defenses. At Saipan, a larger,

better defended island than either one of the first two objectives of the Central Pacific Campaign, two days were allotted to the bombardment, and one of those by the inexperienced gunners aboard TF 58's fast battleships. Research has not revealed a satisfactory answer as to why Spruance and Turner decided to use TF 58 in this capacity other than the fact that the fast battleships had performed a similar function to Spruance's satisfaction in the Marshalls. Not allowing the battleships closer than 10,000 yards guaranteed that they would not do an adequate job, and all authorities agree on this point, yet Spruance decided to use them anyway even with the necessary restrictions. As a result, one whole day of gunfire preparation was wasted. The Second Marine Division report indicates that the old battleships, with only one day and the morning before H-Hour to bombard objectives, probably had too many targets with which to deal in such a short time. In sum, Saipan should have stood as a "lesson" in itself: do not significantly modify on a whim the painful lessons you say you have learned. The marines paid for this lack of consistency at Saipan, but it would not be the last time.

Naval Gunfire in Operation FORAGER

Naval Gunfire at Guam – The "Lessons" Reconfirmed

As stated above, CTF 51's plans for Operation FORAGER held for the assault of both Saipan and Guam. In other words, the same overall guidelines applied in both cases. The Guam operation was originally set to begin on 18 June, three days after the beginning of the invasion of Saipan, but greater than anticipated enemy resistance on that island and a major engagement with the Japanese Fleet led Spruance eventually to postpone the Guam invasion until 21 July. Task Force 53 actually began its preliminary
bombardment of Guam on 16 June in keeping with the original date for W-Day, but this action was terminated and rescheduled for later. The postponement allowed for two important developments: the Bombardment Group assigned to Admiral Conolly for the Guam operation (TG 53.5, Rear Admiral W. L. Ainsworth commanding) could contribute to the naval gunfire support of the Saipan invasion and, beginning on 8 July, Ainsworth's naval gunfire support ships could indulge in a truly long, slow, and deliberate working over of Guam's defenses.⁹⁹

On the morning of 8 July the heavy cruisers USS *Wichita*, USS *Minneapolis*, USS New Orleans, and USS San Francisco and their screening destroyers opened up with 8" and 5" guns on various selected shore targets. These vessels poured fire onto enemy positions until 11 July. On the morning of 12 July the battleships USS New Mexico, USS Idaho, and USS Pennsylvania arrived and began pounding the Japanese with their 14" guns. Admiral Conolly arrived off Guam on 14 July to take command of the bombardment. Morison relates an amusing story of how Conolly came to exercise this authority on top of his responsibilities as CTF 53. The Admiral and General Geiger wanted the bombardment to begin as many days ahead of W-Day as possible, but Admiral Spruance did not want the native Chamorros, a people who viewed the Americans as friends and protectors, to suffer the hell of a naval bombardment any longer than was absolutely necessary. He finally relented, but on one condition: someone had to be found who could plan and conduct a systematic bombardment of Japanese guns and strong points. Turner, as CTF 51, told Conolly to find someone to do it. Conolly, who had been attending a meeting in Turner's sea cabin aboard his flagship Rocky Mount when the latter got the message from Spruance, climbed down

the ladder from the cabin and then bounded right back up. He said as he reentered, "I have the fellow, Kelly; his name is Conolly!"¹⁰⁰

Conolly then fell to work. He showed his love of meticulous planning in the system he devised for keeping tabs on what was destroyed during the bombardment. He directed that a list of shore targets be compiled and that, as each target was damaged or destroyed, a note be entered to that effect on the list. Additional targets were added to the list as direct observation and photographic analysis uncovered them. This methodical approach, in conjunction with the length of time afforded to the bombardment, resulted in a very different reception for General Geiger's troops on the beaches of Guam than the Northern Troops and Landing Force experienced on the bloody shores of Saipan. Major W. M. Gilliam, 3rd Amphibious Corps Naval Gunfire Officer, described the result in this way:

The extended period for bombardment plus a system for keeping target damage reports accounted for practically every known Japanese gun that could seriously endanger our landings. When the morning of W-day arrived it was known that the assault troops would meet little immediate resistance.¹⁰¹

Admiral Conolly, in the naval gunfire enclosure appended to his report on the Guam

operation, elaborates further:

The assault troops of both the Third Division and the First Brigade landed with very little interference or opposition from enemy troops and with sporadic mortar fire as the only enemy gunfire to hinder them. This feat was due in large part to the intense naval gunfire placed upon the landing beaches and adjacent areas just before the Marines first set foot on the beach. Coastal defense guns, heavy and light AA guns, dual purpose guns and all types of defensive installations were rendered impotent prior to the landing of troops. Most of the houses and other structures on the west coast of the island were completely razed by deliberate destructive fire, which prevented their use by enemy troops. It is believed that not one fixed gun was left in commission on the west coast that was of greater size than a machine gun.¹⁰²

How was Conolly able to produce this result? The amount of time allowed him prior to W-Day, thirteen days in all, definitely had something to do with it – but the time element does not tell the whole story. True, if the Third Marine Division and the 1st Provisional Marine Brigade had had to rely on only two days of preliminary naval gunfire bombardment the initial assault casualties of both would have been much higher – photographs and enemy POW testimony indicate that the original bombardment did little if any real damage to Japanese defenses.¹⁰³ Time, however, was not the only, nor necessarily the most important, variable here. Conolly and his staff had devised a flexible naval gunfire and air support plan for the 18 June invasion date and it was this plan, refined and expanded, that he would use to great effect beginning on 8 July.

Naval gunfire support for the Guam operation had to be divided up differently than at Saipan because of the unique landing plan employed by 3rd Amphibious Corps. Having two sets of landing beaches separated by five miles distance and divided by a rather substantial peninsula dictated the division of the Southern Attack Force into two Attack Groups: the Northern Attack Group for the Third Marine Division's beaches at Agana and the Southern Attack Group for the 1st Provisional Marine Brigade beaches at Agat. Conolly assigned two battleships, the USS *New Mexico* and the USS *Idaho*, to the northern group for close support of the landing waves and to the southern group he attached the USS *Pennsylvania*, what he described as "the best fire support battleship" in his report, for the same purpose. Each of these landing zones was treated as a separate area for the purposes of providing naval gunfire and air support, the two arms alternating with one another between the two zones over the thirteen-day preliminary

bombardment period so as to keep interference to a minimum. To maximize the destruction of all possible sources of small arms fire against the assault waves, Conolly ordered all heavy ships to close the range and fire on houses and other structures in the towns of Agana, Piti, Tepugan, Asan, and Agat. All ships used pointer fire and direct spot to ensure as high a percentage of hits as possible. Known enemy guns received first priority and were fired upon repeatedly and bombed from the air to make doubly sure that they were taken out.¹⁰⁴ Naval gunfire support in both the northern and southern landing zones on W-Day began at first light and continued, basically according to TF 51's guidelines, right up to the point of men storming ashore. The results were, as described by Gilliam and Conolly above, considered quite satisfactory.

Admiral Conolly made thirteen recommendations for the improvement of naval gunfire support in his report. All were relatively minor in scope. Five dealt with pre-W-Day and W-Day matters:

- (1) That all fire support units be briefed in detail before proceeding to the combat zone (This is particularly important).
- (2) That fire support unit commanders and fire support ship commanding officers be given as much leeway as possible in determining the details of their scheduled fires. This includes caliber, rate of fire, and range to use....
- (4) That all fire support ships be cautioned to base their close support not on the rigid time schedule (furnished as a guide only) but on the position of the leading assault boat waves. Fire should continue on the landing beaches until leading assault waves are 500 or 300 yards from the beach, depending upon whether the line of fire of supporting ships is respectively perpendicular to the beaches or parallel to them.
- (5) That air observers and close support destroyers report the position of assault waves so that supporting fires can be checked or lifted by the Task Force Commander in order to avoid firing into own boats, but at the same time to provide safe and effective support up to the last possible moment before troops land....

(10) That commanding officers of ships be prepared to fight duels with shore batteries. The old adage that ships cannot engage shore batteries must be discarded once and for all. Ships must move in to extremely close ranges and must be prepared to lie to for hours in fire support areas (In order to do these things, the shore batteries should have been softened up and an adequate anti-submarine screen must be provided and organized).¹⁰⁵

Conolly is simply restating, and in so doing reconfirming, some of the most important "lessons of Tarawa." He had shown that he thoroughly understood them at Roi-Namur and he proved the depth of that understanding at Guam. When the war in the Pacific ended in August of 1945, it would be evident that Richard L. Conolly understood better than any other naval commander, including Richmond Kelly Turner, what those "lessons" really meant. While at Roi-Namur he did not face a hardened objective like the ones others faced at Tarawa, Peleliu, and Iwo Jima, he nonetheless knew, almost intuitively, what his priorities should be given his objectives and the amount of time he was allotted to destroy them. Other admirals spoke of the importance of delivering timely, well-aimed gunfire support to the troops ashore: Conolly did it, again and again.

Endnotes

1. Carl W. Hoffman, *Saipan: The Beginning of the End* (Washington, D.C.: Historical Division, HQMC, 1950), 45-46; Henry I. Shaw, Jr., Bernard C. Nalty, and Edwin T. Turnbladh, *Central Pacific Drive*, History of U.S. Marine Corps Operations in World War II, Vol. III (Washington, D.C.: Historical Branch, HQMC, 1966; reprint, Nashville, TN: The Battery Press, 1994), 263 (page citations are to the reprint addition); Jeter A. Isely and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory and Practice in the Pacific* (Princeton, NJ: Princeton University Press, 1951; reprint, Quantico, VA: Marine Corps Association, 1988), 319 (page citations are to the reprint addition). Both Saipan and Guam were substantially larger than the two previous objectives in the Central Pacific Campaign – Saipan encompassing seventy-two square miles and Guam, the largest island north of the equator between Hawaii and the Philippines, covering 225 square miles – and the Americans knew that they would present different challenges than had the atolls. *Central Pacific Drive*, 238 and 439.

2. Hoffman, 3.

3. Philip A. Crowl, *Campaign in the Marianas*, United States Army in World War II: The War in the Pacific (Washington, D.C.: Center of Military History, 1960; reprint, Harrisburg, PA: National Historical Society, 1994), 25 (page citations are to the reprint addition).

- 4. Hoffman, between pages 4 and 5.
- 5. Ibid., between pages 30 and 31.
- 6. Hoffman, 48; Central Pacific Drive, 263.
- 7. Hoffman, 48-49; Central Pacific Drive, 264 & 267.
- 8. Hoffman, 48-49; Central Pacific Drive, 267.
- 9. Hoffman, 50.
- 10. Ibid.

11. Hoffman, 50-51; *Central Pacific Drive*, 266-268; Isley & Crowl, 316-317. Watson replaced Julian Smith as commander 2nd Marine Division on 11 April 1944 according to Gordon Rottman, *U.S. Marine Corps World War II Order of Battle* (Westport, CT: Greenwood Press, 2002), 134.

12. Philip A. Crowl, *Campaign in the Marianas*, United States Army in World War II: The War in the Pacific (Washington, D.C.: Center of Military History, 1960; reprint, Harrisburg, PA: National Historical Society, 1994), 83 & 85 (page citations are to the

reprint addition); Hoffman, 50.

- 13. Hoffman, 51-52; Central Pacific Drive, 269.
- 14. Hoffman, 50-51; Campaign in the Marianas, 87; Central Pacific Drive, 269.
- 15. Campaign in the Marianas, 87-88; Central Pacific Drive, 270; Hoffman, 53.
- 16. Campaign in the Marianas, 88; Hoffman, 53.
- 17. Central Pacific Drive, 269; Hoffman 65.
- 18. Hoffman, 54-55; Campaign in the Marianas, 89; Central Pacific Drive, 271.
- 19. Hoffman, 54; Central Pacific Drive, 270.
- 20. Central Pacific Drive, 270-271; Hoffman, 54.
- 21. Hoffman, 55.
- 22. Hoffman, 55; Central Pacific Drive, 271; Campaign in the Marianas, 89.
- 23. Hoffman, 67.
- 24. Central Pacific Drive, 271 & 273; Hoffman, 58-59.
- 25. Campaign in the Marianas, 91; Central Pacific Drive, 273; Hoffman, 59-60.
- 26. Campaign in the Marianas, 91; Central Pacific Drive, 274; Hoffman, 55-56.
- 27. Campaign in the Marianas, 91; Central Pacific Drive, 274; Hoffman, 56-57.
- 28. Hoffman, 56-57; Central Pacific Drive, 274-275.
- 29. Hoffman, 66; Campaign in the Marianas, 90.
- 30. Campaign in the Marianas, 90 (including quote); Central Pacific Drive, 345.
- 31. Campaign in the Marianas, 344.

32. Orlan R. Lodge, *The Recapture of Guam* (Washington, D.C.: Historical Branch, G-3 Division, HQMC, 1953), between pages 37 and 38.

- 33. Ibid., between pages 46 and 47.
- 34. Campaign in the Marianas, 466

35. Central Pacific Drive, 462-463.

36. Central Pacific Drive, 463; Campaign in the Marianas, 343-344.

37. Central Pacific Drive, 451-452; Campaign in the Marianas, 344-345.

38. Orlan R. Lodge, *The Recapture of Guam* (Washington, D.C.: Historical Branch, G-3 Division, HQMC, 1953), 37.

39. Central Pacific Drive, 466-467.

40. Campaign in the Marianas, 344; Lodge, 42-43; Allan R. Millett, Semper Fidelis: The History of the United States Marine Corps, rev. ed. (New York: The Free Press, 1991), 418.

41. Quote contained in Harry Gailey, *The Liberation of Guam:* 21 July – 10 August 1944 (Novato, CA: Presidio Press, 1988), 95-96.

42. Lodge, 43 & 46; Central Pacific Drive, 463, 465 & 467; Campaign in the Marianas, 344.

43. Central Pacific Drive, 467-468; Lodge, 40-41.

44. *Central Pacific Drive*, 468-469; quote is from Third Marine Division Special Action Report, FORAGER Operation, dtd 19 August 1944, Narrative Section, page 3. Marine Corps University Archives, Box 24, Folder 5. (referenced hereafter as 3rd MarDiv SAR)

45. Central Pacific Drive, 469.

46. *Central Pacific Drive*, 469; quote is from 3rd MarDiv SAR, page 3.

47. Central Pacific Drive, 469-470; Lodge, 38-39.

48. Lodge, 39.

49. Central Pacific Drive, 470-471; Lodge, 39.

50. Central Pacific Drive, 471 & 472.

51. Central Pacific Drive, 472-473; Lodge, 48-49; Gailey, 100.

52. Central Pacific Drive, 473; Lodge, 49 & 50-51.

53. Central Pacific Drive, 473; Lodge, 49 & 50.

54. Central Pacific Drive, 473-474; Lodge, 49 & 50.

55. Central Pacific Drive, 4475-476.

56. Central Pacific Drive, 476 & 477; Lodge, 51 & 53.

57. Campaign in the Marianas, 21 –22 & 24.

58. Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945* (Annapolis, MD: Naval Institute Press, 1991), 100-131.

59. Ibid., 208 & 209-210.

60. Ibid., 184, 208-209, & 214-215.

61. Grace Person Hayes, *The History of the Joint Chiefs of Staff in World War II: The War Against Japan* (Annapolis, MD: Naval Institute Press, 1982), 7-8.

62. Ibid., 280-281; quote is from 280.

63. Ibid., 402-403; first quote is from 403 and second quote is from 402-403.

64. Ibid., 423.

65. Ibid., 427-431; quote is from 431.

66. Ibid., 431-433. The British appeared to be suggesting that the majority of the "savings" in the Pacific be at MacArthur's expense. King defended American actions in the Southwest Pacific because of his belief in unremitting pressure on the Japanese and because he did not want to give back any gains in the European Theater vs. Pacific Theater logistical contest.

67. Ibid., 488-490; quote is from 489.

68. Ibid., 491.

69. lbid., 492 & 459-461.

70. Hayes, 543-546; Ernest J. King and Walter Muir Whitehead, *Fleet Admiral King: A Naval Record* (New York: W.W. Norton & Co., Inc., 1952; reprint, New York: Da Capo Press, 1976), 533-534. King & Whitehead differ with Hayes as to the location of the meeting between King and Nimitz. Since King was one of the participants, it is most likely that the meeting occurred in San Francisco and not Hawaii.

71. Hayes, 546-547.

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87. Headquarters Expeditionary Troops, Task Force 56: Report on Marianas Operation, n.d., Enclosure G, Reports by Special Staff Officers, Naval Gunfire Support Report, page 11. Marine Corps University Archives, Box 7, Folder 1, Part 1.

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91. Casualty figure found in Isley & Crowl, 330.

92. NTLF Op Rpt, 25.

93. Ibid.

94. Ibid.

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96. 4th Marine Division Operations Report, Saipan, n.d., Annex E, page 22. NARA, RG 38, Box 329, File A14-1, 4th MarDiv Operations Report - Saipan.

97. Department of the Navy, *Fleet Training Publication 167, Landing Operations Doctrine, U.S. Navy, 1938*, Change 3, par. 502(a) and 502(g).

98. 2nd Marine Division Operations Report, Saipan, 11 September 1944, page 21. NARA, RG 38, Box 323, File A11-1, 2nd MarDiv Op Report Phase I 11 Sept '44 Saipan.

99. 3rd Amphibious Corps Report on Guam Operation Naval Gunfire, pages 1-2. Marine Corps University Archives. (referenced hereafter as 3rd Amphibious Corps Report on NGF)

100. Morison, New Guinea and the Marianas, 1-2.

101. 3rd Amphibious Corps Report on NGF page 3; quote is from the same source.

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of Guam, July-August 1944, dtd 10 August 1944, Enclosure B, page 11B. Marine Corps University Archives, Box 24, Folder 7. (referenced hereafter as CTF 53 Guam Rpt)

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CHAPTER 6

OPERATION STALEMATE II

The Amphibious Assault of Peleliu

Dawn of 15 September 1944 brought calm winds and clear skies, perfect weather for an amphibious attack. Transports and LSTs containing the assault units of the 1st Marine Division took their position offshore of Peleliu Island and started preparing to send their charges out into the diminishing darkness toward the beaches. The general preliminary bombardment by naval vessels began at 0530 as the first LVTs began organizing for the trip ashore and it continued while the assault marines prayed that their fire would lessen the fury of the Japanese response to the invasion. From 0750 to 0805 fifty carrier planes attacked the beaches while, just like at Guam, the gunfire support ships kept right on firing.¹

While this attack was proceeding, at about 0800, the flags dropped on the control vessels and the LCI(G)s and LVT(A)s in the first waves began to make their way toward the reef. At the same time, destroyers offshore fired white phosphorus shells at the Umurbrogol ridges to the north of the invasion beaches in order to blind Japanese observation of the ship-to-shore movement and battleships and cruisers in the fire support task units focused their fire on the beaches. At about 0822 the LCI(G)s reached a point approximately 1,000 yards offshore, just short of the reef, and began firing their 4 ½" rockets at the beach. They allowed the first three waves of LVTs to pass through them before moving to the flanks to deliver on call fire for the assault forces. LVT(A)s, following close on the heels of the LCI(G)s, climbed over the reef and made first contact with the beach at 0832, only two minutes past the planned H-Hour,



Map 17 – Palau Islands²



Map 18 – Peleliu Island Landing Plan³

and marines were ashore on all beaches within four minutes of this time.⁴

Heavy fire from the naval gunfire support units destroyed most all of the Japanese beach defenses and killed most all of the Japanese defenders in the immediate vicinity of the beaches. Consequently, the attacking marines encountered little direct resistance to the landings on the beaches. However, the enemy spewed out murderous fire onto the LVTs as they came across the reef and headed for land. Tom Lea, an illustrator and writer for *Life*, rode in on a tractor in one of the later waves. His description of the experience is typical:

At 0830 we wallowed aft the control boat on the transfer line, the reef a hundred yards ahead, and beyond the edge of the reef 700 yards of green shallow water thick with black [coral heads]. The first Jap mortar burst hit just inside the reef as our coxswain worked us up alongside an LVT for transfer. While the two craft bobbed and smashed at each other, we numbly piled ourselves and our gear into the LVT. The coxswain of the LCVP waved, backed his craft clear, and headed seaward.... Standing on a field radio case forward, I managed to poke my head up so I could see the first wave of LVTs go in. As I watched,on the lip of the beach we saw many pink flashes – the Japs, coming out from under our shelling, were opening up with mortar and artillery fire on the first wave. Dead ahead there was a brighter flash. Looking through his binoculars, [Captain] Farrell told us, "They hit an LVT."...

Mortar bursts began to plume up all over the reef and walk along the edge of the beach. Farrell, who could have waited another hour to take our Free Boat (not belonging to a specific assault wave) into the beach, [decided now was the time].

The clatter of our treads rose to the pitch of a rock crusher and our hell ride began. In that clanking hearse it was impossible to stand without holding on to something, impossible to sit on the deck without the risk of fracturing our tailbones. So we grabbed and lurched and swore. Suddenly there was a cracking rattle of shrapnel on the bulkhead and dousing water on our necks.

"Get down! Squat!" yelled Farrell, and we bent down on our hunkers, grasping at each other's shoulders, at the bulkheads, at anything. That was the first mortar that came close. There were two more, and then the

ping and whine of small arms in the air over us....

We ground to a stop, after a thousand years, on the coarse coral. The ramp aft, seaward, cranked down fast and we tightened our holds on our gear. The air cracked and roared, filled our ears and guts with its sound while Farrell bellowed, "OK! Pile out! Scatter! But follow me to the right! The right, goddammit, remember!" And we ran down the ramp and came around the end of the LVT, splashing ankle-deep up the surf to the white beach.⁵

As Lea's experience indicates, the Japanese emphasis at Peleliu during the first phase of the American invasion was on destroying the marines while they were at their most vulnerable – in the LVTs and DUKWs on their way to the beaches. Every Marine Corps report of what happened on 15 September shows how successful the new Japanese defensive tactics were. Coming ashore on Peleliu was sheer hell.⁶

The landing scheme for the day called for the 1st Marines to land on the left with two battalions in assault over Beaches White 1 and 2, the 5th Marines, also with two battalions in assault, to land in the center over Beaches Orange 1 and 2, and the 7th Marines to land on the right over Beach Orange 3 in column.⁷ Of the three, 5th Marines suffered, relatively, the least both from antiboat fire while going ashore and from Japanese defenses once on the beach and moving inland. Most of the battalion's losses were the result of enemy artillery and mortar fire as the LVTs crossed the reef.⁸ Of its two assault battalions, the First encountered fewer problems while establishing its beachhead and beginning its advance. Landing over Beach Orange 1, it pushed eastward to the O-1 Line, just west of an enemy airfield, by 0900 and tied in with 1st Marines 2nd Battalion on its left. The Divisional O-2 Line lay on the other side of the airfield, but both 1/5 and 2/1 waited for an order to advance. When that order did not come, 1/5 set up a very strong defensive line. Pre-invasion aerial photographs showed

possible tank tracks in 1/5's zone of action, indicating that the Japanese operated tanks in the area and that they might launch a tank-supported counterattack from north of the airfield. To counter this possible threat, most of 5th Marines' antitank weapons and support tanks had been given over to 1/5 for the invasion. Lieutenant Colonel Robert W. Boyd, 1/5's CO, placed riflemen and automatic weapons along with marines armed with grenade launchers and bazookas in positions along the front and in depth. He also placed four 37mm antitank guns in defilade in shell craters across the front and machine guns in back of the front in case a Japanese counterattack broke through. Finally, Boyd placed three tanks from Company B, 1st Tank Battalion that came up to support 1/5's advance in hull defilade among the shell craters.⁹

The story was different for Lieutenant Colonel Austin C. Shofner's 3rd Battalion, landing over Orange 2. Difficulties cropped up early as much of the battalion's communications equipment was destroyed when the LVT carrying it ashore went up in a geyser of flame and debris before it ever reached the beach. The loss did not stop the assault, however. Company I, landing on battalion left, cleared the beach quickly and attacked directly east. It was able to tie in at O-1 with elements of 1/5 by 0930. Captain Andrew A. Haldane's Company K was not so fortunate. For about fifteen minutes it held the right flank of the landing beaches essentially by itself because of a problem encountered by 3rd Battalion, 7th Marines, coming ashore just to Company K's right over Beach Orange 3. The LVTs carrying 3/7 encountered underwater obstacles on the way in and were hit hard by enfilading and direct fire from an unnamed island and a promontory, both located to the south of the assault beaches. The LVTs veered to the left in an attempt to get around the obstacles and to get away from the heavy enemy

fire, but doing so caused some of them to land on Orange 2 instead of Orange 3.

Company K, 3/5, had to spend precious minutes on the assault beach trying to sort

things out before it could begin its drive inland.¹⁰

Shortly after Haldane straightened out the 3/5 - 3/7 mix-up but before his

company could move very far off the beach, the southern part of Beach Orange 2 was

slammed with an extremely heavy enemy mortar barrage. The rain of 81mm and 90mm

mortar shells trapped Haldane's men out in the open with no real cover to protect them.

Eugene B. Sledge, a 60mm mortarman with Company K, 3/5, described the experience

in harrowing detail:

The heavy mortar barrage went on without slackening. I thought it would never stop. I was terrified by the big shells arching down all around us. One was bound to fall directly into my hole, I thought.

If any orders were passed along, or if anyone yelled for a corpsman, I never heard it in all the noise. It was as though I was out there on the battlefield all by myself, utterly forlorn and helpless in a tempest of violent explosions. All any man could do was sweat it out and pray for survival. It would have been sure suicide to stand up in that fire storm.

Under my first barrage since the fast-moving events of hitting the beach, I learned a new sensation: utter and absolute helplessness. The shelling lifted in about half and hour, although it seemed to me to have crashed on for hours. Time had no meaning to me. (This was particularly true when under a heavy shelling. I never could judge how long it lasted.) Orders then came to move out and I got up, covered by a layer of coral dust. I felt like jelly and couldn't believe any of us had survived that barrage.

Haldane and his men advanced toward the O-1 Line as elements of 3rd Battalion, 7th

Marines, took position on their right flank, but increasing enemy resistance slowed their

progress as they approached the airfield just inland from the beach. The Japanese had

constructed several mutually supporting concrete and log pillboxes for defense of the

airfield and Company K had to reduce these before being able to make contact with Company I, 3/5, to its left. Finally, at about 1000, Haldane was able to tie in with Company I just short of the airfield at the O-1 Line.¹¹

Third Battalion, 5th Marines, resumed the attack to the east at about 1030. Companies I and K lost contact with one another as the battalion front advanced because Company I had to stay in contact with stationary 1/5 to its left. While it lost communication with Company I on the left, Company K maintained contact with 3/7 to its right as it moved forward. Thick undergrowth and enemy sniper fire, however, made it very difficult for Haldane to coordinate the advance of his two assault rifle platoons. Lieutenant Colonel Shofner, concerned about the growing gap between his two assault companies, inserted his reserve, Company L, between I and K. Company L's zone of action was less brush-covered than those of the other two companies, so the going was much easier for it. While the 3rd Battalion made these adjustments, Companies I and K ran into another series of mutually supporting enemy pillboxes and trenches. Fire from these positions brought a halt to the marines' uncoordinated advance and a platoon of tanks was brought up to reduce the enemy strongpoint so that progress could be resumed. Company K lost contact with 3rd Battalion, 7th Marines, to its right while it was waiting for the tanks to reduce these enemy defenses.¹²

At 1015 2nd Battalion, 5th Marines' regimental reserve, completed landing over Beach Orange 2. Colonel Harold D. Harris, 5th Marines regimental commander, decided to commit his reserve so that the 5th Regiment could resume its inland advance. Second Battalion, consequently, relieved Company I, 3/5, on the left. Company I, then, moved to a position between Companies L and K, 3/5, thus

shortening Company K's frontage and reducing pressure on Haldane to maintain his position with his diminishing assets. After effecting the relief of Company I, the 2nd Battalion launched an attack eastward and, later in the afternoon, turned the attack to the north, all the while remaining in contact with 1/5's stationary defensive line on the left. After completing this turning movement, elements of 2/5 took position along the southern edge of the enemy airfield.¹³

Company L, 3/5, stayed in contact with the right flank of 2/5 while the latter settled into place on the perimeter of the airfield. At the same time, it took part in the resumption of the attack that had stalled earlier in the day at the enemy strongpoint just short of the airfield. Several factors made this advance very difficult. First was the thick underbrush that helped conceal the Japanese defensive positions. Second, the maps supplied to Haldane and the other company commanders were incomplete, only vaguely, and many times inaccurately, portraying the inland terrain features in 3rd Battalion's zone of action. Finally, the loss of much of the battalion's communications equipment during the ship-to-shore movement wrecked havoc with regimental- and battalion-level command and control.¹⁴

The extent to which these factors contributed to the confusion that prevailed within the ranks of 3/5 on D-Day is best exemplified by Lieutenant Colonel Shofner's attempts to regain contact with 3/7 to his right. The 3/5's commander received a radio message from 3/7's CP shortly after resuming his battalion's attack to the east stating that 3/7's left flank elements were positioned on a north-south trail approximately 200 yards ahead of 3/5's right flank elements. Shofner ordered his companies I and K to advance as quickly as possible to close the gap while 3/7's units remained in place,

waiting for contact. Companies I and K, 3/5, carried out their orders, but they did not come upon any units from 3/7. Some time after 1500, Shofner received another message from 3/7's CP stating that the information in the earlier message was incorrect: 3/7 units were actually *behind* companies I and K, 3/5, not in front of them. This explained why 3/5's advance did not result in contact with 3/7, but this knowledge did not bring any relief to Shofner's mind. What this meant was that, rather than decreasing the gap, his movement of companies I and K had actually widened it. Something needed to be done immediately before the situation worsened, so Shofner ordered Company K, 3/5, to bend its right flank back to make contact with 3/7, committing HQ personnel to lengthen the line as much as possible. Try as they might, though, Haldane and his men had not sighted 3/7 by nightfall.¹⁵

The last straw for 3/5 came at approximately 1700. Shofner had battled the Japanese and his own communications problems all day and had become extremely frustrated by his inability to effectively coordinate his rifle companies. It was then that an enemy mortar hit Shofner's CP, injuring him badly enough to require his evacuation. Lieutenant Colonel Lewis W. Walt, 5th Marines executive officer, assumed command and immediately set out on a personal reconnaissance to find 3/5's scattered units. He was not able to locate all three rifle companies until after 2100, at which time he adjusted their positions as best he could. The battalion line was not continuous during the night, however, because Company I could not find its assigned position in the darkness. Fortunately, no Japanese counterattack of any consequence hit 3/5's positions that night.¹⁶

Interference in the landing of and problems maintaining contact with the 5th Marines to his left were hardly the only problems encountered by Colonel Herman H. Hanneken, CO of the 7th Marines. His regiment, unlike the 1st and 5th, was allotted only one beach for the assault. This meant that he had to send his battalions ashore in column, one at a time, with the 3rd in the lead immediately followed by the 1st. His 2nd Battalion remained afloat as the division reserve. Hanneken devised an unusual scheme of organization that was meant to minimize confusion during the first minutes on the beach. He exchanged Company A, 1/7, for 3/7's reserve, Company L. Command of each of these companies would revert to its proper battalions upon completion of the landing. Company A, following 3/7's assault companies ashore, was supposed to advance off the beach to what would be the left side of 1/7's zone of action once that battalion came ashore. It would provide flank protection for 3/7 as the latter began its advance eastward. Also, Company A's being in position from the beginning of the assault meant that 1/7 would not have to move through another battalion's units to get into position for the advance inland. The scheme of maneuver for 7th Marines called for 3/7 to push across the island to the eastern shore in conjunction with 3/5. Meanwhile, 1/7 would wheel to the right and begin a drive against the Japanese who were being isolated in the southern pocket created by 3/5's and 3/7's attack. Once across the island, 3/7 would then wheel to the right, fall into line with 1/7, and contribute to the assault southward.¹⁷

Like Company K, 3/5, Major E. Hunter Hurst's 3/7 sorted itself out and reunited quickly after the fiasco coming ashore. Very few Japanese were encountered on the beach. The assault troops eliminated them and advanced to contact with the first inland

Japanese defenses, Company I on the left and Company K on the right. These obstacles generally slowed 3/7's progress, but one actually helped the marines: a large antitank trench that ran approximately parallel to the assault beach. Its location had been radioed to Major Hurst and his staff just before the landings and it simplified and accelerated the job of reuniting and reorganizing his command tremendously. Once in the trench, his men were protected from enemy fire coming from their front. Thus protected, they could move rapidly down the trench to the right or left, positioning themselves for the continuation of the assault. By 0925 3rd Battalion reported that it had seized its beachhead and that it was beginning the advance inland.¹⁸

Progress was rapid in the beginning. By 1045 Company K, 3/7, had pushed approximately 500 yards inland and captured a Japanese radio direction finder in the process. Company I, 3/7, meanwhile, had difficulty maintaining contact with Company K's left flank. At approximately 1300, Company I ran into a Japanese defensive position consisting of a large blockhouse, the ruins of a concrete barracks, several pillboxes and concrete gun emplacements, and a series of mutually supported gun positions. Company I's commander radioed for tank support and waited for it to arrive. These defenses were not a surprise; they had been pinpointed on aerial photographs before the landing and the tankers had been briefed on their position beforehand. It is at this time that the questionable wisdom of landing two 3rd Battalions from two different regiments in assault right beside one another became all too apparent. Moving forward to support Company I, 3/7, the tanks had to travel along the southern edge of the airfield in order to avoid the aforementioned antitank trap. Coming upon a group of marines, the tank commander stopped to ask where he could find "Company I." The marines told

him that they were from "Company I," and the tankers began operations in support of these marines. After some time, the tank commander began to realize that these marines were not from 3rd Battalion, 7th Marines, but from 3rd Battalion, 5th Marines. All during this time, Company I, 3/7 was immobile, waiting for tank support that was not coming. Third Battalion, 7th Marines could not advance as a unit until its Company I could move, so, consequently, it did not meet its objective for D-Day – reaching the eastern beach. Waiting for tank support to arrive had another adverse effect: it completely severed Company I, 3/7's connection to Company K, 3/5 on its left flank. Major Hurst sent out patrols trying to reestablish contact and these patrols emerged from the jungle on the fringes of the airfield, approximately 200 yards behind Company K, 3/5. It was at this time that the cat and mouse game between 3/5 and 3/7 described above began.¹⁹

At 1030, while the saga of 3/7 was just beginning, 1st Battalion, 7th Marines came ashore over Beaches Orange 2 and 3, having suffered from the same problems coming in as had 3/7 before it. Since Company A was already ashore and established on the battalion left, having landed with 3/7 in the assault, 1/7's CO Lieutenant Colonel John J. Gormley advanced his Company C to the south on the battalion right and kept Company B as his reserve. Enemy resistance was relatively light until approximately 1200 with the exception of some intermittently heavy mortar fire. The situation changed, however, when the battalion wheeled to the right to begin its advance against the Japanese being isolated in the southern extreme of the island. Enemy defensive fire increased noticeably and even the terrain turned against the marines. A large mangrove swamp that did not appear on operational maps blocked movement through

the majority of the battalion's right zone of action. The only trail around it skirted its western fringe, but it was strongly defended by enemy pillboxes and bunkers. Company A, 1/7, attempted to work its way around the swamp to the east, but in doing so it found itself approximately 250 yards inside 3/7's zone and out of touch with Company C.²⁰

Lieutenant Colonel Gormley brought his reserve, Company B, up to tie together the flanks of his other two rifle companies. The heavy fighting that had begun at about noon continued into the evening. Major General William H. Rupertus, commanding general of the First Marine Division, became worried about the 7th Marines' lack of progress as he watched the action in the southern sector unfold. As reinforcement, he committed the Division Reconnaissance Company to the fight shortly before noon and made plans to do the same with the Division Reserve (2/7). At 1715 7th Marines received the order to dig in for the night. As the Americans began to tie in their lines, the Japanese began moved against the 7th Marines' front with light machine gun teams. The marines organized defensive positions as best they could, but movement along the lines was difficult in the dark.²¹

Colonel Lewis B. Puller's 1st Marines faced the most ferocious enemy resistance on D-Day. Things did not get off to a good start: the five LVTs carrying Puller's headquarters were destroyed coming ashore. As a result, 1st Marines was out of communication with the rest of First Marine Division for much of 15 September.²² The experience of Puller's 2nd Battalion, commanded by Lieutenant Colonel Russell E. Honsowetz, did not seem to portend anything disastrous as it landed. Aside from the pounding it took crossing the reef and making its way to the beach, resistance was only moderate once it came ashore over Beach White 2. It then pushed inland fairly quickly

and reached the O-1 Line, about 350 yards from the beach, by 0930, tying in with the 5th Marines to its right and awaiting orders to proceed to O-2. Despite its promising start, however, 2/1 remained stalled at the O-1 Line until the next morning while 3/1's situation played out to the north.²³

Unlike 2/1, Lieutenant Colonel Stephen V. Sabol's 3rd Battalion, 1st Marines received no favors on D-Day. Hit hard by Japanese fire from the time it crossed the reef, the pounding did not let up even when the battalion came ashore. Progress toward O-1, consequently, was difficult from the start. Captain George Hunt's Company K came ashore in assault on the left. Its first objective was a coral outcrop that the marines dubbed "The Point." Hunt, in his book *Coral Comes High*, provided an excellent description of just how formidable an objective he faced:

The Point, rising thirty feet above the water's edge, was of solid, jagged coral, a rocky mass of sharp pinnacles, deep crevasses, tremendous boulders. Pillboxes, reinforced with steel and concrete, had been dug or blasted in the base of the perpendicular drop to the beach. Others, with coral and concrete piled six feet on top were constructed above, and spider holes were blasted around them for protecting infantry. It surpassed by far anything we had conceived of when we studied the aerial photographs.

The marines decided that such a powerful defensive position made a frontal assault from the beach suicidal, so the plan called for Company K to fight inland and then pivot to the north so that it could come up behind the Japanese positions. Hunt pushed inland as planned and made his left turn. He then began his attack with two rifle platoons in assault, the 3rd on the left and the 2nd on the right.²⁴

The 3rd Platoon advanced against The Point, keeping its left flank close to the shore. It approached to within fifty yards of the coral outcropping before its attack

stalled. The 2nd Platoon advanced approximately seventy-five yards toward the objective, stumbled into a tank trap, and was pinned down by extremely heavy fire coming from the northern end of a long coral ridge thirty to forty feet from the platoon's right front. The marines were taken totally by surprise when this fire slammed into their faces. The ridge did not show up on any photographs or maps and it was literally crawling with Japanese defenders hidden in caves and dug-out positions. The battle to take The Point devastated Hunt's two assault platoons, reducing the effective strength of each from forty-six men to no more than thirteen. On top of everything else, contact between the two platoons was severed.²⁵

Hunt continued to press the attack against his objective. Ignoring the gap between his two assault platoons, he sent his reserve platoon (1st) forward where its leader, Second Lieutenant William A. Willis, joined what was left of 3rd Platoon to his own and then pushed ahead into a hail of enemy fire. He and his men fought their way up to the crest of The Point from the rear, taking out Japanese defensive positions as they went. Once there, they saw that a 47mm gun that had been devastating the landing beaches all morning from the safety of the coral outcropping was still operational. Willis had to take it out. He and his men made their way down to the gun where Willis tossed a smoke grenade in front of the gun portal to blind the crew while another marine fired a rifle grenade into the reinforced-concrete casemate. White-hot flames erupted from the emplacement as the grenade set off the stored ammunition within. Survivors of the explosion, some with their clothes afire and the ammunition in their cartridge belts cooking off, emerged to a warm welcome from pre-positioned marine riflemen.²⁶

Lieutenant Willis completed the assault on The Point by 1015. After it was over, Captain Hunt could only find thirty-two survivors of the original fifty-nine men who began the attack. His 2nd Platoon was still pinned down in the tank trap, so he had no other choice but to establish a perimeter defense using what was left of the other two platoons. The shot-up remnant of Company K found itself isolated on the extreme left flank of the division, beating off periodic Japanese counterattacks with a captured enemy machinegun. Hunt got down to only eighteen men on that first night, but he and his marines were able to hold out for the next thirty hours with only minimal support getting through.²⁷

Third Battalion was rapidly becoming ineffective as a fighting unit. It could not expand its beachhead because unit cohesiveness was breaking down at several levels: Hunt's problems maintaining contact with the elements of his company have been described, but company-to-company communication suffered as well. Company I attacked through swampy terrain on the battalion right and, while doing so, lost its tenuous connection to Company K. Lieutenant Colonel Sabol committed two platoons from his reserve (Company L) to plug the resulting gap, but they were forced to halt before completing their mission when extremely heavy fire hit them, seemingly from nowhere. The source of the fire: the southern end of the same coral ridge that was keeping 2nd Platoon, Company K, pinned down in the tank trap. Repeated attempts to overrun or flank the ridge failed and the losses incurred in trying to make contact with Hunt and his men were unsustainable. Finally, Sabol sent in his last reserve platoon to set up a secondary defensive line that, hopefully, would protect the division's flank, consigning Company K to its fate.²⁸

Brigadier General Oliver P. Smith, the 1st Marine Division's Assistant Division

Commander, provides us with a summary of D-Day on Peleliu in his journal:

What General Rupertus had hoped to accomplish on D Day [sic] was to seize Objectives O_1 and O_2 . O_1 was a coordinating objective which included 300 yards of beachhead behind White 1, White 2, Orange 1 and Orange 2, and, in addition, that part of the island south of the airfield. Objective O_2 included Objective O_1 plus all of the airfield. What we actually captured the first day was approximately Objective O_1 north of Orange 3 and a wedge across the island east of Orange 3. Until several days later, when we got complete casualty reports from the transports, we did not fully realize what this shallow beachhead had cost. Then we found that the toll of the first day was 92 killed in action, 1148 wounded in action, and 58 missing in action. [These were the numbers known to Smith at the time. The final tally, not counting combat fatigue and heat prostration cases, was 1,111 casualties.] These were very heavy losses and could not have been sustained for very many days in succession without destroying the combat efficiency of the division.²⁹

Strategic and Operational Objectives for STALEMATE II

The Palaus are a complex archipelago of 343 islands and islets located at the far western most reaches of the Carolines between 2° and 8° N latitude and 131° and 135° E longitude. This places their 189 square miles of land area approximately 500 nautical miles from the Philippines to the west and Papua New Guinea to the south, 722 nautical miles from Guam to the northeast, and approximately 1800 nautical miles from Japan to the north. Surrounded, with the exception of the southernmost major island of Angaur, by a wide reef, the physical characteristics of the constituent islands vary widely. Flat atolls similar to what United States forces had encountered early in the Central Pacific Campaign intermingle with islands that are more like the rugged interiors of Saipan and Guam.³⁰

Babelthuap, the second largest island in all of Micronesia after Guam, dominates the group with a greater land area than all the rest of the Palaus combined. Peleliu, just north of Angaur, lies astride latitude 7°N just inside the southwest tip of the Palau reef. It is composed of two elongated strips of coral and limestone stretching to the northeast from a relatively flat common base, giving the impression of a large lobster claw. A rugged ridge, the Umurbrogol, which rises to a height of 550 feet, dominates the longer, northern strip of land. It is a perfectly suited for use in a defensive struggle because of its numerous natural caves and sharp, craggy peaks. The southern strip is separated from the northern one by swamps and shoal coral and is itself almost cut in two by a large Mangrove swamp. Peleliu's climate is tropical with average monthly temperatures of between 80° and 82° Fahrenheit and an average rainfall of ten inches per month. The result is a sauna-like relative humidity of 82%. The heavy rainfall was a Godsend, however, because there were no rivers or streams on the island. The small native population had to catch rainwater in cisterns in order to have drinking water. Overall, Peleliu's topography and climate guaranteed that the 1st Marine Division once again would have to endure the type of hell they had experienced on Guadalcanal in 1942.³¹

The Palau Islands were sighted by Spanish explorer Ruy Lopez de Villalobos in 1543, but their secluded location ensured that no Europeans, Spanish or otherwise, would go out of their way to visit them until some Spanish missionaries did so in 1712. Spain did nothing to develop the Western Carolines over the years and Imperial Germany, seeking to carve out an overseas empire for herself, attempted to take advantage of this apparent Spanish disinterest. In 1885, the Germans landed naval forces on the island of Yap and claimed control of several islands in the Western Carolines. A neutral arbitrator disallowed this challenge to Spain's sovereignty, but the Spaniards eventually sold the Marshalls, Marianas, and Carolines to the Germans in

1899 after their humiliating loss to the United States in the Spanish-American War. The Palaus came under Japanese control after World War I, along with the rest of the League of Nations Mandate, and they established their administrative headquarters for all of the mandated territory on the Palauan island of Koror. Even more so than was the case in the other island groups of the Mandate, the Japanese kept a tight reign on foreign visitors to the Palaus. As a result, there were few tourist or seafarer accounts to reference and there were no Allied coast watchers to provide vital intelligence, as had been the case in the Solomons and Gilberts, when Navy and Marine Corps planners began to prepare for the invasion of Peleliu. This dearth of information would prove troublesome, to say the least, when it came time to plan for naval gunfire support.³²

The Palaus did not figure importantly into the U.S. interwar ORANGE plans. Their proximity to the many possible harbors available in the Philippines undercut their strategic value. The only Navy planner to see them as important in any way was Captain Samuel W. Bryant, the chief of the Navy War Plans Division under CNOs William V. Pratt and William H. Standley. Bryant believed that the logical first step on the way to the southern Philippines after taking Truk was the Palau Islands. Another planner, Commander Cary W. Magruder, disagreed. Magruder argued that the Palaus could be bypassed and the Japanese forces thereon suppressed and neutralized by air from the Philippine island of Mindanao. It was there that the argument over whether or not to include the Palaus in U.S. plans for a war with Japan rested when the U.S. Navy decided in mid-1935 that it was not a good idea to prepare detailed plans for action against Japan beyond the capture and development of the first Advanced Base, that being Truk in the central Carolines. It was considered best to way for the "fog of war" to

clear before committing to anything beyond that point. Krueger mentioned the Palaus in his 1936 Army Strategical Plan ORANGE as a possible objective, but he determined that the Marianas were the more tactically and strategically important to Japan's defense and so an attack on that island group was more strategically important to the United States in defeating those defenses. The question of whether or not to take the archipelago in a war with Japan, therefore, remained essentially dormant from 1935 until mid-1943.³³

In 1938, when the Joint Planning Committee began to consider what the U.S. should do in case it should find itself at war with Germany, Italy, and Japan, all at the same time, they were familiar with the various Army and Navy versions of the interwar ORANGE plans for a war against Japan alone. Assuming that Guam and the Philippines would be lost, they predicted that the best route across the Pacific to the Home Islands would most probably be a combination of the old direct route from Pearl Harbor and Midway to Luzon and the step by step route from Hawaii to the Marshalls and Carolines, possibly including the Marianas, Yap, and the Palaus. These ideas concerning a Pacific war were incorporated into the various RAINBOW plans. As it turned out, RAINBOW 5, the plan for a war against Germany and Japan with the emphasis being on Germany, eventually provided the basis for U.S. planning and action at the beginning of World War II.³⁴ As a result, the possibility of the United States being interested in the Palaus lay at the heart of the American planning structure from the start. It took clearing of the "fog of war," as the interwar Navy planners predicted, and the conflict between the Pacific Ocean Areas and Southwest Pacific commands to bring the old argument up once again.

The fog had begun to clear by 6 August 1943 when the Joint War Plans Committee (JWPC) submitted JCS 446 to the Chiefs for their consideration. The importance of this document in the planning for the Marianas operation has already been discussed.³⁵ It was also important regarding the Palau Islands, however. For the first time since the mid-1930s, United States planners considered invading the archipelago, scheduling an invasion for 31 December 1944. The planners expected heavy Japanese resistance to this invasion because, as they put it, the enemy understood that American success "would facilitate operations of any nature, in any direction, against some of the enemy's most vital holdings and lines of communication." The plan for the invasion as envisioned at this time consisted of the capture of Yap and various other supporting positions first, to be followed by the seizure or neutralization of all eight major islands in the Palau archipelago. Control of the Palaus would then allow the United States to attack the Philippines.³⁶ Admiral King's objections to the report, noted in Chapter 5, brought attention to the strategic importance of the Marianas as opposed to relative unimportance of the Palaus. His suggestions for revision, while not excluding the latter from the list of objectives, definitely reoriented priorities for the Central Pacific Campaign.³⁷

This reorientation was apparent in the report given to the Chiefs just prior to the SEXTANT Conference in November 1943, an invasion of the Marianas having been inserted on 1 October 1944, but the Palau operation was still set for 31 December. During the discussions after SEXTANT, the JCS entertained one set of dates after another, listening to the arguments of representatives from the Pacific Ocean Areas and the Southwest Pacific commands and making changes as they saw fit. The date for the

Palau operation was moved from 31 December to 15 July to 1 September and, finally to 15 September. Their final word as to the date for the operation was expressed in the 12 March 1944 directive sent to both Nimitz and MacArthur. Concerning the Palaus, it stated:

- d. Establish control of Marianas-Carolines-Palau area by POA forces....
 - (3) Occupation of the Palaus by FOA [sic] forces, target date September 15. The objective is to extend the control of the eastern approaches to the Phillippines [sic] and Formosa, and to establish a fleet and air base and forward staging area for the support of operations against Mindanao, Formosa and China.³⁸

An argument would erupt in the future as to whether or not Peleliu should have been taken, given the high price paid in casualties and the fact that MacArthur changed his plans concerning the capture of the Philippines. As far as MacArthur's original plans were concerned, they were based upon instructions from the JCS. Immediately after the above instructions in the 12 March directive is another set aimed at MacArthur:

e. Occupation of Mindanao by SOWESPAC forces, supported by the Pacific fleet, target date November 15. The objective is establishment of air forces to reduce and contain Japanese forces in the Philippines preparatory to a further advance to Formosa either directly or via Luzon, and to conduct air strikes against enemy installations in the N.E.I. [Netherlands East Indies].³⁹

As evidenced here, the original justification for taking the Palaus was that controlling them would allow POA forces to support SWPA forces in taking Mindanao and, ultimately, to provide support for the invasion of Formosa and the China coast. These plans, both at the strategic and theater levels, would change radically, but the Palau operation would still go off. Admiral Nimitz, in a 1949 letter to historian Philip A. Crowl, echoed these instructions when he stated that there were two main reasons for resting control of the Palaus from the Japanese: "first, to remove from MacArthur's right flank, in his progress to the Southern Philippines, a definite threat of attack; second, to secure for our forces a base from which to support MacArthur's operations into the Southern Philippines."⁴⁰ General O. P. Smith, in his personal journal, expands beyond the instructions from the Chiefs to explain the importance of the Palaus:

The question may arise "why capture the Palaus?" At the time the concept was drawn up there appeared to be several good reason:

- (a) There was a good airfield on Peleliu and an uncompleted airstrip on Babelthaup [sic]. Angaur was suitable for the construction of an airfield. Planes based in the Palaus could support General MacArthur's invasion of the Philippines. Mindanao was only 550 miles from Peleliu.
- (b) Possession of the Palaus, together with the Marianas which were being attacked first, would effectively cut off the bypassed Japanese bases in the Central Pacific.
- (c) Possession of the Palaus would give us a fair anchorage, Kossal Passage, at the north end of Babelthaup [sic] and a more limited anchorage at Koror.⁴¹

Disagreement over the ultimate value of STALEMATE II would be just one of the many controversies that continues to tarnish the memory of this operation to this very day.

Resources and Plans for STALEMATE II

The 12 March directive gave Nimitz the guidance he needed to start serious

planning for post-Marshalls operations. His staff had been busy preparing contingency

plans since late 1943 and had produced the first GRANITE plan by early January 1944.

General O. P. Smith found the planning section of the CinCPOA staff working on an

invasion plan for Babelthuap when he came through Hawaii that same month. He

remarked in his journal that Colonel R. R. Robinson, a CinCPOA planner, was intending

to use the same beaches that Smith and other marines had used in a landing

operations problem at the Marine Corps Schools during the late 1930s.⁴² Preliminary

planning was far enough along by 10 May for Nimitz to launch Operation STALEMATE
formally. He issued on that date CinCPOA's "Joint Staff Study, Revised" for the Palau operation. In it, he designated Commander Third Fleet as overall commander for the invasion; Commander III Amphibious Force as Joint Expeditionary Commander; and the Commanding General of III Amphibious Corps as Commanding General Joint Expeditionary Troops. Following the 12 March JCS directive, he tentatively set the invasion date for 15 September.⁴³

Thus far in the Central Pacific Campaign Nimitz used the descendant of the Central Pacific Force, the Fifth Fleet, in all the planned amphibious operations. Along the way, Spruance's command became practiced in the art of the amphibious assault and CinCPOA came to rely on their expertise. FORAGER was the first operation in which Fifth Fleet needed outside units to meet the manpower and shipping demands of an operation, so III Amphibious Force and III Amphibious Corps from the South Pacific were added for the invasion of Guam. STALEMATE II went further, however. It was the first full-scale amphibious assault operation in the Pacific that was not planned and executed under Spruance's direct command.

A reorganization of the Pacific Fleet that allowed this change to occur began to take shape while the Fifth Fleet was on its way to the Marianas. It all began innocently enough: Nimitz needed to find a place for Admiral William F. Halsey. Halsey had been the commander of the South Pacific Area since before Guadalcanal in 1942. He had worked with both Nimitz and MacArthur from that time until the end of 1943 to tame the enemy in the Solomons and the Admiralties, among other places, and his Third Fleet had become the scourge of the Japanese in the waters immediately east of New Guinea. By 1944, he had done his job so well that the enemy was under control in the

South Pacific and his command was about to be transformed into a rear area. Keeping a fighting admiral like Halsey ashore to oversee supply and recreation issues was a waste, and Nimitz knew it. Halsey had to be used somewhere else and quickly. This apparent conundrum turned out to be fortuitous for CinCPOA, however, because it offered him a neat solution for a growing problem. Both Nimitz and King, and Halsey as well, wanted to accelerate the Pacific war as much as possible. The problem was that the constant planning and training such an acceleration required, on top of the actual execution of the necessary operations, was exhausting the Fifth Fleet Staff. The solution Halsey's dilemma provided was that it would allow Nimitz to change out fleet commanders and their staffs, alternating between Halsey and Spruance, in order for each man to have the time to relax and plan while the other was busy at sea executing an operation. The beauty of the system that evolved was that no additional ships were necessary, the name of the fleet simply changed depending on who was in command: Third Fleet for Halsey, Fifth Fleet for Spruance.⁴⁴

Since Fifth Fleet was busy planning and executing FORAGER in May and June of 1944, Nimitz gave Third Fleet the task of preparing for STALEMATE. The various command echelons for the operation and the men who headed them were as follows: Third Fleet, Admiral William F. Halsey; III Amphibious Force, Vice Admiral Theodore S. Wilkinson; III Amphibious Corps, Major General Roy S. Geiger. Wilkinson, as specified in Nimitz's study, was named Joint Expeditionary Commander for the Western Carolines campaign and Geiger the Commanding General of the Joint Expeditionary Troops. All three echelons immediately began preliminary studies of the Palaus upon receiving Nimitz's 10 May study. Wilkinson, Geiger and their staffs were involved with

the upcoming Guam operation at the time, so planning for both FORAGER and STALEMATE had to run concurrently. On 29 May, CincCPOA issued a Warning Order to Third Fleet concerning the invasion of the Palaus and followed it on 3 June with a new plan, GRANITE II, which set the date of the invasion at 8 September, a week earlier than the JCS had directed. GRANITE II called for an undertaking almost as big as the Saipan and Guam operations combined: four assault divisions divided into two corps invading all of the major islands of the archipelago. The 1st Marine Division and the 81st Infantry Division, comprising the III Amphibious Corps, would attack the southern islands of Peleliu and Angaur while, at the same time, the 7th and 77th Infantry Divisions, comprising the XXIV Corps, U.S. Army, would assault Babelthuap. The 27th Infantry Division would serve as operational reserve.⁴⁵

Being involved in both operations complicated planning for Geiger and his staff. STALEMATE planning needed to continue while III AC executed its part of Operation FORAGER, so Geiger detached a provisional planning staff and sent it to Hawaii where it became operational on 12 June. This staff was eventually renamed X-Ray Provisional Amphibious Corps and command was given to Major General Julian C. Smith, Commanding General of the Second Marine Division at Tarawa and presently Deputy Commander of the V Amphibious Corps. Problems developed very early. The 8 September date was dependent upon the use of several of the units involved in FORAGER. When the invasion of Saipan lasted longer than anticipated, causing the reserve 27th Infantry Division to go in earlier than planned and the invasion of Guam to be put off until July, the plans for the Palaus had to be rethought. In addition, Julian Smith's planners began to have second thoughts about trying to take Babelthuap. First,

they became concerned that the allocated forces were not enough to overcome a growing Japanese garrison on an island larger and more rugged than Saipan. After all, it took three divisions twenty-five days to secure Saipan. Smith was expected to take Babelthuap with only two divisions. Second, Babelthuap was too rugged to allow for much airfield development and its harbor facilities were not the best to be had in the region – the island of Yap and Ulithi Atoll, both near the Palaus, had better harbors and would be easier to conquer and the Japanese already had built and were operating a fine airfield on Peleliu. On 7 July, another Warning Order went out to all subordinate commands involved in STALEMATE. The operation, renamed STALEMATE II, would now be carried off in two phases. The first phase would involve the capture of Peleliu and Angaur and the neutralization of Babelthuap and Koror while the second phase would consist of the capture of Yap and Ulithi. The date for Phase I was pushed back to the original JCS date of 15 September. It would then coincide with MacArthur's assault on the island of Morotai. Phase II, meanwhile, was scheduled tentatively for 5 October.⁴⁶

Admiral Halsey never agreed that the Palaus needed to be taken. He believed that the cost of invading them far outweighed the usefulness of the harbors and airfields they contained. Instead, he argued that the U.S. should go directly into the Philippines. He based this argument upon a belief that Japanese resistance would swiftly collapse at a certain point in time and that the United States needed to be in a position to apply even more pressure on the enemy to complete his destruction when this collapse occurred. Halsey encountered evidence of weakening Japanese resistance while directing pre-invasion carrier strikes in the Philippines immediately prior to the beginning

of Phase I of STALEMATE II and he saw this as an indication that the enemy's anticipated collapse was eminent. MacArthur, following the 12 March JCS directive, was preparing to invade Mindanao on 15 November after securing Morotai. Halsey determined that there were virtually no Japanese on Mindanao, so he radioed to Nimitz on 13 September three recommendations: (1) cancel STALEMATE II; (2) immediately turn over the ground troops mounted for that operation to MacArthur; (3) tell MacArthur to revise his plans to allow for an immediate invasion of the central Philippines. Nimitz replied that Phase I had to go on as planned because the operation had progressed too far to call it off, but Phase II would be reviewed with Halsey's advice in mind.⁴⁷

Nimitz's biographer, E.B. Potter, states that there was another reason why CinCPac did not want to cancel Phase I: the admiral believed that Peleliu's airfield and the anchorage to the north of Babelthuap in the Kossol Passage would prove useful in staging MacArthur's invasion of Leyte. Nimitz sent a message to MacArthur with Halsey's recommendations attached requesting a decision. On 15 September, as the 1st Marine Division hit the beaches on Peleliu, CinCPOA received a dispatch that was written in MacArthur's name. The message said that MacArthur was wiling to make the recommended changes in his schedule if XXIV Corps could be transferred to his command. A message describing all of these changes was then sent to the Joint Chiefs for approval. The Chiefs and President Roosevelt were attending the Quebec OCTAGON Conference at this time. The thought of Nimitz and MacArthur working together so impressed them that approval of the plan was radioed back within ninety minutes. Upon receipt of this message, Phase II of STALEMATE II was cancelled and the 7th and 77th Infantry Divisions were sent to the Southwest Pacific.⁴⁸

These changes affected Julian Smith more than anyone else. General Geiger and the III Amphibious Corps staff returned from the Marianas on 15 August and Geiger relieved Smith in command of the Western Landing Forces. X-Ray Provisional Amphibious Corps was at that point deactivated. Smith retained his title of Commanding General Expeditionary Troops, having under his command two corps, III AC and XXIV Corps. This made him, in essence, an army commander. The transfer of XXIV Corps to MacArthur's command left Smith without an army to command. He retained his position and title but he became superfluous to the operation, General Geiger being the overall ground commander for STALEMATE II in essence. Admiral Wilkinson was also affected, however. As Commander Joint Expeditionary Force, he was in overall command of the amphibious aspects of Operation STALEMATE II. Like Kelly Turner, however, he had to wear two hats. He chose for his second hat that of commander of the Eastern Attack Force (TF 33), the unit scheduled to take Yap and Ulithi. He delegated command of the Western Attack Force (TF 32), the group given the task of covering the Peleliu and Angaur landings, to Rear Admiral George H. Fort. When Phase II was cancelled, this took away one of Wilkinson's hats, letting him concentrate on overall support of the operation.⁴⁹

Division- and Force-level planning and coordination took place over August 1944, with staff members from the various units traveling across the Pacific for conferences and meetings. First Marine Division training began in June and was capped off with Division landing rehearsals in the Cape Esperance area of Guadalcanal on 27 and 29 August. General O.P. Smith describes these rehearsals in his journal:

The first rehearsal was made without firing by Naval gunfire ships. This was a pre-dress rehearsal for the purpost [sic] of testing com-

munications. The part of the exercise which involved the landing of LVT waves and the later transfer operations went off with reasonable smoothness. The communications were not very good. A good many of the radios had been received just before embarkation and there had been no opportunity to calibrate them. I set up the advance CP in the proper location ashore and eventually got communication with the regiments by telephone, but not by radio. The radios were calibrated by the time of the dress rehearsal....

General Geiger visited me at the CP during the first rehearsal. He had not realized that General Rupertus was unable to make the trip ashore and was somewhat concerned about him going on the operation. I assured General Geiger that in the two weeks remaining before the landing I felt General Rupertus' ankle would mend sufficiently to permit him to carry on. (At Peleliu, General Rupertus managed to get around pretty well with the aid of a cane.)⁵⁰

On the dress rehearsal of August 29th, Naval gunfire ships and planes bombed the beaches prior to the landing. This resulted in quite a few rocket duds which were a hazard to the amphibian tractors when they were barging around back of the beaches. The dress rehearsal went off very smoothly, including communications. The next landing would be on the beaches at Peleliu.

On August 30th, there was a critique at Corps Headquarters. It was attended by all the "brass" of the fleet and the ground forces. As I remember the Generals and Admirals included Admirals Oldendorf, Fort, Ainsworth, Sample and Durgin; and Generals Geiger, Rupertus, Mueller (Eighty-first Division), Marcus Bell (Eighty-first Division), Omar Peiffer (an observer from the Navy Department), Silverthorn and myself. There was nothing particularly constructive about the critique. Everyone was pleased with everyone else. The critique did, however, give all hands an opportunity to get acquainted.⁵¹

Everyone, therefore, appeared satisfied with the preparations they had made prior to

the beginning of Operation STALEMATE II. General Rupertus was so sure of the 1st

Marine Division's readiness that he made the following comment during the 30 August

critique: "We're going to have some casualties, but let me assure you this is going to be

a short one, a quickie. Rough but fast. We'll be through in three days. It might take

only two."⁵² The coming battle would show just how overly optimistic he and the other

commanders were.

Naval Gunfire at Peleliu – The "Lessons" Ignored

Optimism prevailed among the planners because they and the entire Central Pacific command were not paying close enough attention to the changes in Japanese defensive tactics that were already evident by the time Geiger and his staff began crafting the STALEMATE II operational plan. The first real evidence of these changes became evident in May of 1944 at Biak in the Schouten Islands. This invasion was part of General MacArthur's mopping up of the New Guinea campaign. The 41st Infantry Division met little resistance on the beach, but resistance grew to the point where the 162nd Regimental Combat Team was almost forced back on its initial landing site. The American forces found that they were dealing with a defense in depth that used the caves and other terrain features of the island to the greatest advantage of the defenders. In addition, the Japanese commander, Colonel Naoyuki Kuzume, instructed his troops to not waste themselves in useless banzai attacks against the American invaders. These tactics caused the battle for Biak to last until August, much longer than MacArthur had anticipated. Kuzume's goal was to overwhelm the Americans once they had established themselves ashore rather than to try to destroy them on the beach. The Japanese Imperial General Headquarters, noting the resilience of the Biak defenses and the troubles encountered by the Americans on Saipan, decided to issue a change in defensive doctrine in July 1944. This doctrine emphasized the preparation of a main line of defense far enough inland to escape the brunt of the American prelanding bombardment, the organization of a defense in depth with the objective of wearing down the invaders, and the retention of sufficient reserves to allow Japanese

defenders the option of mounting effective counterattacks at the optimal time. The Japanese planned to open fire at close to maximum effective range, when the enemy was crossing the reef, attriting the Americans unrelentingly as they advanced. Given the relative disparity in combat power, this doctrinal change made more effective use of Japanese resources. The 1st Marine Division faced these tactics on Peleliu.⁵³

The most important aspect of the American amphibious assault doctrine regarding pre-invasion preparation was the section concerning naval gunfire. The purpose of naval gunfire support, prior to Tarawa, was to soften up the enemy's defenses so that men could be put ashore. The doctrine, after Tarawa, emphasized deliberate destruction of targets both on and near the beach that endangered assaulting troops. The new Japanese tactics attempted to neutralize the overwhelming firepower advantage that the United States Navy could bring to bear on any objective it chose. Biak and Saipan showed that these tactics were effective. The Americans encountered well-developed defenses on Guam, but their prolonged bombardment of that island showed that even defenses in depth could be substantially weakened if naval gunfire was applied with deliberation over a long period and if Japanese fighting positions were located with precision by means of air reconnaissance. The assault of Peleliu would show that the Americans were not paying as close attention to either the Japanese or to their own successes as they believed at the time.

To Rear Admiral George H. Fort, commander of the Western Attack Force, fell the responsibility of taking Peleliu from the Japanese. He chose to keep tactical control of the assault on that objective for himself, giving control of task groups assigned to take Angaur and to sweep the Kossol Passage north of Peleliu for mines to subordinates.

The man responsible for providing Fort with preliminary naval gunfire support was a veteran of several operations prior to STALEMATE II: Rear Admiral Jesse B. Oldendorf. Oldendorf had served with distinction at Saipan and he would become famous in October of 1944 as the commander of the U.S. battleline in the Battle of Surigao Strait in which several American battleships that survived Pearl Harbor were able to wreck their revenge on the Japanese. Operation STALEMATE II would not be his finest hour.⁵⁴

Most of the fire support ships that would take part in the invasion of Peleliu assembled in the Solomon Islands area after the completion of Operation FORAGER. The bombardment force lost the services of one of its old battleships on 23 August while the various ships were enroute to their staging areas when the USS *Tennessee* lost steering and collided with the USS *California*. Navy repair crews got the *Tennessee* in shape in time to participate in the bombardment of Angaur, but *California*, more severely damaged, could not make it to the staging area in time and consequently had to be left behind. Once the force was assembled, it underwent replenishment and then engaged in rehearsals in the Cape Esperance Area of Guadalcanal 27-29 August.⁵⁵ Rear Admiral Fort described the last day of these rehearsals in his Action Report:

An Official rehearsal on August 29, 1944 [sic.] was carried out which closely followed the DOG Day Schedule. A pre-HOW Bombardment (reduced ammunition allowance) was carried out and HOW Hour straging runs were made on the beach area. Communications was established between the [3rd Battalion, 1st Marines; 2nd Battalion, 1st Marines; 1st Battalion, 5th Marines; 3rd Battalion, 5th Marines] and the ships assigned to them for the operation.⁵⁶

Following post-rehearsal replenishment, the Palau bombardment force set out to begin preliminary gunfire preparation of the operation's objectives.⁵⁷

The question of just how closely American naval commanders and planners outside of the Fifth Fleet were paying attention to the "lessons of Tarawa" and the changes in Japanese tactics can be raised concerning the earliest steps in preparing for Operation STALEMATE II. Vice Admiral Wilkinson states that CinCPac and 5th Amphibious Force documents concerning naval gunfire support of landing operations were referenced in preparing his basic plan and that subordinate commands should use these same documents in preparing their plans, but he gives them an out. He states, "Responsible Attack Force Commanders may modify these instructions as circumstances warrant to conform to requirements for their specific objective."⁵⁸ Modifications could thus be made whether or not the modifying commander was aware of the latest information concerning Japanese tactics. Compounding this ignorance of Japanese tactics was an ignorance of what the Japanese were doing on Peleliu. As Samuel Morison put it:

Since there were no tourists' photographs of Palau beaches for planners to study, as in France – no Australian coastwatchers or trading-schooner skippers to consult, as in the Solomons; no information gathered before the war, as in the Marianas and the Philippines – Jicpoa (Joint Intelligence Center Pacific Ocean Areas) had to rely on aerial photographs and submarine reconnaissance. One purpose of...fast carrier force raids on the Palaus at the end of March 1944 was to photograph the islands. Special photographic missions were flown in July and August. But the 1:20,000-scale maps compiled from those aerial photos were defective, owing to cloud cover, heavy jungle growth and clever Japanese camouflage which concealed the important features of Peleliu and gave the general impression that this rugged island was low and flat.⁵⁹

Later reconnaissance by Underwater Demolition Teams prior to the operation did

nothing to corrected this false impression because the "frogmen" were only interested in

reconnoitering the landing beaches.⁶⁰

Wilkinson's basic instructions for how the preliminary bombardment of Peleliu

should be carried out went as follows:

Preparatory Naval gunfire bombardment should be coordinated with Air bombardment to produce the maximum softening up and harassing effect. This should include a steady naval or air bombardment from D-2...until troops are well established on the beach.

The D-2...and D-1 Naval bombardment should be scheduled with the following definite purposes:

- (a) Destruction of enemy aircraft and rendering airfields unserviceable.
- (b) Destruction of enemy guns and emplacements in the objective area.
- (c) Destruction of enemy ammunition dumps, fuel dumps, and buildings.
- (d) Destruction of enemy shipping, including barges and small craft.
- (e) Destruction of beach defenses and strong points in landing areas.
- (f) Bombardment of enemy reserves and personnel concentrations.
- (g) Close fire support of Underwater Demolition Teams during reconnaissance and clearing obstacles on the landing beaches.
- (h) Night harassing fire to prevent reconstruction of fortifications and movement of enemy reserves.⁶¹

He then states that "[a]II fires on these two days should be slow and deliberate in order to produce the maximum destruction of defenses."⁶² The first indication that Wilkinson did not really understand the "lessons" that had been learned thus far in the Central Pacific Campaign is evident in these instructions: he was allowing for only two days of preliminary bombardment. General Geiger recognized the implications of this decision immediately. His experience at Guam proved to him that the effective use of naval gunfire made a real difference in the success of a beach assault. He deemed two days to be an extremely ineffective use of the firepower at the disposal of the Peleliu Attack Force and he requested that the bombardment period be increased to four days. Wilkinson eventually allowed for an additional day and Geiger was glad to get it, but the III Amphibious Corps commander was not truly satisfied with the compromise. In the

end, the amount of ordnance was not increased. Instead, the modified plan called for the use of the same amount of ammunition over the longer timeframe, allowing for greater deliberation and, hopefully, greater effectiveness.⁶³

Additional evidence of a lack of understanding of the fundamentals of proper naval gunfire integration in the assault of a hostile beach on the part of the STALEMATE II team can be found in the planning of the First Marine Division. This veteran unit had spearheaded the first attempt to stop the Japanese expansion on land at Guadalcanal and had followed up that experience with action in the northern Solomons through 1943 and early 1944 in support of General MacArthur's isolation of Rabaul.⁶⁴ In all of these operations, however, the First Marine Division had never made a true amphibious assault landing. Consequently, the staff of the division was not thoroughly schooled in the latest lessons from the Central Pacific Campaign. One of those lessons taught that a division-level naval gunfire officer was a necessary part of the staff when planning for an amphibious assault. The First Division's SAR describes their predicament in this way:

This Division did not have a Marine Naval Gunfire Officer. No officer in the Division had been trained in any way for such an assignment. A naval officer (Lt. jg) of III Phib Corps who had previously worked with the Division was requested for purposes of planning. This officer assisted during this phase. Later, Lt. Marvin P. Morton, U.S.N., reported from V Phib Corps. Although late for the planning, this officer applied himself with vigor and intelligence. With little time to work, he did everything possible to properly indoctrinate and instruct the various [Naval Gunfire Liaison Officers and Shore Fire Control Parties]. In this his success was limited only by time. Lt. Morton had had no previous combat experience although his training was excellent.

The present [Table of Organization] authorized a Major as Artillery and Naval Gunfire Coordinator. This member of the staff in an amphibious operation can be invaluable. However, that officer must have had training in both artillery and naval gunfire. As previously mentioned, this Division had no officer with those qualifications.⁶⁵

Having no staff officer trained in both these specialties handicapped the division planners when it came time to coordinate the training and use of the marines and naval personnel who would ultimately control naval gunfire in support of troops once the assault was underway. The lack of this most important staff officer also led to problems communicating division requests for naval gunfire support to the higher naval authorities responsible for supplying that support.

Once each command echelon had distributed its plans upward to higher authority and downward to its subordinate commands and the rehearsals of 27-29 August that were based upon those plans had taken place, Rear Admiral Oldendorf set out with his task group to take up position off Peleliu so that he could begin the preliminary bombardment. The fast carriers of Task Force 38 attacked the Palaus beginning on D-9 while Oldendorf was at sea and the fast battleships and cruisers accompanying the carriers shelled the islands from long range to help soften up Japanese defenses prior to his arrival at dawn on D-3, 12 September 1944. When his ships were in position, he got right to work, hammering Japanese emplacements beginning at 0530. He reports that "[t]he entire island was systematically bombed and bombarded. The Commander of the Fire Support Group [that is, Oldendorf] accomplished this by assigning the most profitable targets observed and obtained by photographic interpretation." Over the three days preceding D-day, Oldendorf oversaw UDT preparations and his ships carried out the bombardment of Peleliu according to plan with only one variation: poor visibility kept one of the fire support units from being able to deliver its scheduled fire during the period 0530-0630 on D-2.⁶⁶ Over the three days of preliminary bombardment, the

Peleliu Fire Support Unit threw 2,255 tons of ordnance against the Japanese defenders.⁶⁷ Describing his treatment of the landing beaches, Oldendorf stated:

The designated, White and Orange, landing beaches received heavy and sustained punishment as did the high land that overlooked the beaches. This high land was covered with thick tropical growth when the Fire Support Group arrived on Dog Minus THREE Day, but by Dog Day, when the Attack Force arrived, this growth had been systematically destroyed and only charred tree stumps and scarred rocks remained. Numerous caves were then visible on the slopes of the high land.⁶⁸

Rear Admiral Fort arrived off Peleliu at dawn on D-day, 15 September, and, according to plan, took command of the fire support ships, minesweepers, and UDTs.⁶⁹ The naval gunfire support ships then poured 1,373 more tons of ordnance onto Peleliu over the course of D-day as the First Marine Division struggled to establish itself ashore.⁷⁰

The preliminary bombardment of Peleliu has been subjected to withering criticism since the end of the war. Jeter Isley and Philip Crowl were among the first to scrutinize the operation, and they raised some very interesting points. First, they mention a radio transmission from Admiral Oldendorf to Admiral Fort in which the former told the latter that the fire support units had silenced all known targets and that he could find no more to attack.⁷¹ In announcing this to Fort, Oldendorf essentially brought the preliminary bombardment to a halt before he had used his allotment of approximately 1,406 tons of ammunition.⁷² Second, they compare the three days allowed for the preliminary bombardment at Peleliu unfavorably with the thirteen days of pre-invasion punishment delivered by Conolly at Guam, stating:

...the conclusion cannot be avoided that preliminary naval gunfire on Peleliu was inadequate, and that the lessons learned at Guam were overlooked. Guam had demonstrated without shadow of doubt that slow, prolonged, and deliberate naval bombardment could accomplish amazing results even against a strong, well-equipped, and determined force. Peleliu, like Tarawa and to a lesser extent Saipan, demonstrated that the only substitute for such prolonged bombardment was costly expenditure of the lives of the assault troops.⁷³

Rear Admiral Fort, who, as Oldendorf's immediate superior, was ultimately

responsible for his subordinate's performance, took great exception to their critique. In

two letters written to Crowl and Kenneth W. Condit in 1950, Fort stated:

I cannot accept...[the] statement that thirteen days shore bombardment are necessarily a lot better than three. If three days are sufficient, the remaining ten days are an absolute waste of expensive and scarce ammunition....If Admiral Oldendorf broke off fire before he had used up his allowed ammunition on the grounds that there were no more targets, he was entirely correct. The idea that some people seem to have of just firing at an island is an inexcusable waste of ammunition....[As far as the time constraints were concerned, even if there were plenty of visible targets] some of the fire support ships reported so late that it was impossible for them to arrive at the objective until D-3. The D date was set to coordinate with MacArthur's simultaneous landing in S.W. Pacific and could not be delayed. Hence three days bombardment was all that was possible.⁷⁴

The only argument that could be made against the timing of STALEMATE II relative to MacArthur's actions in the Southwest Pacific is the one embodied by the greater question of whether or not the Palaus needed to be captured once MacArthur modified his plans for the invasion of the Philippines. Since Nimitz chose to continue with Phase I of STALEMATE II, such an argument is moot because that decision set the timetable in stone, as Fort points out. Concerning Fort's comments regarding the number of days one ought to allow for the destruction of a given target, however, much can be said in rebuttal. His statement that "If three days are sufficient, the remaining ten days are an absolute waste of expensive and scarce ammunition" is a truism if, indeed, three days are enough to reduce the defenses of an objective. The problem with his using such a truism as the basis for his critique of Isley and Crowl's analysis of the Peleliu preliminary bombardment is that there is good reason to question whether

three days was sufficient to reduce Japanese defenses on this particular objective. His argument that "just firing at an island is an inexcusable waste of ammunition" is also open to criticism. While firing at an island blindly without any thought as to where one's rounds might fall is a mistake that should be avoided, refusing to fire when one simply runs out of visible targets is a mistake as well. The doctrine embodied in *FTP 167* stressed that:

...it must be clearly understood that definite information on targets will be meager prior to the attack, that enemy tactics and doctrine will vary. In the absence of specific information the principle must be followed of placing fire at the at the proper times in all areas from which, should he be there, the enemy could defeat the attack.⁷⁵

While the naval gunfire chapter of *FTP* 167 specifically dealt with the requirements of Dday, the basic concept presented here held for other situations as well. Curiously, considering the argument Admiral Fort uses in his letters to vindicate his subordinate's actions, Oldendorf takes a position very much like the doctrine expressed in *FTP* 167 in a letter he wrote to the Director of Marine Corps History in 1950. In it, he states that, in a situation like he encountered at Peleliu, the "best that can be done is to blast away at suspected positions and hope for the best."⁷⁶ The bottom line here is this: ammunition may be expensive, but human lives are infinitely more valuable. If intelligently expending his entire allotment of ammunition prior to H-hour on D-day could have destroyed more known or suspected enemy weapons, then Oldendorf should have used every last projectile at his disposal. If he suspected that there were more enemy weapons to be found, then he should have made a greater effort to obtain the intelligence he needed to locate those weapons and target them. Proof of the inadequacy of the preliminary bombardment came as the marines went ashore. The assault troops were savaged by small arms, mortar, and light artillery fire as they emerged from their landing craft onto the beaches. General Geiger's naval gunfire officer states that the short time frame allowed the preliminary bombardment insured that only the more obvious targets could be taken out and that "[m]any of these enemy installations [that were left] were of such a nature that it is doubtful if they could have been discovered except by a person on the ground."⁷⁷ It was from installations such as these, many of them caves that proved extremely difficult to reduce, that much of the fire that descended upon the assaulting marines originated – but not all of it. The 1st Battalion, 1st Marines referenced Oldendorf's comment concerning a lack of targets in their report:

[17 Sept. D+2] From patrol information of the day before it had been ascertained that a large concrete structure 60 feet by 60 feet and about 20 feet high with 4 feet reinforced concrete walls lay directly in the center of the Battalion's advance to the south of the road which begins in 133S. Contrary to previous reports from the task force Commander that not a target was standing, this blockhouse – almost, it could be called a fortress because of the pill boxes surrounding it – had not been touched by Naval gunfire nor bombing. The Battalion C.O. ordered the JASCO [Joint Assault Signal Company] Platoon which was attached to us to obtain gunfire support. The USS Idaho obliginly [sic.] fired a mission and punctured the fortress with 2 direct hits from her 14 inch guns. The surrounding pill boxes were pasted with 14 inch and 6 inch fire by the JASCO, and the tanks placed direct fire in them.⁷⁸

This incident occurred two days after the landings when personnel trained to call in accurate naval gunfire had come ashore. This emplacement, however, was prominent enough to have been detected by photo-interpreters and included on maps given to units of the First Marine Division. Consequently, it should have been targeted by the preliminary bombardment and destroyed before the 1st Battalion, 1st Marines ever came

near to the structure. It was not. Why?

Admiral Oldendorf addressed this question in the letter he wrote to the director of Marine Corps History in 1950. He stated in the letter that the blockhouse in question was not indicated on the maps he had been given. In addition, his entire staff was ill from the time of the preliminary bombardment until several days after the landing. Isley and Crowl state that Oldendorf's staff was small to begin with, the Bureau of Naval Personnel allowing him only a cruiser division staff of four officers even though he carried the responsibilities of a much larger command during the balance of the operation in the Palaus. With inadequate maps and usually only a flag lieutenant to help him, the job of coordinating gunfire over the three days prior to the landings was just short of overwhelming.⁷⁹ The lack of adequate staff and the illness among what staff he had was beyond his control. The lack of accurate maps, however, is a different story. Under normal circumstances, great pains were taken to make sure that the maps used by the commanders of fire support units and the maps given to the assaulting troops matched. Doctrine as far back as FTP 167 emphasized the importance of accurate maps and the distribution of those maps to everyone involved in supplying gunfire support:

A map of suitable size and scale is prepared from the best available data (air photos, hydrographic charts, reconnaissance reports, etc.) and is furnished firing ships, shore fire control parties, air observes, liaison officers, and any others directly concerned with naval gunfire. The standard grid system prescribed for the operation is superimposed on this map, in order that locations of targets from other sources such as infantry front line commanders may be readily plotted on the fire-control map.⁸⁰

That Oldendorf's maps did not correlate to the maps supplied to the First Marine Division is an indication that communication between these two echelons of command did not function adequately. Here is where the lack of a Marine Naval Gunfire Officer at the division level probably effected the operation most directly. Without this additional staff officer in the chain of command whose job would have included coordination between the division and the fire support units, such a mistake was more likely to go undetected until it was too late to rectify. The division acquired the services of two naval officers to fill in for the missing marine, but it is obvious that the system failed both Oldendorf and the First Marine Division at some level.

The naval participants in the Palaus operation have spent a lot of time and ink explaining away the deficiencies of the preliminary naval gunfire bombardment delivered at Peleliu. When one considers what the record shows and what the apologists have said in their own defense, however, it is difficult to come away from and analysis of this operation disagreeing with Isley and Crowl's conclusion that the effort was inadequate. The ultimate reason for this inadequacy was blissful ignorance. This ignorance operated on two different levels. First, the planners of Operation STALEMATE II chose to ignore the lessons that Spruance, Turner, and H.M. Smith had learned thus far in the war, choosing instead to trust more in the massive application of firepower than in its intelligent application. General Geiger, fresh from his schooling in the lessons of the Central Pacific Campaign at Guam, attempted to effect a change in the gunfire schedule when he and his staff returned from the Marianas. He was only able to get one additional day and then had to make the best of it. Even his naval gunfire officer, however, showed the American penchant for equating tonnage of ordnance with effective use of gunfire support when he commented in his report that "[d]espite [the] tremendous weight of explosives" used on D-day the assaulting marines

were hit with a large volume of enemy fire as they came ashore.⁸¹

The second level of American ignorance was even more deadly to the marines going ashore at Peleliu, however – ignorance of changing Japanese tactics. Faulty reconnaissance was a problem for the Americans, true, but Japanese tactics made the situation much worse for the marines than it would otherwise have been. The skillful use of camouflage and the decision to build a defense in depth using the natural caves of the island as an integral part of their system demonstrates that the Japanese had taken their defensive doctrine and tactics to the next level. The U.S. Navy and Marine Corps, on the other hand, had allowed their tactical skill to degrade, almost to the level demonstrated at Tarawa. The result was a tragic slaughter that was unnecessary and avoidable.

Endnotes

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2. Frank O. Hough, *The Assault on Peleliu* (Washington, D.C.: Historical Section, HQMC, 1950), 5.

3. Ibid., between pages 12 and 13.

4. Garand and Strobridge, *Western Pacific Operations*, 108; Harry Gailey, *Peleliu: 1944* (Annapolis, MD: The Nautical and Aviation Publishing Company of America, 1983), 69.

5. S. E. Smith, ed., *The United States Marine Corps in World War II* (New York: Random House, 1969), 634-635.

6. Gailey, Peleliu, 69.

7. Garand and Strobridge, Western Pacific Operations, 110, 115, and 119.

8. Hough, *Assault on Peleliu*, 41. Since artillery and mortar fire lack pinpoint precision against moving targets, the amount of Japanese fire to achieve this result was incredible.

9. Garand and Strobridge, Western Pacific Operations, 115-116.

10. Garand and Strobridge, *Western Pacific Operations*, 116 and 117; Hough, *Assault on Peleliu*, 46.

11. Garand and Strobridge, *Western Pacific Operations*, 116; Eugene B. Sledge, *With the Old Breed at Peleliu and Okinawa* (Novato, CA: Presidio Press, 1981; reprint with new introduction by Paul Fussell, New York: Oxford University Press, 1990), 62-63 (page citations are to the reprint edition); quotation from Sledge, 63.

12. Garand and Strobridge, Western Pacific Operations, 116-117.

13. Ibid., 117.

14. Ibid.

15. Ibid., 117-118.

16. Ibid., 118-119.

17. Ibid., 119; Hough, Assault on Peleliu, 45.

18. Garand and Strobridge, *Western Pacific Operations*, 119-120; Hough, *Assault on Peleliu*, 47.

19. Garand and Strobridge, Western Pacific Operations, 120-121; Hough, Assault on Peleliu, 47-48.

20. Garand and Strobridge, *Western Pacific Operations*, 121; Hough, *Assault on Peleliu*, 48-49.

21. Garand and Strobridge, *Western Pacific Operations*, 121; Hough, *Assault on Peleliu*, 49.

22. Garand and Strobridge, Western Pacific Operations, 130.

23. Garand and Strobridge, *Western Pacific Operations*, 114-115; Hough, *Assault on Peleliu*, 38-39; Major General Oliver P. Smith, "Personal Narrative, Peleliu," Part III, page 24. Marine Corps University Archives (MCUA), O.P. Smith Collection, Box 22A, Folder 2.

24. Garand and Strobridge, *Western Pacific Operations*, 110; Hough, *Assault on Peleliu*, 40; quote from Hough, 40.

25. Garand and Strobridge, Western Pacific Operations, 110-112.

26. Garand and Strobridge, Western Pacific Operations, 112-113; Hough, Assault on Peleliu, 40-41.

27. Garand and Strobridge, *Western Pacific Operations*, 113; Hough, *Assault on Peleliu*, 41.

28. Ibid.

29. Smith, "Personal Narrative," Part III, 34; final tally information from Garand and Strobridge, *Western Pacific Operations*, 131.

30. Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945* (Annapolis, MD: Naval Institute Press, 1991), 106; Garand and Strobridge, *Western Pacific Operations*, 55; additional physical statistics concerning Peleliu and the Palaus found on internet at website address www.spc.int/prism/country/pw/stats/PalauStats/PhysicalFeatures/physical_features.htm.

31. Garand and Strobridge, Western Pacific Operations, 55-58; Hough, Assault on

Peleliu, 4-6 and 9.

32. Hough, Assault on Peleliu, 7; Garand and Strobridge, Western Pacific Operations, 54-55.

33. Miller, War Plan Orange, 203-207.

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40. Quote from Jeter A. Isely and Philip A. Crowl, *The U.S. Marines and Amphibious War: Its Theory and Practice in the Pacific* (Princeton, NJ: Princeton University Press, 1951; reprint, Quantico, VA: Marine Corps Association, 1988), 392 (page citations are to the reprint edition).

41. Quote from Smith, "Personal Narrative," Part I, 62.

42. Smith, "Personal Narrative," Part I, 62.

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44. Samuel Eliot Morison, *New Guinea and the Marianas: March 1944 – August 1944*, History of United States Naval Operations in World War II, Vol. 8 (Boston, MA: Little Brown and Company, 1953), 161.

45. Isely and Crowl, 393; Garand and Strobridge, *Western Pacific Operations*, 60-61; Hough, *Assault on Peleliu*, 10-11.

46. Garand and Strobridge, *Western Pacific Operations*, 60-61; Hough, *Assault on Peleliu*, 10-11.

47. Hough, Assault on Peleliu, 190-191.

48. E.B. Potter, *Nimitz* (Annapolis, MD: Naval Institute Press, 1976), 323; Hough, *Assault on Peleliu*, 190-191.

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50. According to Garand and Strobridge, *Western Pacific Operations*, 94, Rupertus had broken his ankle during one of the Regimental-level landing exercises prior to the 27 August Division-level exercise.

51. Smith, "Personal Narrative," Part I, 83.

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56. Commander Task Force 32, Action Report, Peleliu, dtd 16 October 1944, Enclosure E (referenced hereafter as Fort), page 1. NARA, RG 127, Box 297.

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64. First Marine Division Special Action Report, Palau Operation, (referenced hereafter as 1st MarDiv SAR), Phase II, Operational Phase, page 1. MCUA, Peleliu Project, Box 46, Folder 3.

65. 1st MarDiv SAR, Annex K, page 7.

66. Oldendorf, 1-15 and 35; 1st MarDiv SAR, Phase II, page 2; Isely and Crowl, 402; quote from Oldendorf, 1.

67. IIIAC NGF Rpt, Enclosure A.

68. Oldendorf, 1-2.

69. Ibid., 16.

70. IIIAC NGF Rpt, Enclosure A.

71. Morison states that this transmission was sent on the evening of D-1, 14 September. Morison, *Leyte*, 35.

72. Allotment figure from IIIAC NGF Rpt, page 2. 1st MarDiv SAR, Annex K, page 8, states that fewer projectiles were fired than originally allotted.

73. Isely and Crowl, 403.

74. Quote found in Isely and Crowl, 403.

75. Department of the Navy, *Fleet Training Publication 167, Landing Operations Doctrine, U.S. Navy, 1938, Change 3, 113.*

76. Letter referenced and quote found in Garand and Strobridge, *Western Pacific Operations*, 104.

77. IIIAC NGF Rpt, page 2. The Japanese were known to be experts at camouflage and concealment. Given this expertise, such a statement is most likely accurate.

78. First Battalion, First Marines, Historical Report, page 14. MCUA, Peleliu

Project, Box 1, Folder 1.

79. Oldendorf letter referenced and quoted in Garand and Strobridge, *Western Pacific Operations*, 104; Isely and Crowl's comments concerning Oldendorf's staff found in Isely and Crowl, 402.

80. FTP 167, Chg 3, 125.

81. IIIAC NGF Rpt, page 2.

CHAPTER 7

OPERATION DETACHMENT

The Amphibious Assault of Iwo Jima

We were sitting there [aboard ship] watching [the H-Hour bombardment]. Big battlewagons were sitting back there [firing], and aircraft were coming in. The whole island looked like a big dust bowl. They told us that the thing was bombed for seventy-two days, around the clock. I thought to myself, "Oh, a couple of days, and we'll be out of here. Nothing to it!¹

We got out of our bunks that morning and had breakfast. We were anchored off of Iwo Jima. I remember coming out of the ship and walking along the rail. I looked out, and we weren't too far off of the island. It was my first view of it, and it was everything that the map said – but not quite. I thought maybe it was a place with palm trees, something like Saipan, Tinian, and the Marshalls. When I first saw it, the only thing I could see was death.... It was dead. I've often described it as something that nobody wanted, and they burned it up. All that was left was ashes. It was gray, and there was smoke coming up from different places where they had bombed. There couldn't be any life on it. It was a picture that one would call Hell.²

At 0640 on 19 February 1945, naval gunfire support vessels began the pre-H-

Hour bombardment for what would prove to be the bloodiest operation in the history of the United States Marine Corps, the invasion of Iwo Jima. At 0805 the gunnery vessels lifted their fire so that seventy-two fighters and bombers from TF 58 could attack the eastern and northern slopes of Mount Suribachi, the landing areas, and the high ground on the north flank of the assault beaches with rockets, napalm, and general-purpose bombs. Forty-eight additional fighters immediately followed up this attack by dropping napalm on, firing rockets at, and strafing the same areas.³

The first wave of LVTs crossed the line of departure at 0830. Armed with a 75mm howitzer, these LVT(A)(4)s were to provide the following assault waves with much needed artillery support as the latter crossed the beach and headed inland. Each



Map 19 – Iwo Jima Landing Plan⁴

wave was allotted thirty minutes to travel the 4,000 yards between the line of departure and the shore all the while maintaining 250-300 yards between each wave. The second wave, LVT(2)s carrying 1,360 marines, crossed the line of departure at 0832 followed five minutes later by the third wave carrying 1,200 more. All together, there were ten assault waves, the last eight following the second at five-minute intervals. At 0857, when the first wave of LVTs was approximately 400 yards from the shore, naval gunfire lifted inland and to the flanks. From this point gunfire support vessels began laying down a "rolling barrage" 400-500 yards in front of the advancing troops. Fighters simultaneously began to strafe the landing beaches and continued this strafing until the first wave came ashore, at which time the focus of the strafing attacks shifted inland approximately 500 yards.⁵

Amphibian tractors first came ashore on Iwo Jima at approximately 0902, only two minutes behind the targeted H-Hour. The Marines made two unwelcome discoveries as they emerged from the ocean. First, an eight to fifteen foot high terrace existed directly behind the landing beaches. This terrace blocked the LVT(A)(4)s' field of fire inland. Second, the beach turned out to be covered with a soft, black volcanic sand that lacked the cohesiveness necessary to hold up even an individual marine much less a wheeled vehicle. Even tracked vehicles like the LVTs and M-4 medium tanks found the going difficult at best. Some of the LVT(A)(4)s advanced 50-75 yards inland, beyond the first terrace, by hitting the beach at full speed and letting their momentum carry them up the incline. The LVT(A)(4)s that could not make it across the first terrace positioned themselves offshore so that they could support the landing by firing their 75mm howitzers inland. The second assault wave came ashore at 0904, the

third at 0907, and the fourth, carrying 1,600 marines, crossed the beach at 0912.⁶

Organized enemy resistance was not apparent during the landing of the first four or five assault waves. Holding to Kuribayashi's orders, the Japanese did not fire on the initial waves as they churned across the 4,000 yards from the line of departure to the beach nor did they fire antiboat guns at the tractors during their final approach. Isolated enemy artillery and mortar rounds began to land in the surf as the later waves reached the shore, however. The first marines to feel the effects of Japanese resistance were the men of Major Robert Davidson's 2nd Battalion, 23rd Marines (2/23) on Yellow 2. At approximately 0904 his unit reported that they were under moderate mortar attack and by 0920 Fourth Division marines on both Yellow and Blue beaches were reporting heavy enemy fire. The men of the Fifth Division were spared at first, but by 0935 the Green and Red beaches were under an intense mortar barrage as well. Japanese resistance grew rapidly more intense after this slow start until, at its peak, the ferocity of the artillery and mortar barrage that poured down on the beaches of Iwo Jima was greater than any yet encountered in the Pacific. The landing beaches were covered with smashed and swamped landing craft, the scattered paraphernalia of combat, and dead, wounded, and crawling marines within an hour and a half of the first tractors clattering ashore.⁷

The 28th Marines, landing across Green 1, was one of those Fifth Division units that encountered light opposition as it came ashore. The 1st Battalion (1/28) advanced approximately 150 yards by 0930 and at 0935 the 2nd Battalion (2/28) began to land behind it over the same beach. By 0940, however, 1/28's pace slowed considerably as it came under increasingly heavy fire. By the time it had covered 300 yards it was being

inundated with mortar and artillery fire from Mount Suribachi and the high ground north of the landing beaches. Battalion Landing Team 2/28, meanwhile, found it extremely difficult going as it attempted to organize its companies on the beach under an increasingly lethal Japanese barrage. Battalion Landing Team 1/28 was supposed to move across the 700 yards of the island's narrow neck just to the north of the volcano, thereby isolating it from the rest of the Japanese positions to the north, while 2/28 was supposed to take up positions facing Mount Suribachi for the purpose of protecting the left flank of the entire landing force. Completing that mission was beginning to look problematic.⁸

Coordinated movement by the marines became impossible and momentum was lost as increasingly intense and accurate small arms fire took its toll. Advance beyond the first terrace was very difficult. Anyone attempting to leave its protection was immediately fired upon by numerous rifles and machine guns emplaced in well-concealed pillboxes, blockhouses, and caves. Besides battling the Japanese, the men of the 1/28 also fought with the volcanic sand as they clawed their way inland. The knowledge each marine possessed of the proper way to dig a foxhole was a useless bit of trivia there on the beaches of Iwo Jima. The volcanic sand that caused so many problems for vehicles was so slippery that it filled in any hole as fast as a man could shovel. Filling sandbags with the stuff seemed to be the answer, so very urgent calls began to go out over the radio net for as many bags as could be brought ashore.⁹

Having spared the first assault waves until they were ashore, the Japanese changed their tactics as the later waves came in. They began to target LVTs and landing craft, creating a maze of wreckage through which the Navy coxswains had to

navigate in order to get to the shore. Landing craft broached as their bows were pinned to the beach by wheeled vehicles that sank into the soft volcanic sand as they attempted to exit. The mess kept piling up – and the system kept shuttling men and supplies ashore. All eight assault battalions had hit the beach within one and a half hours of the time when the first marines set foot on the island.¹⁰

Enemy positions that had been bypassed in 1/28's area of responsibility continued to fire on marines. The heavy casualties sustained by 1st Battalion prompted Colonel Liversedge to request the General Rockey release 3/28, in division reserve, to his control. Rockey agreed to do this and preparations began to land the battalion. The first boats containing elements of 3rd Battalion crossed the line of departure at 1220. Heavy fire from Suribachi and the high ground to the north of the landing beaches splashed among the landing craft as they approached the shore, tearing into the boats as they attempted to discharge their troops onto shore. Battalion Landing Team 3/28 suffered many more casualties than did 1/28 and 2/28 during their earlier ship-to-shore movement. All elements of the 3rd were ashore by shortly after 1300, but they were not able to insert themselves into the line of combat until late in the afternoon.¹¹ The 2nd and 3rd Battalions were slated to attack south toward Suribachi at 1545. The attack was to be preceded by preparatory naval gunfire and it was to be accompanied by what was described as "adequate" air support. Battalion Landing Team 2/28 finally launched its attack just before 1700 supported by tanks from Company C of the 5th Tank Battalion. It advanced 150 yards by 1730 at the cost of many casualties, but this ground had to be given up when orders were received to fall back and tie in with 3/28 for the night.¹²

The 27th Marines, in the meantime, was fighting its own battle for survival. Landing across beaches Red 1 and 2, the 2nd and 1st Battalions, like the 28th Marines to their south, encountered only scattered resistance. Also like the 28th, however, casualties mounted from enemy mortar and artillery fire the RCT advanced beyond the immediate landing areas. Battalion Landing Team 1/27 entered the south end of Motoyama Airfield No. 1 at 1130. Company C crossed the field and took up a position along a 250-yard line extending from its southwestern portion to the northwest. Unable to make its planned turn to the north, the battalion began consolidating along the western edge of the airfield. Company A of the 5th Tank Battalion supported 1/27 in its attacks against strong Japanese defenses around the airfield, but, even with tank support, the BLT was not able to make a significant advance for the rest of D-day. The 2nd Battalion encountered its first pillbox approximately fifty yards inland off the beach. Following established Marine Corps procedures, most enemy positions were bypassed on the way across the island. The advancing assault companies took on only those installations that were in their immediate path, leaving these bypassed positions to be taken out later by regimental reserve 3/27 after it had landed at 1130. Once elements of the assault battalions engaged an enemy pillbox, assault teams equipped with flamethrowers and riflemen throwing hand grenades neutralized the Japanese within the installation and engineers then blew up the pillbox with explosives. Battalion Landing Team 2/27 was able to push all the way to the cliffs overlooking the island's west coast by approximately 1500 using these tactics. Battalion Landing Team 1/26 completed its landing over Red 1 by this time and was attached to 2/27 at 1502. It was then ordered to take up defensive positions behind 2/27.¹³

The situation on Iwo's southern beaches deteriorated so rapidly on the morning of D-day that General Schmidt found he needed to release his Landing Force reserve, the 26th Marines, back to its parent Fifth Division within one hour after beginning operations. At 0955 Schmidt released the 26th, less the 1st Battalion, and reconstituted his corps reserve by designating the newly arrived 21st Marines of the 3rd Division to take their place. 26th Marines (- 1st Battalion) started for the line of departure at 1106, but crowded conditions on the beach and limited space inland for an advance delayed its landing until 1732 that afternoon. Going in over Red 1, it advanced to an assembly area at the southern tip of Motoyama Airfield No. 1 and took up defensive positions there. The situation ashore also complicated the landing of the division's organic artillery support regiment, the 13th Marines. It finally started going across the beach at 1400 but was not able to have elements emplaced and ready to provide support to the embattled infantry regiments until 0440 on D+1.¹⁴

Hard as it may be to believe, given the foregoing description of events transpiring in the Fifth Division's zone of operations, but accounts of the day's action generally agree that the beaches within the Fourth Division's zone were even more deadly. Landings on the northern beaches began at the same time as did those on the southern ones, the 1st Battalion, 23rd Marines (1/23) landing over Yellow 1 and the 2nd Battalion (2/23) over Yellow 2 at 0900, precisely at H-Hour. Like its counterparts in the south, the RCT encountered little trouble going ashore and the advance to the first terrace was without significant incident. Then things changed. Heavy and accurate fire began to tear at the men of both battalions from the front and flanks as they approached the second terrace. At 0930 1/23 reported having advanced 250 yards inland and 2/23

reported a similar advance at 0940, but the enemy's defensive fire was beginning to take its toll. The Japanese were firing at the Marines from the remains of two blockhouses and fifty pillboxes that had not been destroyed by the preliminary naval gunfire and air bombardment. This stiff opposition was proof that armor support was needed and, at 1005 sixteen tanks of Company C, 4th Tank Battalion began landing over the Yellow beaches. The soft volcanic sand and land mines combined to slow Company C's advance to the front lines, but the tanks that survived were able to provide enough support for 1/23 to allow the battalion to advance an additional 500 yards by noon, just 200 yards short of the airfield. Battalion Landing Team 2/23 was not so fortunate. Tanks were unable to find a way to get into position to provide support and, consequently, the battalion's advance was only half that of 1/23's by noon.¹⁵

The left flank of 1/23 finally reached the boundary of Airfield No. 1 at 1405. The tank support that had helped 1/23 to advance so much further than 2/23 was compromised at this point, however. The tanks began to draw intense anti-tank fire and had to pull back to the revetted edge of the airfield, leaving the infantrymen to push the attack without their immediate support. The slow advance of 2/23, in the meantime, began to greatly concern the 23rd Marines' regimental commander, Colonel Walter W. Wensinger. At 1300 he called for the landing of his regimental reserve, 3/23, the plan being for the 3rd Battalion to move inland approximately 200 yards and then to provide 81mm mortar support to the beleaguered 2nd Battalion. The landing, like the landings of the assault battalions, went off without significant incident. Also like the experience of the assault battalions, unfortunately, was the situation ashore immediately following the coming ashore. The Japanese laid down an extremely heavy barrage on the beach,
and casualties mounted as 3/23 tried to push its way through the wreckage and bodies strewn across the narrow strip of sand that was their dubious refuge from the pounding surf of the Pacific. Colonel Wensinger ordered the battalion to pass through 1/23 in order to exit the congested beach. Casualties and congestion took their toll, but 3/23 finally reached the airfield boundary by 1700 and, despite the confusion of battle and a lack of tank support, Company F, 2/23, reached the apron of Airfield No. 1 by 1730 and took a defensive position there for the night.¹⁶

General Cates, like Colonel Wensinger, was concerned about the slow progress of 2/23 as well as the terrible beating the battalion was taking in the process. At 1405 he ordered two battalions of his divisional reserve ashore, 1/24 and 2/24. Battalion Landing Team 1/24 would provide support for the 25th Marines, but 2/24 was earmarked to relieve 2/23. The 2nd Battalion went ashore at 1650 over Yellow 2 and proceeded to advance 700 yards inland to the front line. It then carried out the relief of 2/23 at 1800 and tied in for the night between 3/23 on the right and 1/25 on the left.¹⁷

The northernmost invasion beach, Blue 2, was located directly below a cliff from which the Japanese could rake the incoming assault forces almost with impunity. The 25th Marines' regimental commander, Colonel John R. Lanigan, attempted to overcome this problem by having his two assault battalions, the 1st and 3rd, land abreast over Blue 1 and the southern edge of Blue 2. Like in the case of the other assault forces on D-day, Lanigan's marines encountered only light enemy fire going into the beach at a little past 0900. When they had gotten only twenty-five yards out onto the beach from their LVTs, however, the Japanese unleashed upon them a hailstorm of mortar, artillery, rocket, and heavy machine gun fire. Battalion Landing Team 1/25 reported at 0935 that

it had advanced 300 yards and at 1005 3/25 reported that elements of the battalion had moved 350 yards northeastward along the beach and that its left flank had penetrated inland 400 yards making contact with 1/25.¹⁸ Marine casualties mounted steadily while relatively little damage was done to the Japanese in return.

By 1200, however, BLTs 1/25 and 3/25 found that a 100-yard gap had opened between them. This gap had to be plugged, but it could serve a useful purpose while it existed. The source of the murderous volume of fire that the Japanese were bringing down upon the assault battalions was the high ground to the northeast of Beach Blue 1. Colonel Lanigan decided to use his regimental reserve, 2/25, to advance through the gap between the 1st and 3rd Battalions in columns of companies and then to assault the Japanese positions on the high ground. With this plan in mind, BLT 2/25 landed over Beach Blue 1 at 1250 and moved inland 300 yards to an assembly area. Company E prepared to take up a position between 1/25 and 3/25. The now complete RCT 25 then began a coordinated regimental attack against the high ground above Blue 2 at 1400. Intense enemy resistance made the going hard and slow. By 1730 3/25 was so debilitated by casualties and disorganization that Colonel Lanigan had to request permission from Division to reinforce the battalion with a company from 1/24. Permission was given for this move and the battle raged on. Battalion Landing Team 2/25 reported at 1745 that it had reached the high ground around the quarry and, at 1830, Company L, 3/25, reported the same. At 1900 contact between 2/25 and 3/25 was reestablished. At about the same time, Lieutenant Colonel Justice M. Chambers, commanding officer of 3/25, reported that the combat strength of his battalion was down to 150 men. Relief of the 3rd Battalion, 25th Marines by elements of the 24th Marines,

Division Reserve, took place during the night beginning at 1845 and ending at 2330.¹⁹

While RCT 25's desperate battle for the high ground above Blue 2 was being played out, the two direct support battalions of the Fourth Division's artillery regiment, the 14th Marines, were ordered ashore. The 1st Battalion, armed with 75mm Pack Howitzers, struggled to make it onto the island over Beach Blue 1. Its guns were in place and registered by 1745, ready to provide a much needed artillery punch to RCT 25's attack. The 2nd Battalion, slated to supply direct support for RCT 23, encountered even greater difficulties than did 1/14. The DUKWs carrying its 105mm howitzers could only land on Beach Yellow 1one at a time because of a combination of surf and beach conditions, but it was finally in place and ready to fire shortly before dusk. The 3rd and 4th Battalions did not make it ashore on D-day.²⁰

Strategic and Operational Objectives for DETACHMENT

Thus ended the first day of what was to be the Marine Corps' most difficult battle in its history. An operation that some thought would take only a couple of weeks at the most lasted for 36 days and cost the Americans more casualties than they inflicted on the enemy. Such an outcome can be expected from time to time and can be chalked up to "the fortunes of war," but Iwo would be the third time in nine months that the United States failed to properly divine Japanese defensive plans and, as at Biak and Peleliu, the assaulting soldiers and marines paid the price. As far as Iwo Jima was concerned, what was so important about this small, inconsequential hunk of volcanic rock and sand that it would attract the interest of American planners in the first place? To answer that question, one first needs to understand both the physical characteristics of the objective and how interservice rivalry influenced the decision making process within the Joint

Chiefs of Staff.

Iwo Jima ("Sulfur Island") is located in a chain of islands, the Nanpo Shoto, stretching from just beyond the entrance of Tokyo Bay to within 300 miles of the Mariana Islands. There are three island groups making up the chain. The northernmost group, known as Izut Shichito, is composed of six main islands and a number of smaller ones. The center group, named the Ogasawara Gunto but more commonly referred to by Americans during World War II as the Bonin Islands, consists of four islands: Muko Jima, Nishino Shima, Chichi Jima, and Haha Jima. Iwo Jima is found in the center of the third group, the Kazan Retto ("Volcano Archipelago" or "Islands"). American planners tended to lump the Volcano Islands together with the Bonins and use the latter name for all of them, but, technically, the Volcanoes and the Bonins were not the same.²¹ As far as Pacific Ocean distances are concerned, this location (24°44' N 141°22' E) placed Iwo in close proximity to several important American objectives: 670 miles south of Tokyo, 625 miles north of Saipan, and 700 miles north of Guam.²²

Iwo's appearance from the air has been described variously over the years. To this writer's eyes, however, the most accurate analogy is to a pork chop. Covering a total of seven and one-half square miles, the island stretches four and two-thirds miles to the northeast from Tobiishi Point (just southwest of Mount Suribachi) to Kitano Point and it expands from a width of 700 yards at the landward base of Suribachi to two and one-half miles across the widest part of the northeastern portion. The profile of the island from seaward has been described as looking like a partially submerged whale with Suribachi, an extinct volcano rising 546 feet above sea level, providing the tail and the northeast plateau gently rising above the surface giving the appearance of a whale's

head and back.²³

The presence of Suribachi provides the observer with the most obvious clue as to the origin of the island: Iwo Jima is a young volcanic island, geologically speaking, with sparse vegetation and a moon-like landscape. There is no fringing reef like American forces had encountered so often before in the Pacific and the surrounding waters are free of rock outcroppings. The island affords no natural harbors or protected anchorages of any kind. This is the main reason that Sulfur Island was rarely ever mentioned in the prewar ORANGE plans. The seabed rises to the beaches very steeply so that within just a few feet of the shoreline the water is ten to twelve feet deep. Without the protection of a reef or harbor, ships attempting to offload there cargo onto Iwo are pounded by unrelenting open ocean surf that makes a mockery of there efforts. American forces would find just how difficult these conditions could be to overcome on 19 February 1945 when it was too late to do anything but stay the course and hope to God that they could persevere.²⁴

To understand how Iwo Jima rose from a strategic irrelevancy to the level of necessary objective one must look into the inner workings of the Joint Chiefs. Robert S. Burrell argues in a recent article that their decision to take this obscure piece of volcanic flotsam was influenced more by interservice rivalry than by realistic strategic considerations.²⁵ Such can be argued to have been the case in the end, but there were other factors involved in the decision as well. One of them was Admiral King's adamancy concerning the seizure of the Marianas and his interest in the eventual capture of Formosa. The first mention of islands in the Nanpo Shoto in the records of the JCS occurs in August of 1943 during the debate over JCS 446. As described in

Chapter 5, King wanted to insert a statement into that document that would allow for an eventual movement toward the Marianas. He included the Bonin Islands in this statement along with the Marianas because their inclusion strengthened his argument for an invasion of the latter. Shortly after King won his argument for including this broadening statement in JCS 446, air planners in Washington recommended to the JWPC that the timetable for seizing the Marianas be accelerated and, by the way, it would be a good idea to establish fighter bases in the Bonin Islands to protect the bombers that would be flying missions over Japan from the Marianas.²⁶

Another factor influencing American interests in the Bonins was preparation for the OCTAGON Conference (12-16 September 1944) and the need to push the British to support an invasion of Japan. The most the British would promise at SEXTANT was support for an invasion if one should be necessary. The American planners by mid-1944 believed that the preponderance of air, sea, and land power built up by the U.S. in the Pacific argued for the mounting of an invasion as early as was practicable. They presented this argument to the Joint Chiefs on 30 June 1944 in a Joint Staff Planner's report (JCS 924). This paper defined the objective of the war with Japan as "invasion of the industrial heart of Japan and the seizure of objectives therein, in order to force the unconditional surrender of Japan." What should the intermediate objectives be on the way to the Home Islands? They were:

- a. Concurrent advances through the Ryukyus, Bonins, and Southeast China coast for the purpose of intensifying the blockade and air bombardment of Japan and creating a situation favorable for:
- b. An amphibious assault on Kyushu for the purpose of further reducing Japanese capabilities by engaging and fixing major enemy forces and establishing a tactical condition favorable to:
- c. A decisive stroke against the industrial heart of Japan by means of an amphibious attack through the Tokyo plain assisted by continued

pressure from Kyushu.²⁷

In addition, the JWPC recommended dates from about 1 April to 30 June 1945 for air attacks on the Home Islands and the invasion of the Bonins and the Ryukyus.²⁸

The JWPC went even further. They believed that invasion and unconditional surrender needed to be made the basis for future Pacific war planning, but that could come about only if the British agreed. With persuasion of the British Chiefs at the next conference in mind, then, the American planners suggested that the Combined Chiefs undertake a restatement of the overall objective for the Pacific. They recommended the following wording:

[The overall objective of the war in the Pacific will be t]o force the unconditional surrender of Japan by:

- 1. Lowering Japanese ability and will to resist by establishing sea and air blockades, conducting intensive air bombardments, and destroying Japanese air and naval strength.
- 2. Invading and seizing objectives in the industrial heart of Japan.²⁹

The British Chiefs, upon receiving a copy of the recommended change, voiced concerns that such a change in the overall objective in the Pacific might jeopardize the already agreed-to priority of "Germany first." The JWPC recommended that the JCS send a reply to the British assuring them that it was not the intent of the United States to jeopardize the war in Europe in undertaking an expansion of the war effort tin the Pacific. The JCS sent this reply to the British Chiefs on 4 August, but the British did not answer. Finally, during the OCTAGON Conference, the British recorded their official approval of the restated objective. From this point, then, the invasion of Japan became the ultimate stated goal of the Pacific war.³⁰

The importance of the Army Air Forces' support for King's Marianas operations has already been discussed. What needs to be detailed here is how that same support influenced Operation DETACHMENT. A year after the debate over JCS 446, the idea of capturing an island in the Bonins caught the fancy of more than just the Army Air Forces' planners, and for different reasons. Raymond Spruance, upon returning to Pearl Harbor from the Marianas in early September, met with Nimitz to discuss future operations for the Fifth Fleet. Nimitz told Spruance that the next operation would be Formosa and Amoy, a port on the Chinese coast. Spruance, who had been studying the question of where U.S. forces should go next when a lull in the fighting off the Marianas would allow him the time to do so, immediately told his boss that he did not like Formosa as an objective. When Nimitz asked him his preference, Spruance said that he would prefer seizing Iwo Jima and Okinawa. He knew that an invasion of Formosa had been Admiral King's ultimate objective in preparation for a blockade of the Japanese Home Islands that would obviate the need for an invasion. Although King had convinced the other members of the JCS at least to consider his Formosa strategy, however, Spruance knew that there were others beside himself who had doubts about it. One of those people was Chester Nimitz.³¹

Admirals King and Nimitz held another of their periodic conferences in San Francisco 29 September through 1 October 1944, and, as usual, they discussed the results of recently completed operations as well as other issues relating to the continuation of the war against Japan. The most important of the latter group concerned future operations, and it was in light of this question that Nimitz and his staff put before King their arguments against invading Formosa. Robert S. Burrell describes

Spruance at this meeting as agreeing with Nimitz's conclusion to forego Formosa in favor of General MacArthur's plan to invade Luzon in the Philippines on 20 December 1944 to be followed by the POA invasion of Iwo Jima on 20 January 1945 and of Okinawa on 1 March 1945, but, as described above, it was originally Spruance's idea to go into Iwo and Okinawa and not Nimitz's. What is more, even though Nimitz and some members of his staff mentioned the Army Air Forces' arguments in support of an invasion of Iwo, Spruance did not rely on them initially to justify his preference to Nimitz and others prior to the conference. According to Spruance's biographer, his early reasoning was based upon the classic strategic concept of interior versus exterior lines of communication. Since interior lines can be more easily protected than exterior lines, it behooves the strategist to strive to establish the former. Spruance saw Iwo Jima as the focus of an arc running through Tokyo, Kyushu, and the Ryukyus, its capture allowing the U.S. to establish an airbase that would augment American carriers in protecting the fleet from the thousands of airplanes the Japanese had hoarded in the Home Islands. In other words, the capture of Iwo Jima would allow the U.S. to operate along interior lines of communication as it tightened its grip on Japan. Faced with determined and logical opposition to his treasured Formosa strategy from the men he had trusted to fight the Pacific war, King finally relented and agreed to recommend the invasions of Iwo Jima and Okinawa to the Joint Chiefs.³²

King circulated the draft of a directive to Nimitz and MacArthur among the Chiefs upon his return to Washington on 2 October that essentially embodied all that he had discussed with Nimitz and his staff in San Francisco. On 3 October, the JCS sent a directive to MacArthur telling him to prepare to take Luzon on 20 December and they

sent another to Nimitz telling him to provide cover and support for MacArthur's operation. Additionally, Nimitz was to begin planning operations against one or more positions in the Bonins and the Ryukyus. With the successful completion of all of these operations, a lodgment on Formosa or the China coast would be unnecessary for the prosecution of a naval and air blockade of Japan. King, Nimitz, and Spruance hoped that it would mean that there would be no reason for an invasion of the Home Islands as well. It was now up to Spruance and his Fifth Fleet to carry out the first of the newly scheduled POA operations, the seizure of Iwo Jima.³³

Resources and Plans for the Assault of Iwo Jima

Tying Operation DETACHMENT so closely to the invasions of Luzon and Okinawa would prove costly in the end. The effect of Luzon and MacArthur's other Philippine operations became evident very early. Planners recognized by mid-November that the one-month interval allowed for between the Luzon and Iwo assaults was too short a timeframe to allow for the transference of shared amphibious and support shipping between commands. In the first of two delays, Nimitz recommended that Iwo be put off until 3 February and Okinawa until 15 March to compensate. As MacArthur's forces became bogged down on Leyte, the Japanese fighting tenaciously to hold on to every square inch of the island as long as possible and nature conspiring with the enemy to slow U.S. troop progress and airfield construction to a standstill, he decided that the Luzon operation would have to be postponed to 9 January. Once again, Nimitz was forced to change the dates of his operations to coordinate with ComSWPac. In early December Nimitz sent a message to the JCS requesting that the Iwo operation be postponed until 19 February and Okinawa until 1 April. The Joint

Chiefs agreed and the dates were finally set.³⁴

Nimitz's staff at Pearl Harbor could not wait for every eventuality to work itself out before beginning making plans for DETACHMENT. Accordingly, they went right to work upon receipt of the 3 October JCS directive, aiming for the original target date of 20 January. Because the Pacific Ocean Areas was a command made up of elements from all the services, the central planning agency under CinCPOA was a body organized along lines similar to those of the Joint Chief's Joint Staff. This group issued a study on 7 October 1944 that was to serve as the preliminary planning foundation for all subordinate commands. It was not a directive, however, so CinCPac/CinCPOA was not restricted by it to a particular course of action. Tentative as it was, the description of the purposes of DETACHMENT contained therein was rooted in the ideas of America's toplevel planners. These were:

To maintain unremitting military pressure against Japan.

To extend our control over the Western Pacific.

To establish a base from which we may:

- (1) Attack the Japanese Empire.
- (2) Protect our bases in the Marianas.
- (3) Cover our naval forces and conduct search operations in the approaches to the Japanese Empire.
- (4) Provide fighter escort for very long range operations.³⁵

As far as specific tasks were concerned, the study envisioned the following:

- (a) To reduce Japanese naval and air strength and production facilities in the Empire.
- (b) To destroy enemy naval and air strength in the Bonins.
- (c) To capture, occupy, and defend Iwo Jima and develop an air base on that island.³⁶

The first of these specific tasks would provide Spruance and Turner with a trump card in

their argument with Marine Corps planners over the amount of preliminary naval gunfire

at Iwo.37

The CinCPOA directive for Operation DETACHMENT came down on 9 October 1944. Nimitz designated in that document the following men to be his top-level commanders at Iwo: Operation Commander, Admiral Raymond A. Spruance; Joint Expeditionary Force Commander, Vice Admiral Richmond Kelly Turner; Commanding General Expeditionary Troops, Lieutenant General Holland M. Smith; and Second in Command Joint Expeditionary Force, Rear Admiral Harry W. Hill. All levels began operational planning at once. Spruance issued his Operation Plan No. 13-44 on 31 December 1944. Considering how DETACHMENT would eventually unfold, knowing what Spruance understood – at the time – to be the ultimate objectives of the operation would be enlightening:

- (a) The occupation of SAIPAN, TINIAN, and GUAM has served to establish our shore based air forces in locations from which continuing air attacks are being made against enemy positions in the NANPO SHOTO. Continual reconnaissance from the MARIANAS of the sea areas in the southern approaches to the Japanese Empire is being conducted. The MARIANAS also provide bases from which long range bombers can operate against enemy positions in JAPAN. In order to operate with the greatest effectiveness and with a minimum of attrition, long range bombers should be provided with fighter support at the earliest practicable time. IWO JIMA provides three sites for airfields and is admirably situated as a fighter base for supporting long range bombers between the MARIANAS and the Empire.
- (b) The results of carrier attacks on PALAU, MINDANAO, the VISAYAS and LUZON have revealed a weakness of Japanese aviation in their forward areas which will permit more rapid advances. To exploit this situation it is necessary to establish ourselves in positions from which we can engage the enemy in the Empire itself.
- (c) Several divisions are now deployed in the South PACIFIC and the Central PACIFIC, from which positions they can be readily mounted for an assault on the NANPO SHOTO. The interval between the LUZON operation and the earliest subsequent operation of

comparable size offers the possibility of sufficient time to complete an assault on the NANPO SHOTO without delaying or interfering with other scheduled operations.

(d) This assault will be executed in a single phase, with two divisions employed simultaneously in such a manner that the complete subjugation and occupation of the island will be quickly effected, after which all major assault troop units will be evacuated, leaving the development and defense of the island in the hands of garrison forces.³⁸

There are two observations to be made here. First, Spruance concentrated his attention on the greater strategic questions concerning the operation rather than on the problems associated with taking the immediate objective. One cannot read too much into this conclusion alone, however, because Spruance himself admitted that he was a better strategist than a tactician and, also, he had operated successfully in this way in every operation prior to DETACHMENT.³⁹ Second, Spruance initially believed that seizing Iwo would not be too difficult a proposition and that, consequently,

DETACHMENT would fit in neatly between the two larger operations in the Philippines and the Ryukyus. By itself, this last assumption would not be harmful. The combination of the two, however, would prove deadly to the marines tasked with assaulting Sulfur Island because this combination would heavily influence Spruance when it came time to decide how many days of preliminary naval gunfire bombardment to provide the assault troops. Spruance did not make these decisions without being aware of how the greater strategic picture was affecting his thinking. In his report on the Iwo operation, he explained some of his decisions in these words:

The planning for and the actual execution of the lwo Jima operation were affected to a considerable extent by the operations in the Philippines which immediately preceded it, and by the necessity of preparing for the Okinawa operation which was to follow it. The Philippine operations necessitated last minute changes and reduced the total number of ships which had been previously allocated to the Iwo Jima operation. This applied primarily to battleships, cruisers, and destroyers for the Joint Expeditionary Force, although other forces were also affected to a lesser extent....

The Okinawa operation affected the Iwo Jima operation in two ways. First, it was felt that the threat of Japanese land based aircraft, while taking Okinawa, would be very great, both because of the great value of that island to us when we took it and because of its closeness to the Empire (325 miles). Therefore, anything which we could do during the Iwo Jima operation to reduce Japanese air strength, either in aircraft and, even more, in aircraft production facilities, would help the Okinawa operation as well as support the Iwo Jima operation. The second way in which the Okinawa operation and the Iwo Jima operation affected each other was in the close timing of the two operations. D-day for the Iwo Jima operation was 19 February. L-day for the Okinawa operation had been set as 1 April. If the fighting ashore on Iwo Jima were prolonged, it might be difficult to carry out the plans for the Okinawa operation which called for initial carrier operations to start off Kyushu on L-minus-9 (23 March).⁴⁰

While it is true that this is a summary written after DETACHMENT had been completed

and, therefore, can be seen as an attempt at justification after the fact, comparison of

this statement with the objectives stated in Spruance's plan for the operation shows that

these ideas were uppermost in his mind from the very beginning.

All of the commanders named in Nimitz's 9 October directive received the

document at the same time, and they, like Spruance, began preliminary planning based

upon it and the 7October CinCPOA study. The following table⁴¹ details the principal

commanders of the most important commands taking part in Operation DETACHMENT:

<u>Commander</u>	<u>Command</u>	Designation
Adm Raymond A. Spruance	5 th Fleet	TF 50
VAdm R. K. Turner	Joint Expeditionary Force	TF 51
RAdm William H. P. Blandy	Amphibious Support Forces	TF 52

RAdm Harry W. Hill	Attack Force	TF 53
RAdm Bertram J. Rodgers	Gunfire and Covering Force	TF 54
LtGen H. M. Smith	Expeditionary Troops	TF 56
MajGen Harry Schmidt	Landing Force (V Amphibious Corps)	TG 56.1
MajGen Clifton B. Cates	4 th MarDiv (Assault Troops)	TG 56.2
MajGen Keller E. Rockey	5 th MarDiv (Assault Troops)	TG 56.2
MajGen Graves B. Erskine	3 rd MarDiv (Expeditionary Troops Reserve)	TG 56.3
Vadm Marc A. Mitscher	5 th Fleet Fast Carrier Force	TF 58

The largest of the commands subordinate to Spruance was TF 51, Admiral Turner's Joint Expeditionary Force. As commander of this task force, Turner coordinated the planning and execution of the forces commanded by Blandy, Hill, Rogers, and H. M. Smith. Task Force 51 was very large, being comprised of 495 ships for use in the initial assault and the first garrison echelon and 75,144 men in the landing force, 70,647 of those being marines.⁴²

It was Turner's responsibility to take Commander Fifth Fleet's plan and flesh it out. The plan he devised, ComPhibsPac No. A25-44, laid out the basic scheme of attack for 19 February 1945 and provided a point of coordination for the plans of all the various commands subordinate to his own. Turner would wear more hats in executing the Iwo operation than he had ever had to wear at one time before. Because of the number of ships and men and the intricacies of the required command structure, he could not oversee everything personally as he would have liked. He had divided his forces before in the Gilberts, Marshalls, and Marianas because it was necessary to do so in order to take multiple objectives as part of the same operation. He commanded the assault, however, at whichever objective he was present. This time it would be different. There was only one objective to be taken and he would be on location the whole time –but he would not command the assault itself. That responsibility he gave to Harry Hill as commander of TF 53, the Attack Force. Under Hill would be the transports, Landing Force troops, escorts, control vessels, and other various assigned units whose job it would be to carry out the invasion.⁴³ Turner kept one important tactical command for himself, however. Rear Admiral Blandy would command TF 52, the Amphibious Support Force, until a certain point in the invasion and then he would have to give over command to Turner. This is how Turner describes the change in his plan:

Task Force 52..., initially under the command of Rear Admiral BLANDY, comprising assigned gunfire support vessels, certain CVE's [Escort, or "Jeep," Carriers], minesweepers, and Underwater Demolition Teams. After arrival at the objective, the operations of all aircraft and gunfire vessels from other forces, while they are engaged in direct attack on the objective [underline in original], will also be under this command. At 0700(K) Dog Day, command of Task Force 52, (less attachments) [sic.] will pass to Commander Task Force 51. Thereupon, Rear Admiral BLANDY will report to Commander Task Force 51 as Commander Task Group 51.19 for command of Transport and Tractor Night Retirement Groups....⁴⁴

This change will affect the use of naval gunfire on D-day because of the relationship

between TF's 52 and 54. Rear Admiral Rodgers' Gunfire and Covering Force,

composed of old battleships, cruisers, and destroyers, was tasked with providing cover

against possible enemy surface attack and gunfire support of the invasion as directed

by Blandy in the latter's capacity as Commander TF 52. When Turner takes command

from Blandy at 0700 on the morning of D-day, he also assumes overall control of gunfire

support for the assaulting troops. Thus, the man who would have been in command of

the preliminary bombardment of the objective for almost three days prior to Turner's

arrival and consequently more familiar with the situation at the objective on the morning

of 19 February would be arbitrarily demoted in the command hierarchy so that Turner

could be as hands-on as possible.45

Turner's plan for lwo was rooted in the plans he and his staff had produced so

many times before. The best sketch of what he expected to happen is in the plan itself.

It shows how all-encompassing plans at Turner's level had to be:

- 3. Task force 53 will embark troops in the HAWAIIAN ISLANDS and hold preliminary rehearsals there. Task Group 51.1 will embark troops at GUAM. Task Force 52 will assemble for preliminary training at ULITHI. All of Task Force 51, les TG 51.1 and Defense and Garrison Groups will then assemble at SAIPAN for final rehearsals prior to proceeding to the objective. TG 51.1 will not participate in SAIPAN rehearsals, but will sail from GUAM direct for the objective.
- 4. Naval elements of the Joint Expeditionary Force from HAWAII will move to ENIWETOK for re-supply, and then to SAIPAN. At SAIPAN, vessels other than battleships, transport types, and LST's will be topped off with fuel. Vessels which are not self-sustaining in water will be topped off with water as required. The movement of supply vessels will be as directed by Commander FIFTH Fleet.
- 5. The landing attack on IWO JIMA will be made on the southeast coast, (preferred), or on the northwest coast, (alternate plan), the landing being delayed as necessary to ensure reasonably favorable weather. The Commander-in Chief [sic.], U.S. Pacific Fleet, has been requested to provide long-range weather forecasts....
- 6. The Assault Troops will include selected elements of the Garrison Force. The main strength of our own shore anti-aircraft, coastal battery elements, and ground aircraft formations will begin to arrive at the objective one day after the initial landings. The Expeditionary Troops Reserve will be sent forward in time to arrive at the objective on Dog plus Two [marked through and "one" inserted]. The succeeding garrison echelons will begin to arrive at the objective about five days after the initial landings, on order from the Senior Officer Present Afloat at the objective. Garrison echelons, prior to proceeding to the objective, will go to ENIWETOK or SAIPAN, as directed, to await orders of the Senior Officer Present Afloat at the objective....

- 8. Upon completion of the capture of IWO JIMA, and upon being relieved by the 147th Army Infantry Regiment (from NEW CALEDONIA), the THIRD, FOURTH, and the FIFTH Marine Divisions will be evacuated to GUAM, SAIPAN, and GUAM, respectively. Corps Troops will also be evacuated to GUAM.
- 9. Close cooperation must be effected between opposite numbers of the troops and the supporting elements of the Navy. Personal conferences will be held between the officers of the various services whose plans require coordination. This close personal cooperation must extend all the way from the top echelons down to and including boats' crews and troops. It is most important that Beach Party and Shore Party Commanders prepare joint plans, and engage in joint training; whenever possible, these officers and at least nucleii [sic.] of their parties will be embarked in the same vessels. Garrison Force plans must be integrated with those of the assault troops....
- 11. Each service embarked in a vessel is responsible to the commanding officer for guarding its own property against theft and loss. Commanding Officers of vessels and troops will ensure that effective steps are taken to prevent such loss, and immediate reports will be made in case losses occur. After debarkation of troops, Commanding Officers of ships will cause a very careful search to be made to ensure that troop property left on board is collected and safeguarded for return to the proper organizations. Disciplinary measures will be instituted where appropriate.
- 12. All commanders, in advance of the operation, will take steps to indoctrinate all hands against pillage and souvenir-hunting; and will assign specific responsibility for preventing pillage and souvenir-hunting.⁴⁶

This plan brought the elements of TF 51 to grips with the Japanese on Iwo Jima.

Eventually, after more than a month of grueling, pitiless battle, the marines of V

Amphibious Corps prevailed – at the cost of 5,885 dead and 17,318 wounded and

missing.47

The Japanese Plan for the Defense of Iwo Jima

Lieutenant General Tadamichi Kuribayashi, the newly installed commander of the

109th Division of the Imperial Japanese Army in the Volcano Islands, was one of those

Japanese commanders who decided to learn and to adapt. He was given the responsibility of preparing Iwo Jima for an anticipated American invasion and he knew that it would be a difficult assignment at best. Studying the tactics Japanese forces had used in earlier Pacific island battles and paying special attention to the defense of Biak, Peleliu, Angaur, and Luzon, Kuribayashi concluded that standard Japanese doctrine would not suffice. If he expected to last for more than a few days against the American juggernaut, then he would have to approach his situation from a purely defensive perspective, a perspective generally abhorred by the Japanese.⁴⁸

Having decided to throw away convention, Kuribayashi issued orders that stirred controversy among his more militarily conventional subordinates. First, he chose to establish his headquarters on Iwo rather than on the larger island of Chichi Jima. Second, all civilians on Iwo were evacuated, including "comfort girls," and all alcohol consumption was banned. Third, all facilities were moved underground and mining engineers were brought from Japan to design the necessarily extensive tunnel system needed for implementation. The engineers produced a plan that integrated existing caves with constructed tunnels, providing the lwo defenders with adequate ventilation and protection from naval gunfire. Fourth, conceding that the Americans would take the landing beaches, he concentrated his defenses in the central and northern highlands of the island. This decision proved to be his most controversial. Rear Admiral Toshinosuke Ichimaru, in particular, pressured Kuribayashi to modify his plan in this regard. The general eventually bowed to the pressure and, in a compromise, ordered that 135 pillboxes be constructed along the most obvious landing beaches in the southern part of the island. The Americans, as it turned out, overran these pillboxes

within three hours. Fifth, large-scale banzai attacks were strictly forbidden. This was another point of contention with his subordinates. Dying a glorious death in battle when the odds were totally against success was a Japanese tradition. Contrary to this tradition, all counterattacks were to be carefully considered and efficiently carried out. With this concept of efficient counterattack in mind, small groups of troops were to be sent out at night into the American lines to gather intelligence, damage equipment, and kill marines.⁴⁹

Kuribayashi issued his final defensive plan just before the battle began. His emphasis was on the maintenance of a flexible defense that would wear down the enemy. To that end, he ordered his artillery to remain silent during the preliminary bombardment of the island. He did not want their positions given away too early in the battle. He stressed that he did not want the landings opposed by any of his men. Let the Americans land! Once the invading forces had come ashore and advanced up the beach approximately 500 yards, automatic weapons in the vicinity of Motoyama Airfield #2 along with automatic weapons and artillery on the high ground north of the landing beaches and around Mount Suribachi to the south would rain concentrated fire down on them. The general's purpose was not to defeat the Americans. He knew that U.S. control of the sea, principally as a result of the effectiveness of its submarine force, insured that he could not win.⁵⁰ Instead, he would inflict the maximum number of casualties on the American invasion force as was humanly possible. Once the artillery had done all the damage that it could do from its original positions on the high ground above the beaches, then it was to move northward to continue its mission. Infliction of casualties was the rule. If he could not win with the offensive, then maybe he could

cause the Americans to lose heart and give up, or, barring that unlikely outcome, then maybe massive casualties on Iwo Jima might cause the American public to think twice about carrying the fight all the way to the Japanese Home Islands.⁵¹

Naval Gunfire at Iwo Jima – The "Lessons" Made Irrelevant

The battle for Iwo Jima actually began in June of 1944 when the U.S. Navy carried out the first large-scale carrier raid against the island. Regularly scheduled air strikes began taking place in August and the pre-invasion strategic bombing campaign against Iwo got underway on 8 December. For seventy-four consecutive days, Seventh Air Force B-24s and Marine PBJs (the Navy variation of the B-25 Mitchell bomber) based in the Marianas dropped payload after payload on islands in the Bonin and Volcano groups. Beginning 31 January 1945, air operations against lwo entered a new phase. The number of sorties per day was increased in preparation for the beginning of the preliminary naval gunfire on 16 February. The stated purpose for the bombing was the neutralization of the airfields and other installations on the island, the destruction of gun positions and various fixed defenses, and the unmasking of additional targets for the naval gunfire ships. On 16 February, the same day on which naval gunfire preparation began, the daylight air attacks were stepped up even further and night harassing missions were thrown in for good measure. To top the whole air campaign off, fighter sweeps shot up every airplane and living thing the pilots could find on the island.52

Photographic reconnaissance monitored the damage done by these air strikes. A comparison of photos taken between 3 December 1944 and 10 February 1945 showed that, while appreciable damage had been done to aircraft on the ground and

that the airfields had indeed been neutralized, the Japanese had not been stopped in their attempts to strengthen Iwo's defenses. A study submitted to the Chief of Staff of VAC on 9 February 1945 shows the concern of Marine Corps planners for this lack of results:

Photographic coverage of Iwo Jima to 24 January 1945 indicates that damage to installations resulting from bombing strikes between 3 December 1944 and 24 January 1945 was, on the whole, negligible. These strikes have apparently not prevented the enemy from improving his defensive position and, as of 24 January 1945, his installations of all categories had notably increased in number. The island is now far more heavily defended by gun positions and field fortifications than it was on 15 October 1944, when initial heavy bombing strikes were initiated.⁵³

With the air campaign not accomplishing its goals, the preliminary naval gunfire bombardment grew in importance proportionately.⁵⁴

One of the enduring stories of the assault on Iwo is that the Americans did not know what they were up against until it was too late to do anything about it. This was not true. The above quote shows that at least some of the operational planners were very well aware of the fact that Iwo was a tough objective. The question was what to do about it. It is out of consideration of this problem that the great debate arose over how much preliminary naval gunfire bombardment to provide. Central Pacific experience and published doctrine dictated several days of slow, thorough preparation, and Nimitz's headquarters included eight days of preliminary gunfire support in their original plan with this in mind.⁵⁵ Spruance, strategic concerns uppermost in his mind, decided that eight days were too many given the need to coordinate DETACHMENT with simultaneous carrier air raids on the Japanese Home Islands and with the subsequent invasion of Okinawa. There were logistical considerations as well. He would need more gunfire support ships than he could obtain at the time because of MacArthur's continuing

problems in the Philippines. As Spruance himself put it in his After Action Report:

The only source from which additional gunfire support ships could be obtained was from Task Force 58 (Fast Carrier Force). In order to provide the necessary additional battleships for gunfire support, the Commander in Chief, United States Pacific Fleet, authorized the use of the North Carolina and Washington for this purpose. These two ships were, accordingly, loaded principally with bombardment ammunition, their service allowance of armor piercing ammunition being correspondingly reduced. Certain cruisers of Task Force 58 were also loaded with some additional bombardment ammunition.⁵⁶

Another logistical consideration besides the number of ships available was how to keep

the ships he could get supplied with large-caliber ammunition over the course of a long

bombardment. Spruance determined that the best that could be done, given all of these

problems and questions, was to bombard lwo for three days prior to the invasion.⁵⁷

There is other evidence besides that presented above that the top American

planners were aware of at least some of the difficulties the assaulting forces would face

on Iwo Jima. The following description is found in the final version of the naval gunfire

annex of Turner's Operation Plan A25-44:

IWO JIMA is a relatively small but heavily defended island presenting a series of integrated defense installations which will require a carefully coordinated scheme of fire from all attacking agencies. It must be emphasized that advanced intelligence cannot be expected to disclose more than a fraction of existing defenses. Close observation, both visual and photographic, plus imagination stimulated by a close study of the terrain, are of the utmost importance in locating others....Inshore the ground rises rapidly in a series of terraces culminating in steep embankments surrounding built-up and graded portions of Airfields 1 and 2. The entire slope is covered by fire trenches, emplacements, pillboxes, rifle and machine gun pits and a few blockhouses, all of which must be destroyed or neutralized prior to How Hour by short range direct fire or air bursts as appropriate. The beaches are flanked on the North by cliffs and steep slopes extending South from MINAMI and on the South by SURIBACHI MOUNTAIN, both of which are brush covered and offer excellent possibilities for the usual Japanese camouflage and defense from cave positions.⁵⁸

Joseph Alexander states that Nimitz's intelligence section was aware that Japanese defensive tactics were changing but that a bulletin from his command forecasting Iwo Jima's defenses to be more along the lines of Peleliu's than Roi-Namur's or Saipan's did not receive much attention from the planners of the Iwo assault.⁵⁹ The description of the conditions Turner expected to find on Iwo presented above indicates that someone on Turner's staff actually had given the photographic evidence and Nimitz's bulletin more than just a cursory glance.

Generals Smith and Schmidt knew from hard experience that a target as tough as Iwo Jima required massive amounts of naval gunfire preparation over several days in order to soften it up sufficiently for assault. They knew that Spruance and Turner were set on three days of naval gunfire, and they wrote numerous letters to the two admirals in a battle to get them to authorize more. In one of the first of these, dated 24 October 1944, Schmidt lists the basic assumptions from which he and his planners were working in making their determinations:

- (a) That all known defensive installations must be destroyed.
- (b) That a minimum of 50% more targets will be uncovered during preliminary bombardment and that to discover these targets it will be necessary to fire a considerable amount of ammunition for the purpose of blasting away camouflage and concealment.
- (c) That a methodical "working over" with major caliber ammunition of the slopes of the crater on the south flank and the terrain formation on the north flank will be required to uncover and destroy concealed emplacements and casemates.
- (d) That from one to four major caliber direct hits will be required to destroy known defensive installations and that 10% hits is the average expected occurring in direct fire.⁶⁰

With these and other considerations taken into account, Schmidt recommended:

- (a) That a minimum period of ten days be allotted for naval bombardment of (IWO Jima).
- (b) In addition to the Cruiser Division now allotted, that a minimum of one division of BB's be added for preliminary bombardment.
- (c) That a staff trained and equipped to evaluate results be present to assess the results of preliminary bombardment and to make target assignments; that this staff not only include gunfire personnel but also support air personnel and that this staff be present on SAIPAN by D-20 to study results of 7th AAF bombing.
- (d) That the date of D-Day be dependent on the successful prosecution of the destruction of enemy defensive installations....⁶¹

Smith forwarded Schmidt's request on to Turner on 26 October with his

recommendation and the comment that "[i]n order to insure the quick seizure of the

objective with a minimum of casualties, the increase in the duration of intensity of naval

preliminary bombardment over that now contemplated is considered a necessity.⁶²

Turner sent his reply on 15 November. He turned Schmidt down, explaining in

similar terms as Spruance would have used and offering a plan of his own:

...Limitations on the availability of ships, difficulties of replenishment of ammunition and lose [sic.] of surprise interpose serious obstacles to meeting you recommendations. However, it is felt that the following plan will accomplish all the objectives desired:

- (a) It is understood that (IWO Jima) will be bombarded by one Cruiser Division on or about 15 December and at irregular intervals thereafter. Bombardment will be for the purpose of accomplishing such destruction as is possible, and for establishing a flow of intelligence of target destruction supplementing that expected from air strikes during the same period.
- (b) On Dog minus three, a methodical and thorough bombardment will be instituted by the Amphibious Support Force. Competent evaluation of results and corresponding adjustments in the bombardment plan will be assured through control and coordination by an Amphibious Group Commander embarked in an AGC (with representative of your command aboard if

desired). The increased number of bombardment ships and local control and evaluation of results will enable more ammunition to be delivered at the target in three days than the estimated requirements listed [in your request] for ten days....It is believed that the excess of 5", 14", and 16" capabilities [in this plan] over your estimate of requirements will more than offset the apparent shortage of 6" and 8" capabilities.

(c) Emphasis will be placed on the securing and utilization of all information of target destruction.⁶³

Turner, like so many Navy men before him, places the emphasis on the amount of ordnance to be put on the target. He speaks of "destruction," but he does not appear to understand, at least as far as the wording of this letter is concerned, that destruction can only occur when that massive quantity of ammunition is delivered slowly and methodically, a point the Marines will continue to make.

On 24 November General Schmidt sent a letter to Turner in which he conceded that he would not receive the ten days he had requested, but he provided evidence to support a request for four days instead of three:

- 2. As has been stated in previous correspondence, the preliminary bombardment should provide for the deliberate and methodical destruction of all known or subsequently located enemy gun positions and other installations that can interfere with the successful execution of the landing. The question is whether the time now allotted is adequate for deliberate destruction. The amount of ammunition allotted appears to be adequate.
- 3. Since this question may be determined accurately in advance, two alternatives suggest themselves:
 - (a) To provide for an additional day of bombardment prior to the landing, if it is found during the preliminary bombardment that all known targets can not be destroyed prior to D-Day. This involves obtaining early information by the Expeditionary Force Commander in order that orders could be issued in time to task forces at sea as to the postponement. Under conditions of radio silence, and the dispersion of forces involved, this would

appear difficult. The target date in this case would be postponed one day.

- (b) Allot four days for the preliminary bombardment. This would allow for more deliberate firing, particularly after necessary minesweeping has been effected [sic.]. It theoretically would involve no increase in the expenditure of ammunition, but rather a slower rate of fire. Any increase in ammunition requirements would have to come from that allocated to call fire.
- (c) It is recommended that, if consistent with other considerations, the plan outlined in paragraph 3(b) above be adopted and that the preliminary bombardment begin on D-4.⁶⁴

General Smith, sending Schmidt's latest request on to Turner with his

recommendation, added the following:

- 1. From lessons learned in previous operations and continued study and analysis of the proposed Operation (against IWO Jima), it is the considered opinion of this Headquarters that four (4) full days for preliminary bombardment is the absolute minimum necessary for success.
- 2. This objective lends itself to a strong defense with elaborate installations, and unless these defenses are destroyed or at least neutralized we may expect casualties far beyond any heretofore suffered in the Central Pacific, or possibly jeopardize the success of the entire operation. It is considered that three (3) days for preliminary bombardment are insufficient.
- 3. A comparison of casualties suffered on SAIPAN after an approximate three (3) days of preliminary bombardment with the casualties received on TINIAN and GUAM after many days of preliminary bombardment further convinces this Headquarters of the necessity for a minimum of at least four (4) days of preliminary bombardment....⁶⁵

Both Smith and Schmidt refer to accepted doctrine to explain why they are requesting more naval gunfire and Smith points out that the lessons learned thus far in the Pacific support this claim. The marines are pleading with their Navy superiors upon what they believe to be irrefutable grounds.

It is at this point that Spruance himself weighed in on the debate. On 2

December 1944, he sent a letter to Turner refusing to allow the additional day of

bombardment. He drew the greater strategic picture for Turner so that the latter could

leave Schmidt and Smith with no illusions as to what the overall commander thought:

- The recommendation of Commanding General, V Amphibious Corps, that surface ship bombardment of (IWO Jima) be commenced on D minus 4 Day is not approved for the following reasons:
 - (a) The initial surface bombardment must be simultaneous with the initial carrier attack upon the TOKYO area. The carrier attacks will be continued there for three days if practicable, but it may prove desirable or necessary to discontinue attacks after two days or less. If the attacks were made on D minus 4 and D minus 3 days, time would then be available to the enemy for recovery and reinforcement early enough to initiate threatening air operations at the objective by D day.
 - (b) The situation at (IWO Jima) will be different from that encountered at SAIPAN for reason that by D day the enemy personnel and fixed defenses at (IWO Jima) will have been under heavy shore based air attack for a considerable period of time. This prolonged air bombardment, which was not undertaken at SAIPAN, may be considered at least as effective as the recommended additional day of surface ship bombardment.
 - (c) The trench and pill box defense system at IWO Jima is strong and must be taken by assault, supported, until shore artillery can be emplaced, by intense naval gunfire on D day. There will be no early opportunity for replacement of naval ammunition, a large proportion of which must be saved for support of D day. There is a limit to the quantity of ammunition which can be made available for pre D day bombardment and no advantage is seen in delivering that quantity in four days rather than three.⁶⁶

Spruance placed great faith in the air attacks, but, as the Marines were beginning to

learn at about the time the Commander Fifth Fleet was writing this letter, the air

campaign was not the equivalent of that extra day of naval gunfire.

Schmidt and Smith tried again in early January, pointing out that photographic reconnaissance was not bearing out Spruance's predictions concerning air bombing.⁶⁷ Turner, wanting to bring the debate to an end, sent one last letter to the Marine generals on 9 January in which he took them to task for sticking so closely to the "lessons" the marines thought they had learned thus far in the Pacific war. First, as to the idea that naval gunfire ships should emphasize short-range bombardment:

4. It is not agreed that short ranges are always the most effective for destructive fire. The best experience, as clearly set forth in the PhibsPac Circular letter AL15-Rev. 1, indicates that short range pointed fire is best for targets that present an appreciable vertical surface. On the other hand, short range firing at flat targets wastes ammunition because so many ricochets and duds occur. Therefore, a considerable amount of long and medium range firing must be done, to take care of the many flat targets on (IWO Jima). For example, it would be quite impossible to hit any targets on the tops of the hills by means of short-range fire.⁶⁸

While it is true that the flat trajectories of naval guns makes it exceedingly difficult for

them to hit non-vertical targets, it is also true that hitting targets from longer ranges

requires more firings and, therefore, more time. This would mean that Turner would

have to allow more time than the three days he was willing to allot in order for the

massive quantity of ordnance he stressed so heavily in his 15 November letter to be

used effectively. This paradox did not seem to occur to him at the time.

Second, as to the continued attempts by the Marine generals to change the

naval gunfire schedule:

5. The firing schedules were originally prepared in collaboration with representatives of ComGenVPhibCorps [Schmidt] and ComGenFMFPac [Smith]. Then after a final check, before issue, they were completely revised at the request of representatives of ComGenVPhibCorps in order to allow every ship the maximum possible firing time. The allotment of ammunition to targets was also changed radically. More time for general targets could be allotted than as directed in the present plan if it were not considered necessary to perform UDT operations on the Alternate

Beaches. If UDT reconnaissance of the Alternate Beaches shows that no beach demolitions are necessary, then there will be more time and ammunition available for bombardment of the Preferred Beaches. However, it should be recognized that fire for covering UDT operations is <u>all</u> [underline in original] directed at targets that will particularly threaten troops.⁶⁹

Schmidt and Smith could point out to Turner that their original estimates for gunfire were based on incomplete photographic reconnaissance and that their attempts to modify what they had already approved were based upon the latest evidence at their disposal, not on any wish to be obstinate. Turner was aware of the new evidence as well, but he does not show in this letter that his awareness of it is affecting his decisions. He is also not indicating that he understood that three days was not the original amount of naval gunfire projected, Nimitz's command having recommended eight days instead. In an attempt to assure Schmidt and Smith that the gunfire ships would be performing double duty and, in so doing, would be destroying targets deemed important by the Marines, Turner stresses the work of the covering ships in protecting the Underwater Demolition

Teams (UDT).

Third, concerning a Marine Corps emphasis on the landing beaches:

6. The concentration of more firing vessels off the Preferred Beaches as desired by ComGen V PhibCorps would result in very thin coverage of the other portions of the objective. Guns in such locations can most probably be used to fire on the Preferred Beach area after How Hour. Therefore they too should be destroyed. If the recommendations in the basic letter are approved, the coverage of the Alternate Beaches would be only about 25% of that on the Preferred Beaches, and this is believed to be too small. Most assuredly, it is not proposed to fire on coast defense batteries only on Dog minus THREE, and thereafter concentrate only on what are spoken of in [your] basic letter as "troop targets." Any such procedure would be unsound to an extreme degree. It is essential that coast defense and anti-aircraft batteries receive a great deal of attention.⁷⁰

It is most ironic that Turner is making a point here, over a month before the beginning of the preliminary naval gunfire bombardment of the objective, which would prove accurate as to what the Marines would find upon assaulting the beaches of Iwo. This point will be discussed in greater depth presently.

And finally, to allay any fears that Turner was placing the naval gunfire schedule on the level of Scripture, something that could not be modified under any circumstances:

circumstances:

7. ComPhibGrp ONE [Blandy] as, Commander Support Force, will be in charge of the preliminary bombardment. He has been given full authority to change schedules of fire to meet eventualities as they develop. He is fully cognizant of the features brought out in the basic letter and endorsements, and has been instructed to exercise discretion in modifying schedules to get the best results as a whole from the air and ship bombardments.⁷¹

This offered the Marines an out, an opportunity to conform the firing schedule to what they considered more appropriate based on experience and doctrine, in case the situation at the objective proved contrary to what the planners expected. They would take advantage of it. As they saw it, they had no choice because three days was all they were going to get as far as Raymond Spruance and Kelly Turner were concerned.

Though known to be a workaholic, Turner did not produce his plans by himself. The nuts and bolts of the different sections of an invasion plan were torqued together by many different officers from many different backgrounds and specialties. One such person who had significant input in the creation of the DETACHMENT naval gunfire support plan was Lieutenant Colonel Donald M. Weller. He served as the VAC naval gunfire officer at Iwo Jima and it was his job, in part, to work with the Navy to make sure that Marine Corps gunfire support concerns were addressed as the operation unfolded. Weller was present during the preliminary bombardment from D-3 to D-1 and he was instrumental in the making of decisions concerning the application and the altering of the original gunfire plan. His after action comments are extremely instructive because of his intimate knowledge of how and why those alterations were made. Weller reports that ships were to engage targets during the preliminary bombardment according to an established priority system. The assignment of targets in this way was in line with established doctrine. Priority A targets consisted of installations that could threaten ships and aircraft of the invasion force and underwater demolition team operations. Examples included: any battery that opened fire on ships or aircraft of the invasion force, all coast defense guns, all antiaircraft guns, all covered or open artillery emplacements where the presence of weapons was confirmed, and all antitank guns. Priority B targets consisted of installations that threatened the Landing Force in the ship to shore movement. Examples of these targets included: blockhouses; covered artillery; pillboxes; and various targets such as command posts, unspecified unidentified installations, earth-covered structures, machine guns, and areas of heavy growth. Priority C targets consisted of installations that could oppose troops after the landing had taken place. This was a broad category that included such targets as caves near the beach, radio and radar stations, ammunition storage areas, fuel dumps, and bivouac areas.72

Weller reports that targets were addressed according to this priority system on D-3 and D-2, but photographic assessments of damage caused by the bombardment on those two days indicated that the level of destruction that had been achieved was unsatisfactory. The weather on D-3 had limited the effectiveness of that day's

bombardment and, while the weather had been good on D-2, the skilful use of camouflage by the Japanese increased the number of hits necessary to take out island installations. More hits per target meant more time, time the preliminary bombardment team did not have. These concerns caused Weller to begin thinking of what needed to be done to insure that as adequate a bombardment as possible could be delivered in the short time left. The Japanese reaction to UDT operations on D-2 offered proof that gunfire coverage, while knocking out the obvious Priority A targets, had been woefully inadequate in other respects. Something had to be done, but what? The solution to the problem was dictated ultimately by yet another event on D-2. Weller states:

A hitherto undiscovered four-gun battery situated in *Idaho*'s area was disclosed in TA 166 VW on top of the bluff in a portion which enfiladed the entire landing beach. [This position was located to the right of the 4th Marine Division landing beaches.] This discovery of additional enemy defensive positions as well as this [sic.] full realization of the heavy firepower the enemy was able to bear, was of paramount importance. Officers conducting the preliminary bombardment were impressed far more by this development than by negative results of photographic assessment of the day's firing; it brought home the large amount of damage yet to be inflicted on the enemy installations, and impressed all concerned with the absolute necessity of placing the bulk of the remaining fire power in the vicinity of the preferred landing beaches.⁷³

To address the lack of destruction in the vicinity of the landing beaches, Weller:

...recommended that a maximum concentration of bombardment be placed on and near the preferred landing beaches; the recommendation was approved by the Commander, Amphibious Group 1 [Admiral Blandy]. The schedule for Dog Minus One Day was accordingly abandoned and the following plan substituted....This arrangement placed the fire of four battleships and one heavy cruiser on, and in close vicinity to, the main landing beach....Ships delivering this fire were directed to close the range as early as practicable and to execute maximum destruction. All unexpended ammunition allotted for the preliminary bombardment was to be expended if practicable.⁷⁴ Weller, in other words, advised Blandy to do exactly what doctrine indicated should be done: expend ammunition on the landing beaches and adjacent areas because that is where the weapons that are most deadly to the landing force are located. This was a rule of thumb that had served the Marine Corps well for most of the war, but by following it in this situation Donald M. Weller fell into Kuribayashi's unintended trap.⁷⁵ The Japanese commander knew that American firepower would destroy anything he put on the beach and this realization caused him to insist on a defense in depth. The weapons placed near the beach were not an integral part of Kuribayashi's plan. They represented, after all, a compromise that he was forced into by his more conservative subordinates. Placing the weapons near the beach, however, raised a merely formidable defensive scheme to the level of brilliance. The presence of these installations, afterthoughts though they were to Kuribayashi, insured that the Americans would spend their last precious day of preliminary bombardment blasting away at the one place on Iwo Jima where such a massive expenditure of ammunition was guaranteed to do the least amount of good for the invaders – the landing beaches. The result can be gauged by comments from the division Action Reports. According to the Fifth Division report:

The Japs did not elect to defend the beach. First troops ashore reported occasional enemy small arms fire from the base of Mount Suribachi, mortar fire from a defiladed area in that same vicinity and from the north; they also found coast defense guns on Suribachi out of action and nearly every pillbox on the beach and ground in rear of beach destroyed. The troops crossed the island in about [3 ½] hours....[The preliminary NGF bombardment was intense and well executed, but it did not]: 1. succeed in taking out a large percentage of the enemy fortifications; 2. prevent the enemy from being able to place accurate artillery and mortar fire from prepared positions on any part of the island.⁷⁶

The Fourth Division report was not so generous in its assessment:

It is estimated that approximately [10%] of the beach defenses were knocked out and all enemy troops neutralized by scheduled bombardment in RCT 23 zone of action. Destruction was principally accomplished by heavy caliber shells. High velocity guns were not knocked out on the flanks and automatic weapons from emplacements along abutments of the airfield to the front were active. Mortars from the flanks and reverse slopes exacted heavy casualties on the beaches. Construction of emplacements, in conjunction with terrain, rendered area fires largely ineffective, although observation revealed it possible to close small caves with 5" projectiles....In RCT 25 zone of action large pillboxes on beach Blue 1 were knocked out by heavy caliber fire prior to landings. Effect of 5", rocket, and mortar fires on beaches was not visible due to the sandy nature of the beach. The rolling barrage screened initial waves sufficiently to enable them to organize on the beach but enemy riflemen had held their positions and were able to fire through the barrage from the right flank. Most emplacement observable from seaward were destroyed and the fire received came from reverse slopes and emplacements further inland.77

Weller states that "the Dog-Day bombardment, in conjunction with the destruction accomplished in the preliminary firing, enabled a successful landing to be made against one of the enemy's most heavily and skillfully defended possessions, with acceptable casualties."⁷⁸ The problem with this conclusion is that it does not take into account that Kuribayashi had decided to grant the landing to the invasion force before the first gunfire support shell struck Iwo on D-3 – the Japanese, in other words, had adapted to the preponderance of firepower that the United States could bring to bear at the water's edge by simply conceding the beach. With the "lessons of Tarawa" and the application of those lessons in operations over the course of 1944 firmly in mind, the Navy and Marine Corps planned to fight a different battle at Iwo Jima than the one they were forced to fight. Even with photographic proof of the complexity and density of Kuribayashi's defenses before them, the naval gunfire emphasis on D-1 and on D-day was still on the landing beaches. The Marine Corps has argued that a longer pre-

assault bombardment would have cut down the number of U.S. casualties. This is possibly correct, but just how much more damage could have been done given that the Japanese were underground and well concealed? American amphibious warfare planners working in the Central Pacific failed to understand fully the changes that occurred in Japanese defensive strategy and, consequently, U.S. naval gunfire doctrine failed to adapt sufficiently to address this changed strategy. In failing to adapt, it also failed in one of its most important objectives: to save lives.

Donald Weller has spent his life since the invasion of Iwo Jima analyzing and advising on the use of naval gunfire in support of amphibious operations and, in his capacity as analyst, excusing the planning and execution anomalies that plaqued that operation. Weller was not the only Marine artillery officer present during that hellish month on Volcano Island, however, and at least one of them has left a record of his opinions as to the efficacy of Weller's gunfire plan. Lieutenant Colonel Kenyth A. Damke served as the Executive Officer of the 13th Marines, the artillery regiment of the Fifth Marine Division, at Iwo. He took the Senior Course in the Amphibious Warfare School after the war and, as part of that course, he wrote a paper in which he analyzed the pre-D-day naval gunfire bombardment at Iwo Jima. The question he attempted to answer: did pre-D-day naval gunfire accomplish its mission in Operation DETACHMENT? He reviewed Action Reports from several levels of command and considered everything from the stated mission of naval gunfire to the priority of targets set forth in the plans to the hydrographic conditions in the waters surrounding the island. His conclusions:

Adopting a very strict interpertation [sic.] of the mission of the pre-D-day bombardment of an objective by naval gunfire, as given in U.S.F. 63, the
over all [sic.] mission was not accomplished at IWO JIMA.

Hundreds of targets remained; naval gunfire was capable of destroying them. At the rate of destruction achieved on D-1, another five (5) days of bombardment, under conditions similar to those existing for that day, would have been required to have reduced the fortifications.

The destruction of defensive installations in the prefered [sic.] beach areas was generally very good. A landing force had been placed ashore which had captured the island; in doing so, it had suffered a very high percentage of casualties. Who can say what the casualties might have been in this force and in other forces with in [sic.] the theater, had the bombardment been extended until more of the enemy installations opposing the landing force had been destroyed? As in other major decisions in warfare which involves large forces in large theaters, the answer to this question will never be known. Suffice to say that insufficient time and ships were available with in [sic.] the theater to allow additional bombardment of IWO JIMA before the landing force went ashore.⁷⁹

Damke, a man who was there, a man who witnessed much of the carnage wrecked upon his fellow marines, and a man who was trained in the proper use of artillery in support of land forces, did not agree with Weller's assessment of the effectiveness of pre-D-day naval gunfire at Iwo.

Kuribayashi was successful in accomplishing the limited objectives he had set for himself. First, he made the Marines pay an extremely high price for the taking of Iwo Jima. Second, the sacrifice of himself and his command affected U.S. thinking concerning the invasion of Japan. Admiral Ernest J. King, Chief of Naval Operations and Commander-in-Chief of the U.S. Fleet, already had doubts about invading the Home Islands before the Iwo Jima operation commenced. King had agreed to preparations for an invasion as a contingency plan, believing that it was only prudent to make such plans because an invasion might prove to be necessary. It could be called off easily, however, in the event that it was not. Both King and Admiral William Leahy, personal chief of staff to President Roosevelt, preferred a plan of blockade and bombardment. This strategy was in line with the war plan the Navy had worked out during the interwar period for a conflict with Japan, the famous War Plan ORANGE. Chester Nimitz expressed support for Operation OLYMPIC, the codename for the invasion of Kyushu, in a message to King on 28 April, but he withdrew his support in an "eyes only" message to King on 25 May. The heavy casualties suffered by U.S. forces at Iwo Jima, the slow progress of fighting on Okinawa, and intelligence reports of a buildup of Japanese defenses on Kyushu caused him to reconsider. King was about to make Nimitz's change of heart known to the Joint Chiefs of Staff when the dropping of the atomic bombs on Hiroshima and Nagasaki made the arguments concerning invasion moot.⁸⁰ Having accomplished his two major objectives, therefore, it can be argued that Kuribayashi's essentially hopeless defense of Iwo Jima was not in vain.

Endnotes

1. Charles W. Lindberg, interview by Ronald E. Marcello and John Chalkley, 19 February 1998, interview OH 1224, transcript, University of North Texas Oral History Program, 27.

2. Donald Boots, interview by Ronald E. Marcello, 17 May 2001, interview OH 1405, transcript, University of North Texas Oral History Program, 156.

3. Whitman S. Bartley, *Iwo Jima: Amphibious Epic* (Washington, D.C.: Historical Division, HQMC, 1954), 49-51; George W. Garand and Truman R. Strobridge, *Western Pacific Operations*, History of U.S. Marine Corps Operations in World War II, Vol. IV (Washington, D.C.: Historical Branch, HQMC, 1971; reprint, Nashville, TN: The Battery Press, 1994), 502-503 (page citations are to the reprint edition).

4. Bartley, Amphibious Epic, Map III, Map Section.

5. Garand and Strobridge, Western Pacific Operations, 506-507.

6. Jeter A. Isely and Philip A. Crowl, The U.S. Marines and Amphibious War: Its Theory and Practice in the Pacific (Princeton, NJ: Princeton University Press, 1951; reprint, Quantico, VA: Marine Corps Association, 1988), 478 (page citations are to the reprint edition); Garand and Strobridge, Western Pacific Operations, 506-508. Underwater Demolition Teams took samples of beach sand on D-2. According to the Operation Plan for the UDTs, among the types of information that they were to obtain was "[the w]idth, gradient, and material of beach proper, with special attention to the following: (a) gradient and condition of beach at high water mark (b) contour of beach as to feasibility for attack forces to exit quickly with vehicles from high water mark (c) material of beach and an estimate as to what type of vehicle it will support." Isley and Crowl report that, with a few exceptions, the UDTs "optimistically" deemed the beaches suitable for landings. One of those exceptions was Sergeant Frank E. Schnell. Sergeant Schnell was an observer with UDT #14. He filed a report of his observations after the operation. Included in this report was the following: "[After UDT operations on 17 February were finished.] [w]e then headed back toward SAIPAN to meet the landing force. On the morning of 18 February 1945, I left the APD (USS WATERS), and went aboard the AGC #10 (USS AUBURN) to report to Admiral Hill. The following questions were ask [sic.] by him: If the condition of the beaches would permit an LVT to climb over the terraces and I answered, 'in most places they would.' If rubber tired vehicles could climb them, and I said, 'that I didn't think they could make it.' Whether or not the beach was hard surfaced? I said no, they were soft sandy beaches." Hill decided to go with the majority opinion. At the point when he received this information from Sergeant Schnell there was not much else that he could do. It could be argued that an assessment of beach conditions should have been made earlier than two days before the landings were to occur, but putting men ashore on Iwo before the U.S. was prepared to launch an assault could have compromised the security of the operation.

An accurate understanding of what the assault forces would be facing might have made a difference on D-day, but two days is precious little time to make any significant changes in the landing plan. Commander UDTs Amphibious Forces Pacific Operation Plan No. A1-45, 23 January 1944, Annex (A) – Daylight Reconnaissance Procedure, Appendix (I), p. (A)(I)-1. Marine Corps University Archives (MCUA), Iwo Jima Project, Command Underwater Demolition Teams, Amphibious Forces, U.S. Pacific Fleet, Operations Plan; Isely and Crowl, 469; CG V Amphibious Corps, VAC Report, Iwo Jima Campaign, 13 May 1945, Annex CHARLIE, Appendix 13 (Headquarters Commandant Report), Enclosure B, page 1. MCUA, Iwo Jima Project, Fifth Amphibious Corps Landing Force, Volume V; VAC, Report, Annex CHARLIE, Appendix 10 (Shore Party Report), pages 14-15, contains a description of the beach conditions.

7. Garand and Strobridge, Western Pacific Operations, 508.

8. Ibid.

9. Ibid.

10. Ibid., 508-509.

11. Ibid., 512.

12. Ibid., 512-513.

13. Ibid., 513-515; Bartley, Amphibious Epic, 57-58.

14. Garand and Strobridge, *Western Pacific Operations*, 515-516; Bartley, *Amphibious Epic*, 58.

15. Garand and Strobridge, *Western Pacific Operations*, 517-518; Bartley, *Amphibious Epic*, 60-61.

16. Garand and Strobridge, *Western Pacific Operations*, 518-519; Bartley, *Amphibious Epic*, 61.

17. Garand and Strobridge, *Western Pacific Operations*, 519; Bartley, *Amphibious Epic*, 61; 4th Marine Division Operations Report, 18 May 1945, Annex GEORGE, Headquarters 24th Marines Final Report, pages 171-172.

18. Garand and Strobridge, *Western Pacific Operations*, 519; Bartley, *Amphibious Epic*, 61.

19. Garand and Strobridge, *Western Pacific Operations*, 520-521; Bartley, *Amphibious Epic*, 62-63.

20. Garand and Strobridge, Western Pacific Operations, 521-522; Bartley,

Amphibious Epic, 64-65.

21. It can be assumed that when the documents mention the "Bonins" the planners were usually referring to the Bonin and Volcano Islands groups together.

22. Gordon L. Rottman, *World War II Pacific Island Guide: A Geo-Military Study* (Westport, CT: Greenwood Press, 2002), 417-421; Bartley, *Amphibious Epic*, 4-5; Garand and Strobridge, *Western Pacific Operations*, 447.

23. Rottman, 421-422.

24. Rottman, 422; Edward S. Miller, *War Plan Orange: The U.S. Strategy to Defeat Japan, 1897-1945* (Annapolis, MD: Naval Institute Press, 1991), 101.

25. Robert S. Burrell, "Breaking the Cycle of Iwo Jima Mythology: A Strategic Study of Operation Detachment," *Journal of Military History* 68 (October 2004): 1145.

26. Grace Person Hayes, *The History of the Joint Chiefs of Staff in World War II: The War Against Japan* (Annapolis, MD: Naval Institute Press, 1982), 431 & 496.

27. Quote found in Hayes, History of the Joint Chiefs, 627.

28. Hayes, History of the Joint Chiefs, 627-628.

29. Quote found in Hayes, History of the Joint Chiefs, 628.

30. Hayes, History of the Joint Chiefs, 628-629.

31. Thomas B. Buell, *The Quiet Warrior: A Biography of Admiral Raymond A. Spruance* (Boston, MA: Little, Brown & Co., 1974; reprint, Annapolis, MD: Naval Institute Press, 1987), 331-332 (page citations are to the reprint edition); Garand and Strobridge, *Western Pacific Operations*, 465.

32. E.B. Potter, *Nimitz* (Annapolis, MD: Naval Institute Press, 1976), 326-327; Buell, *Quiet Warrior*, 330-335; Burrell, "Breaking the Cycle," 1159; Hayes, *History of the Joint Chiefs*, 623.

33. Hayes, *History of the Joint Chiefs*, 623-624; Maurice Matloff, *Strategic Planning for Coalition Warfare: 1943-1944*, United States Army in World War II, The War Department (Washington, D.C.: Office of the Chief of Military History, Department of the Army, 1959), 530-531.

34. Bartley, *Amphibious Epic*, 23; Garand and Strobridge, *Western Pacific Operations*, 465.

35. Quote from Bartley, Amphibious Epic, 23-24.

36. Ibid.

37. Bartley, *Amphibious Epic*, 23-24; Garand and Strobridge, *Western Pacific Operations*, 465-466.

38. Fifth Fleet Operations Plan, 13-44, 13 December 1944, page B-1. MCUA, Iwo Jima Project, 5 Fleet Operations Plan, 13-44.

39. Buell, Quiet Warrior, 332.

40. United States Navy, *Amphibious Operations: Capture of Iwo Jima, 16 February* – *16 March 1945* (COMINCH P-0012), page 1-1. MCUA, Historical Amphibious Files (HAF), Box 11B, Folders 255.

41. Table information taken from Derrick Wright, *The Battle for Iwo Jima: 1945* (Gloucestershire, England: Sutton Publishing Ltd, 1999), 197-198.

42. George C. Dyer, *The Amphibians Came to Conquer: The Story of Admiral Richmond Kelly Turner* (Washington, D.C.: Government Printing Office, 1969), 997.

43. Isley and Crowl, 435.

44. Commander Amphibious Forces (CTF 51) Operation Plan No. A25-44, Iwo Jima Operation, Annex A, pages (A)-1 – (A)-2. MCUA, Iwo Jima Project, Commander Amphibious Forces (CTF 51) Operation Plan, A25-44 (Bound Book).

45. Ibid., page (A)-2.

46. Ibid., pages (A)-2 – (A)-4.

47. Garand and Strobridge, Western Pacific Operations, 797.

48. United States War Department, *Handbook on Japanese Military Forces* with introduction by David Isby and afterword by Jeffrey Ethell (London: Greenhill Books/Lionel Leventhal Limited, 1991; reprint, Baton Rouge, LA: Louisiana State University Press, 1995), 99 (page citations are to the reprint edition).

49. Bartley, *Amphibious Epic*, 11; Garand and Strobridge, *Western Pacific Operations*, 453-459; Alexander, *Storm Landings*, 132.

50. Joseph Alexander points out on page 61 of *Storm Landings* that the U.S. submarine force was placing increasing pressure on the Japanese ability to send supplies out to its garrison forces in the Pacific. The ease with which they had been able to supply Betio would not be the norm for 1944 and 1945.

51. Garand and Strobridge, *Western Pacific Operations*, 456-457; Alexander, *Storm Landings*, 131-132.

52. Garand and Strobridge, Western Pacific Operations, 485-486.

53. Quote from Garand and Strobridge, Western Pacific Operations, 486

54. Garand and Strobridge, Western Pacific Operations, 486-487.

55. Isely and Crowl, 441.

56. COMINCH P-0012, page 1-1.

57. Collection of communications between parties concerning naval gunfire requirements for the invasion of Iwo Jima, MCUA, Box 35, Folder 649.

58. Commander, Amphibious Forces, U.S. Pacific Fleet (CTF 51), Operation Plan A25-44, 27 December 1944, Ships' Gunfire Support Plan, pages 4-5. MCUA, Iwo Jima Project, Commander Amphibious Forces (CTF 51), Operation Plan, A25-44 (Bound Book).

59. Alexander, *Storm Landings*, 129. The report was CINCPAC-CINCPOA Bulletin No. 9-45, "Iwo Jima: First Supplement to Nanpo Shoto Information Bulletin No. 122-44," dated 10 Jan. 1945. Isley & Crowl seem to allude to the same document on p. 436 but they do not name the source. They also report on the same page that records captured in the Marianas outlined the basic defensive plan for Iwo and that aerial reconnaissance photographs showed work continuing on island defenses despite almost daily American air and periodic sea bombardment.

60. Collection of communications between parties concerning naval gunfire requirements for the invasion of Iwo Jima, page 1. MCUA, Box 35, Folder 649.

61. Ibid., 6.

62. Ibid., 8.

- 63. Ibid., 9-10.
- 64. Ibid., 25.
- 65. Ibid., 26.
- 66. Ibid., 28.
- 67. Garand and Strobridge, Western Pacific Operations, 492.

68. Ibid., 34-35.

69. Ibid., 35.

70. Ibid.

71. Ibid.

72. CG VAC, VAC Landing Force SAR, Annex CHARLIE, Appendix 2, 30 May 1945, Comments of Naval Gunfire Officer, pages 7-8. MCUA, Iwo Jima Project, Fifth Amphibious Corps Landing Force, Volume IV.

73. Ibid., 12.

74. Ibid., 15.

75. Isely and Crowl, on page 470, praise Rear Admiral Blandy's decision to go with Weller's recommendation.

76. CG 5th Marine Division, 5th Marine Division Action Report, Annex HOW, Naval Gunfire Support, pages 4, 12, and 13. MCUA, Iwo Jima Project, Fifth Marine Division Action Report on Iwo Jima, Volume I (Bound Book).

77. CG 4th Marine Division, 4th Marine Division Operation Report, Annex CHARLIE, Operations, pages 18-19. MCUA, Iwo Jima Project, Fourth Marine Division Report, Iwo Jima, 19 Feb-16 Mar 1945, w/encl. A-C.

78. CG VAC, VAC Landing Force Report, Annex CHARLIE, Appendix 2, 30 May 1945, Comments of Naval Gunfire Officer, page 34. MCUA, Iwo Jima Project, Fifth Amphibious Corps Landing Force, Volume IV.

79. Kenyth A. Damke, "Was the Mission of the Pre-D-Day Bombardment by Naval Gunfire Accomplished at Iwo Jima?," Paper presented in fulfillment of 1947-1948 Senior Course requirements at the Amphibious Warfare School, Marine Corps Schools, Quantico, VA: 12-13. Marine Corps University Archives, Papers and Theses Collection.

80. Richard B. Frank, *Downfall: The End of the Imperial Japanese Empire* (New York: Random House, 1999), 37, 147, 212, 276; John Ray Skates, *The Invasion of Japan: Alternative to the Bomb* (Columbia, S.C.: University of South Carolina Press, 1994), 21, 25-26, 29, 44-45, 54. Skates does not mention Nimitz's change of heart indicated in the Admiral's 25 May "eyes only" communication to King.

CHAPTER 8

CONCLUSIONS

The war against Japan ground on for another four months and nineteen days after 26 March 1945, the day on which the United States announced an end to the capture and occupation phase of Operation DETACHMENT. The doctrine for the use of naval gunfire in support of amphibious assaults played an important part in reaching the point where, at Sulfur Island, it received its most rigorous test. Ironically, as integral to U.S. success as it had been through February of 1945, it played little direct role in the very last stages of the war. At Okinawa, Lieutenant General Mitsuru Ushijima was able to go even further than Kuribayashi in implementing the new Japanese defensive doctrine first seen at Biak. Okinawa's size allowed him the option of granting American forces four days of relative peace in getting ashore, finally contesting the American invasion from prepared inland defenses in depth instead of at the water's edge. The United States, in the end, chose a different strategy to force the Japanese to surrender than the one that had brought them essentially to the Emperor's doorstep. Rather than mounting an invasion of the Home Islands, the most massive amphibious assault contemplated by American wartime planners in either theater, a new and infinitely more powerful American technological innovation than naval gunfire - the atomic bomb - was used to bring the Sons of Nippon to their knees.

What, then, can be said about the effectiveness of naval gunfire in the preparation for and the execution of an assault on a well-defended beach? Did the prewar doctrine hold up without fundamental modification? In possession of an untried naval gunfire doctrine at the beginning of the war, the sea services did not get to put it

to the test until November of 1943 in the Gilberts – a test it failed. The assault on Tarawa Atoll proved that naval gunfire doctrine needed some fine-tuning. American commanders made changes and implemented them in the next operation, against the Marshall Islands, in January and February of 1944. United States amphibious forces, partly because of these changes, overwhelmed Japanese resistance on Roi-Namur and Kwajalein. Rapturous praise on the part of U.S. commanders aside, however, the Marshalls were not a sufficient test of the newly modified doctrine. The reason: the Marshall atolls invaded by the Americans were not the hardened targets that Betio Islet had been. The "Lessons of Tarawa" concerning naval gunfire did seem to have been absorbed and applied, however, and the Marine Corps was pleased.

The next operation would seem to show that only one naval commander, Rear Admiral Richard L. Conolly, had learned the vaunted "lessons." Saipan received only one day of bombardment from the ships whose crews had been trained in the intricacies of point fire against shore targets, the old battleships, cruisers, and destroyers of the Fire Support Task Group. Conolly, by contrast, worked over Guam for thirteen days, but he was able to do so only because the date of the invasion of that island had to be postponed due to the mushrooming problems associated with subduing Saipan. To his credit, however, he used the time wisely, applying the "lessons" with the precision of a master.

The assault on Peleliu suffered from failures at several levels, but the failure that cost the assaulting marines most dearly on D-day was the ignorance of accumulated naval gunfire "lessons" exhibited by the man in command of the operation's preliminary gunfire support, Rear Admiral Jesse Oldendorf. This is particularly surprising

considering that Oldendorf had participated in several preliminary bombardments prior to 15 September 1944, and that he was aware of the importance of thorough gunfire preparation for the success of an amphibious assault landing. The height of frustration for anyone perusing the records of STALEMATE II is when Oldendorf declared that he had run out of targets, this before he had finished using the guota of ammunition allotted him for the bombardment. Finally, at Iwo Jima, the Marine Corps argued for ten days of preliminary bombardment but received only three. The Navy, in the persons of Raymond Spruance and Kelly Turner, cited several reasons why the recognized doctrine requiring a bombardment commensurate with the strength of the enemy's defenses should be discarded in the case of Iwo Jima. Spruance, upon inspecting Japanese fortifications after the island fell to the forces under his command, believed himself justified in limiting the bombardment to three days. Kuribayashi's defenses were so thoroughly hardened that, in his estimation, only marines with rifles and flamethrowers could have gotten them out, regardless of the amount of aerial bombs and naval shells thrown at them.¹ For Spruance, the doctrine was irrelevant in the face of such strength and organization.

In summary, then, what were the major problems associated with the United States Navy and Marine Corps' World War II-era doctrine for the use of naval gunfire in the support of amphibious assaults? First, the doctrine's lack of clarity in its use of terms caused confusion and cost lives. Second, application of the doctrine varied too much from one commander to another and, consequently, from one operation to another. Third, the commanding officers of ships tasked with providing naval gunfire in support of amphibious operations were slow to adapt to the new mindset required of

them, namely, that the lives of the marines and soldiers going ashore and the mission they had to perform was more important than the safety of an individual ship. For the naval mind, such a thought was absolute heresy – even the captain's life counted for nothing if the continued existence of his ship was on the line. Repeatedly Turner and Conolly had to force ship commanders to put their vessels directly in harm's way so that adequate gunfire could be brought to bear during an assault. Fourth, the amount of naval gunfire used in each operation and the way in which it was portioned out varied according to no demonstrable formula. Lack of a consistent formula resulted in inconsistent application of the doctrine. Fifth, and most important, neither the Navy nor the Marine Corps understood the extent to which the Japanese were modifying their own doctrine by mid-1944 in response to American firepower. Consequently, American commanders failed to modify in a timely manner their application of naval gunfire doctrine in reaction to Japanese doctrinal changes. This failure resulted in the loss of thousands of American lives at Peleliu and Iwo Jima and the maiming of several thousand more.

The "lesson" most often mentioned in regard to the use of naval gunfire in support of American Central Pacific amphibious assaults during World War II is that long, slow, deliberate, and precise bombardment was necessary in order to insure the success of the assault of a well-defended beach. A survey of the operations undertaken in the Central Pacific shows quite clearly that this lesson was not followed consistently, so, either it was not learned as was claimed or it was ignored when planners considered it convenient to do so. There was, however, a lesson that was never mentioned as such but was consistently applied, and this lesson fit in well with an

American trait demonstrated in the European Theater as well as the Pacific – inadequacies in doctrinal finesse were to be overcome through the application of massive firepower. Many naval commanders continued to equate tonnage of ordnance to efficacy of naval gunfire support even after the "lessons of Tarawa" supposedly demonstrated the fallacy of such a conclusion. They excused lack of precision by pointing out that they were delivering a certain amount of ordnance in a relatively short period and that surely no defender could hold up under such punishment. Repeatedly, the Japanese showed that they indeed could hold up under the tremendous pounding of American naval artillery and that they would defend their positions to the death, both of themselves and of as many Americans as they could take with them. The Japanese modified their defensive doctrine during 1944 and 1945, taking into consideration the destructive capacity of American firepower, and they found a way to negate the American advantage. While they could not meet their enemy at the water's edge and drive him back into the sea, they could hold out long enough to exact a high price for each inch of ground given up. In the end, this defensive scheme caused the Americans to pause and consider in dread the costs to be incurred in taking the Home Islands, just as Kuribayashi hoped they would.

Endnotes

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APPENDIX A

TABLES

Table 1

Number of ships present during preliminary and pre-assault bombardments arranged according to ship types

	FBB	OBB	CA	CL	DD
Tarawa ¹	0	3	2	2	11
Roi-Namur ²	3	3	2	3	11
Saipan ³	0	7	6	5	26
Guam ⁴	0	6	5	2	19
Peleliu ⁵	0	4	3	1	9
Iwo Jima ⁶	2	6	5	3	9

Table 2

Size of island objectives and total number of combatants per side

	Size of Island ⁷	American Forces ⁸	Japanese Forces ⁸
Tarawa	800 x 3800 yds	17,447	4,866
Roi-Namur	Roi – 1,170 x 1,250 yds	24,902	3,563
	Namur – 80 x 890 yds		
Saipan	51/2 x 121/2 miles	66,779	31,629
Guam	13½ x 33 miles	54,691	16,100
Peleliu	2 x 6 miles	28,484	10,700
Iwo Jima	4 2/3 x 2½ miles	71,245	21,000

Notes:

- 1. Naval Gunfire Report, Tarawa, VAC NGF Officer.
- 2. Naval Gunfire Report, Roi-Namur, VAC NGF Officer.
- 3. Samuel Eliot Morison, *New Guinea and the Marianas: March 1944 August 1944*, History of United States Naval Operations in World War II, Vol. 8 (Boston, MA: Little Brown and Company, 1953), 409.
 - 4. Ibid., 419.
 - 5. III MAC Operations Report, NGF Report.
 - 6. Expeditionary Troops Report, NGF Report, Appendix II.

7. Gordon L. Rottman, *World War II Pacific Island Guide: A Geo-Military Study* (Westport, CT: Greenwood Press, 2002), 322-426.

8. Gordon Rottman, U.S. Marine Corps World War II Order of Battle (Westport, CT: Greenwood Press, 2002), 300-358.

APPENDIX B

GLOSSARY

Glossary of Selected Terms

Amphibious assault - The principal type of amphibious operation that involves establishing a force on a hostile or potentially hostile shore.

Amphibious force - An amphibious task force and a landing force together with other forces that are trained, organized, and equipped for amphibious operations.

Amphibious operation - A military operation launched from the sea by an amphibious force, embarked in ships or craft with the primary purpose of introducing a landing force ashore to accomplish the assigned mission.

Area fire - Gunfire delivered in a prescribed area. Area fire is generally neutralization fire.

Beachhead - A designated area on a hostile or potentially hostile shore that, when seized and held, ensures the continuous landing of troops and materiel, and provides maneuver space requisite for subsequent projected operations ashore.

Close supporting fire - Fire placed on enemy troops, weapons, or positions which, because of their proximity present the most immediate and serious threat to the supported unit.

D-day - The unnamed day on which a particular operation commences or is to commence.

Deep supporting fire - Fire directed on objectives not in the immediate vicinity of friendly forces, for neutralizing and destroying enemy reserves and weapons, and interfering with enemy command, supply, communications and observations.

Defilade - 1. Protection from hostile observation and fire provided by an obstacle such as a hill, ridge, or bank. 2. To shield from enemy fire or observation by using natural or artificial obstacles.

Deflection - Lateral angular correction applied to target bearing to bring fire onto a target. Most targets move, so it is necessary to "lead" them so that the projectile will arrive at their future position.

Destruction fire - Fire delivered for the sole purpose of destroying material objects.

Direct fire - Fire delivered on a target using the target itself as a point of aim for either the weapon or the director. Direct fire is usually used on targets that can be seen (by optics or radar) from the firing ship.

Dispersion - The distance from the point of impact of a particular projectile to the MPI of the salvo. Dispersion in range is measured parallel to the line of fire and dispersion in

deflection is measured at right angles to the line of fire. A Dispersion Pattern is the combining of all the impact points of a particular salvo.

Doctrine - Fundamental principles by which the military forces or elements thereof guide their actions in support of national objectives. It is authoritative but requires judgment in application.

Echelon - 1. A subdivision of a headquarters, i.e., forward echelon, rear echelon. 2. Separate level of command. As compared to a regiment, a division is a higher echelon, a battalion is a lower echelon. 3. A fraction of a command in the direction of depth to which a principal combat mission is assigned; i.e., attack echelon, support echelon, reserve echelon. 4. A formation in which its subdivisions are placed one behind another, with a lateral and even spacing to the same side.

Enfilade - To be able to fire along or down the long axis of a formation.

Estimate of the situation – A logical process of reasoning by which a commander considers all the circumstance affecting the military situation and arrives at a decision as to the course of action to be taken in order to accomplish his mission.

H-hour - For amphibious operations, the time the first assault elements are scheduled to touch down on the beach, or a landing zone, and in some cases the commencement of countermine breaching operations.

Indirect fire - Fire delivered on a target that is not itself used as a point of aim for the weapons or the director. Indirect fire is always used on targets not visible from the ship.

Mean Point of Impact (MPI) - The mean point around which rounds impact. The MPI should be near the center of the intended target.

Neutralization fire - 1. Fire that is delivered to render the target ineffective or unusable. 2. In naval war parlance it is rapid, fairly accurate fire delivered for the purpose of hampering, interrupting, or preventing enemy fire, movement, or action. The destruction of weapons and personnel is a secondary consideration. The effect of neutralization is comparatively temporary, and such fire may have to be repeated.

Plunging fire - In naval warfare, plunging fire is fire that comes down upon a target at close to a ninety-degree angle so that it can best penetrate the thinner armor of a ship's decks or the roof of a bunker.

Point fire - Gunfire directed at a definite material target in order to destroy that particular object.

Prearranged or scheduled fire - Gunfire that is formally planned and executed against targets of known location. Such fire is usually planned well in advance and is executed at a predetermined time or during a predetermined period of time.

Suppression - Temporary or transient degradation by an opposing force of the performance of a weapons system below the level needed to fulfill its mission objectives.

Uplift - To change the elevation of naval guns so that fire impacts at a predetermined distance inland, away from friendly troops.

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