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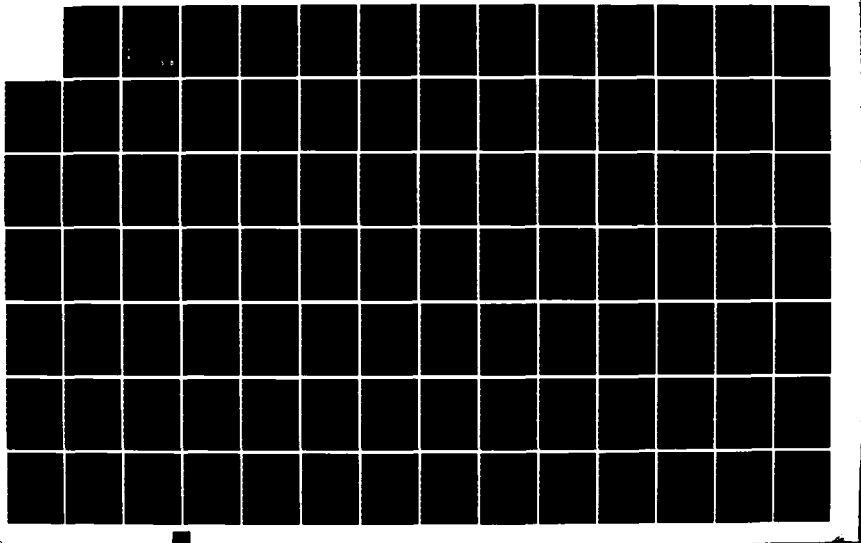

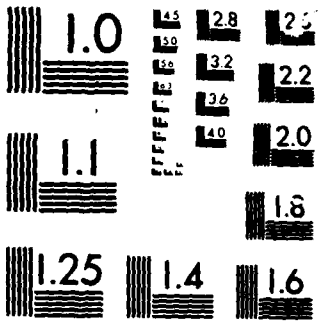

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VILLA VERDE TRAIL, LUZON

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The 32d Infantry Division conducted offensive operations to clear Japanese forces from the Villa Verde Trail on Luzon from February to May 1945. Because of the enemy's stubborn defense in the mountain jungle, the 32d Infantry Division was forced to slug its way to its objectives relying heavily on small unit tactics.

VILLA VERDE TRAIL, LUZON

Deliberate Assault (Mountain, Jungle)

32d Infantry Division

FEB - MAY 1945

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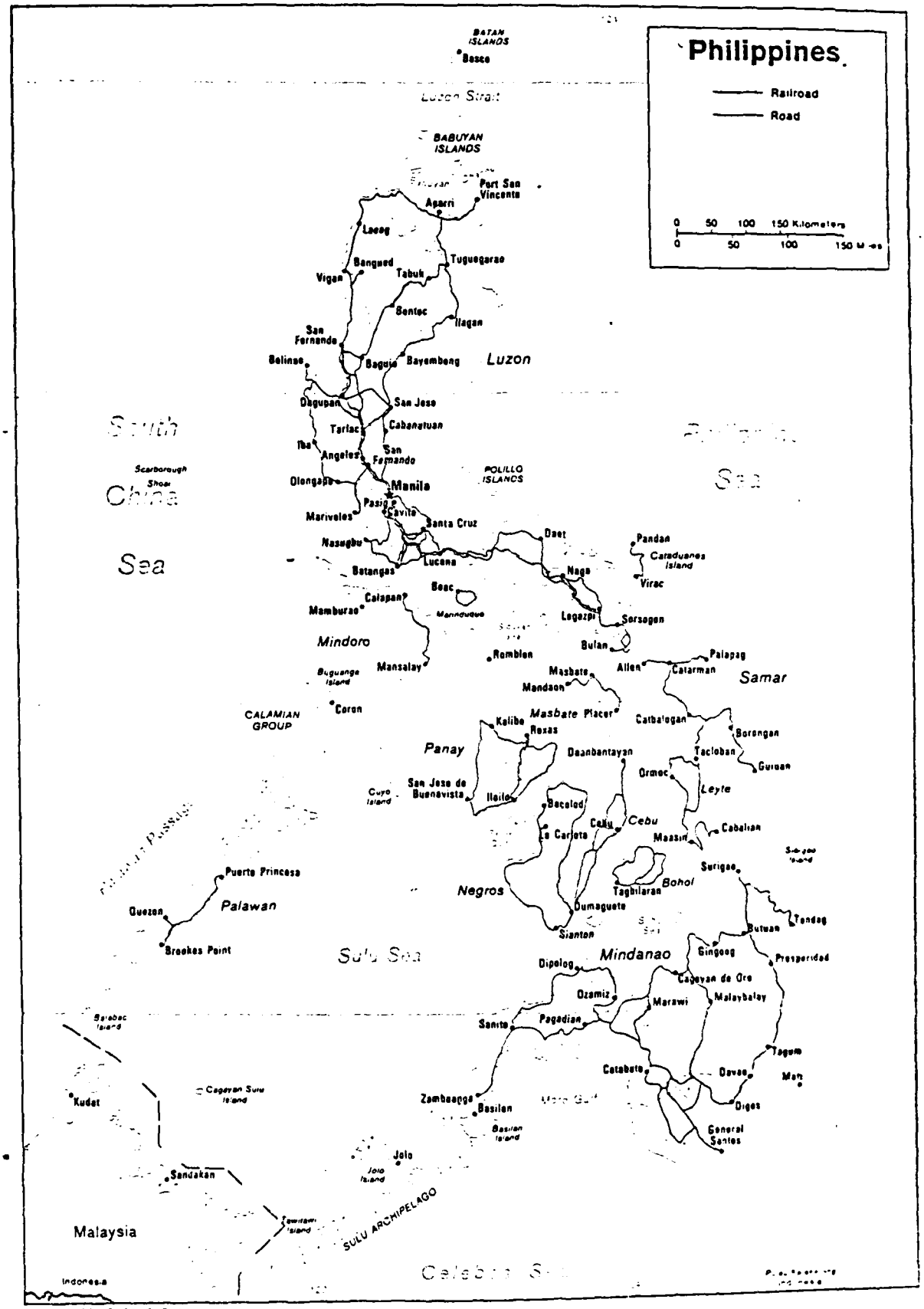

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ABSTRACT

COMMON REFERENCE: The Villa Verde Trail, Luzon
Feb-May 1945

TYPE OPERATION: Offensive, Deliberate Assault, Mountain, Jungle

OPPOSING FORCES: ALLIES - 6th ARMY
I Corps
32d Infantry Division
ENEMY - 2d Tank Division (-)
10th Reconnaissance Regiment

SYNOPSIS: The 32d Infantry Division conducted offensive operations to clear the Villa Verde Trail from late February to May 1945 as part of an overall effort by I Corps, 6th Army, to defeat the Japanese in northern Luzon. The Division had already accrued two years of combat experience in the Pacific prior to the beginning of the operation. Facing, perhaps, its most difficult challenge of the war, the 32d Infantry Division came into this battle understrength, tired, diseased, and weary. Morale was low, and the Division's leadership had been significantly reduced prior to Villa Verde. The 32d Infantry Division found itself confronted by an experienced, dug in, and well fortified enemy in the rugged, densely vegetated mountains of northern Luzon. Consequently, the 32d Infantry Division had no alternative but to fight it out using small unit tactics under extremely difficult environmental conditions.

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SECTION 1

INTRODUCTION TO THE BATTLE OF THE VILLA VERDE TRAIL, LUZON

The 32d Infantry Division's assault to clear the Villa Verde Trail occurred from February to May 1945. This battle was part of the effort by I Corps, 6th Army, to defeat the enemy in northern Luzon. The principal antagonists were the American 32d Infantry Division and the Japanese 2d Tank Division (-) and the 10th Reconnaissance Regiment.

Sources of information concerning the battle include biographies, operational histories, operation reports, field orders and field manuals, after action reports, and memoirs. To insure that a thorough, balanced account of the battle was obtained, documents by both US and Japanese authors were used. In addition, information from both military and civilian sources were included. Oral history interviews were possible; however, they were not used because sources were not readily available. A bibliography is at the end of this paper.

Evaluation of the primary sources are as follows:

American Strategy in World War II, by Kent Roberts Greenfield, provided an indepth look at the US strategy at the beginning of World War II. It also provided an insight into how US strategy evolved during the war in the various campaigns.

The Department of the Army Manual, April 1982, Chapter 5, discusses US forces available for World War II. The manual provides a historical look at how the US mobilized manpower throughout its history and particularly for the period just prior to World War II.

The Japan Yearbook 1949-52 is a historical record that traced the evolution of the armies of Japan. It addresses the various methods of conscription, the different categories of service, and the Japanese forces available in World War II. This book provided a detailed description of Japan's military system.

Japan, the New World Power, by Robert P. Porter, provides information pertaining to Japan's emergence as a world power and the development of national objectives and strategies to insure world power status. This book provided an excellent analysis of the strategies implemented by Japan in World War II.

World War II, Policy and Strategy, by Hans-Adolph Jacobsen and Arthur L. Smith Jr., provides a look at US, Allied, and adversary strategies and policies during World War II. The policies are presented in general terms and show the development of policies as the war continued.

"Germany First: The Basic Concept of Allied Strategy in World War II," by Louis Morton, a chapter in Command Decisions, provides information regarding the US and Allied strategy for World War II. Included in this chapter is a discussion of the development of the Rainbow and color plans. It also reveals the US position concerning the various strategic plans and adoption of these plans on the road to war.

"Japan's Decision for War," by Louis Morton in Command Decisions. Relying heavily on personal memoirs, letters, and official government documents of the period, Morton provides a clear, concise overview of the internal Japanese political dynamics which resulted in the decision for war. The essay is equally suitable for general readership, since it avoids most jargon and presupposes little advance knowledge of the subject, and for professional historians or military readers, since it is very well documented. Morton takes an analytical, subjective approach to his subject, presenting both the advantages and disadvantages of Japan's rationale.

"Japan's Road to War," in the Marshall Cavendish Illustrated Encyclopedia of World War II, Volume 5. For a large-format, "picture" history of World War II intended for the general public, this volume provides a good deal of useful information. Written in colloquial style, it provides general statistics on Japanese forces and military capability. Two subsections of the chapter entitled "Japan Becomes a World Power," and "Japan's Dilemma: the Chinese War," give the general reader an excellent, concise (two-three page) introduction to some key pre-war Japanese history. Not intended as a scholarly work, the book suffers from a lack of documentation; there are numerous quotes throughout by such figures as Nagano, Yamamoto, Tojo, and Konoye, but no attempt is made to place them in context as to when or where they originated.

"World War II: The War Against Japan," by Robert W. Coakley in American Military History. This short essay provides an overview of US operations and strategy in the Pacific, as well as in the China, Burma, India Theater. Intended primarily for the general reader, or at best as an introduction for military readers, the essay succeeds in presenting the broad sweep of events, but little detail. In addition, it is geared primarily toward the land campaign against Japan; Midway, for example, is only briefly mentioned, while Leyte Gulf is relegated to one short paragraph.

The Rising Sun: The Decline and Fall of the Japanese Empire, 1936-1945, by John Tolar . This excellent work provides a detailed review of World War II as seen from the Japanese perspective. The information is derived from a variety of primary and secondary sources: personal interviews with former Japanese officials, State Department cables, previous works, etc.. The primary value of the book lies in the insight it gives into Japanese policy formulation during the war; as a military history--which admittedly the book does not purport to be--it is somewhat selective in the emphasis given to various topics. An entire chapter, for example, is devoted to Iwo Jima, while the US reconquest of the Philippines (a Japanese defeat of similar or greater magnitude) is relegated to several pages.

The Pacific War: World War II and the Japanese, 1931-1945, by Saburo Ienaga. This book, written by a Japanese author who lived through this period, is a strong polemic against Japan's militarism of the 1930's and the early 1940's. The author provides some useful facts and figures on Japan's prewar military induction system, but the main value of the work lies in the picture it paints of the pervasive militarism of Japanese society at the time. Not intended as a scholarly, or even objective, work, it does provide a good insight into the cultural factors which motivated Japan in World War II.

Triumph in the Philippines, by Robert Ross Smith. This work is probably the definitive military history of the US reconquest of the Philippines. Intended for the military reader--the degree of detail is too excruciating for all but the most masochistic general reader--the book relies almost exclusively on primary sources. Smith provides a good overview of the Luzon-Formosa debate, as well as the overall plan for the Luzon invasion. One particularly valuable chapter deals with the Japanese, where Smith describes Yamashita's strategy, logistics, command arrangements, and troop dispositions. Throughout, the author remains dispassionate and objective, providing a history rich in detail if not in color.

Soldier's Guide to the Japanese Army, Military Intelligence Service, War Department. Written in 1944, this 182-page pamphlet was designed to familiarize the average American soldier with the Japanese Army. Surprisingly, the work generally avoids many of the more egregious stereotypes of the Japanese prevalent in the US during this period. Rather, it attempts--and usually succeeds--in describing both the strengths and weakness of the Japanese soldier. Given the "hands-on" nature of the pamphlet, much of it is devoted to Japanese weapons, ranging from small arms to artillery to armor. However, the work also contains useful information on the organizational structure of the Japanese Army, as well as its tactics in the offense and defense. Such data is noticeably absent from much of the more recent literature

on the Japanese Army, and thus this little pamphlet fills an important historical void.

Louis L. Snyder's Historical Guide to World War II. This book is intended primarily as a desk-side reference for general readers. It is arranged alphabetically, with encyclopedia-type entries. While lacking documentation, it does provide some useful facts and figures. The sections entitled, "Japan at War," and "The United States at War," for example, contain good summaries of such diverse national factors as civilian morale, mobilization of manpower, production statistics, labor supply, etc.. While hardly a substitute for more detailed works, it does serve as a good repository for a variety of data all too often dispersed in a number of volumes.

Always a Commander. The Reminiscences of Major General William H. Gill, by Edward Jaquelin Smith. A short section covers the action on the Villa Verde Trail. It shows the commander's general impressions of the battle well (by the 1st of April, Gill was convinced the mission was too big for his division) but does not explain why he fought the battle as he did.

Operations Reports, After-Action Reports, Intelligence Summaries, etc. The reports that were available were complete and provided valuable information pertaining to the area of operations, the scope of the operation, and the assigned missions. Many of the available documents were from late in the campaign; however, they were useful in determining task organization and other pertinent unit information. Several of the subordinate unit Operations Orders also proved to be reliable because they contained information that could not be found in nonexistant higher headquarters field orders.

SECTION 2

THE STRATEGIC SETTING

On 2 December 1941, a Japanese Naval Task Force of six aircraft carriers and seventeen escort ships received a message from Admiral Yamamoto, Commander-in-Chief of the Imperial Combined Fleet. The text read, "Climb Mount Niitaka," code for "Proceed with the attack on Pearl Harbor." Five days later, 404 Japanese aircraft struck the US Pacific Fleet precipitating America's entry into World War II. While the Pearl Harbor attack appears in history as a watershed event, Japan's road to war with the United States began years earlier with the Japanese invasion of China in 1931. The road ended at Pearl Harbor when the Japanese became convinced that the United States was determined to relegate Japan to second-class status among the nations of the world.

During the first four decades of the 20th Century, Japan had created an impressive industrial society. Nevertheless, Japan was at heart a poor nation; its only major asset was its 75,000,000 well-educated and industrious people. The country lacked almost all essential raw materials--iron, coke, oil, rubber, bauxite, manganese, lead, copper--for modern industry. This need to secure resources, as well as a desire to maintain foreign markets for Japanese goods, convinced the Japanese that territorial expansion was a necessity if the nation was to prosper. The program--initially launched by the Army without knowledge of the civil government--began with the invasion of Manchuria in 1931. By 1941, Tokyo was able to pressure the defeated French government to allow the Japanese occupation of

French Indochina, and Japan was well on the road towards establishing its "Greater East Asia Co-Prosperity Sphere."

Long before the Japanese occupation of Indochina, however, Tokyo's objectives were coming into increasing conflict with those of the United States. Determined not to sanction aggression, Washington's initial policy toward Japanese conquests was simply to refuse to recognize sovereignty over the occupied territory. Gradually, the American stance hardened as Japan refused to accede to Washington's demands to cease aggression in China. Finally, in July 1941--following the Japanese move into Indochina--President Roosevelt ordered all Japanese assets in America frozen; Britain and the Netherlands immediately took similar action. The net effect of this move was to create an economic blockade, including an oil embargo, against Japan. According to one American newspaper, it was "the most drastic blow short of war."

For Japan, oil indeed was the critical commodity, in particular for the Navy. Attempts at restricting internal consumption in the late 1930's were not successful in reducing Tokyo's dependence on its three principal suppliers: the United States, Britain, and the Netherlands. Through stockpiling, however, Japan had managed to accumulate 23,000,000 barrels of crude oil and 15,000,000 barrels of refined products--enough for one year of war. Thus the American embargo, supported by Britain and the Netherlands, gave Japan only two options: disengagement from China and Indochina in response to Washington's demands, or immediate, rapid expansion further south to secure the oil of the Dutch East Indies before stockpiles were consumed. To the militarists in Tokyo, the United States' action was the last step in the encirclement of the Empire by hostile powers, a denial of Japan's rightful place in Asia. As a result of this mindset, the course Tokyo chose was war.

To achieve its objective of securing resources, Japan believed it could fight a ~~limited war~~ for limited objectives. Its strategy was predicated on securing a vast triangular defensive perimeter in the Western Pacific. From the Kurile Islands in the north, Japanese bases

would run south through Wake, the Marshall, and the Gilbert Islands. The southern flank would be anchored by the Solomon Islands, New Guinea, and the Dutch East Indies (See Map 1). These bases would provide an outer shield behind which the resources of the region--primarily oil, rubber, and tin--could be exploited, while providing the Japanese with secure interior lines of communication. In effect, Tokyo's strategy was predicated on the premise that the United States would accept Japan's fait accompli and negotiate rather than fight a costly, protracted war to regain lost territory. Even if America did fight, Japan believed the Allies would wear themselves out by frontal assaults on its strongly-defended perimeter.

The Japanese fixation with a string of lightning victories followed by a negotiated settlement was a legacy from the recent past. In 1894, Japan precipitated a war with China over control of Korea. In rapid succession, Tokyo's forces destroyed Chinese naval units, overran southern Manchuria, and captured the port of Wei-hai-wei in China proper. Less than a year later, the Treaty of Shimonoseki granted Japan a large Chinese indemnity, full independence for Korea, and ceded Formosa to the Japanese. The war was a brilliant debut for Japan's newly-modernized Army and Navy, and demonstrated that the country had joined the ranks of the modern military powers.

Less than a decade later, Japan would again astound the world with its military victories, this time against Russia. The issue once again was over influence in North Asia, particularly Korea. Japan initiated hostilities with a surprise attack on the Russian fleet at Port Arthur. This was followed by a dazzling string of victories over Russian forces, highlighted by the battles of Tshushima at sea and Mukden on land. Exhausted by the war, Russia sued for peace eighteen months later, and under American mediation, conceded Japan's paramountcy in Korea and southern Manchuria. There is little doubt that the Sino-Japanese and Russo-Japanese Wars convinced Tokyo that it was not necessary to completely destroy an opponent in order to

achieve desired objectives, but rather that a limited war could obtain the same goals.

The Japanese misperception of the anticipated American reaction to the Pearl Harbor attack probably represents one of history's greatest examples of national self-delusion. If Japan's war aims were limited, Pearl Harbor insured that those of the United States would not be. America isolationist sentiment, so prevalent in 1940 and 1941, vanished overnight. Embued with the strategic tradition of General Grant and annihilation of the enemy, the United States would not settle for a negotiated peace, or even a return to the status quo ante bellum. Rather, America was determined to destroy the entire structure of Japanese militarism, which demanded unconditional surrender of the enemy. American sentiment--and strategy--were perhaps best summed up by Admiral Halsey, who on 9 December 1941 stated, "Before we're through with them, the Japanese language will be spoken only in hell."

Japan's misperception of America's reaction to its initiation of war in the Pacific underscores the fundamental political, social, cultural, and economic differences between the two nations. Although Japan was a modern state with a formal constitution, cabinet, and civil service, the legacy of the feudal past weighed heavily on the nation. Hundreds of years of rule by men of the sword preconditioned the population to accept rule by military leaders, and as the militarists gained the upper hand in national politics during the 1930's, there was little public reaction. Indeed, throughout the culturally homogenous society, the concept of obligation--to family, to employer, to the nation, to the Emperor--was paramount. Both prior to and during the war years, the government could and did exploit such sentiment to demand extraordinary sacrifices from the populace.

The Japanese sense of obligation was also exploited by the Army. Between the ages of seventeen and forty, all able bodied males were subject to military conscription, and a phased system of military service was developed. All men who reached the age of twenty were required to perform "Service with the Colors," or

active duty. This service was followed by duty in the First and Second Reserves and the First Territorial, in sequence. Two other organizations, the Second Territorial and the Depot Service, were used for probationers and replenishment of other forces.

This military system had one overriding goal: to instill obedience and courage in recruits, by harsh discipline if required. The Samurai tradition--officially ended after the Meiji Restoration--became dominant among military officers in the 1930's. Their entire world outlook was conditioned by Bushido, the Way of the Warrior. According to its tenets, the ultimate fate of a soldier was to die in battle, and personal courage and honor were paramount. The system was contemptuous of the rest of humanity, and in the late 1930's, this was reflected in a Japanese Army that was isolated and largely autonomous from the rest of society. Officer candidates were recruited at the age of fourteen, and from then on subjected to narrow military training. The result of such a closed system resulted in hypernationalism and a military establishment convinced that it had a divine right to control the nation's destiny.

Coupled with the general indoctrination of the population, the Japanese military system produced exceptionally--and often excessively--courageous troops. Indeed, a key part of Japanese doctrine was its emphasis on spirit and morale as the decisive factor in warfare. Thus, the Japanese strategy called on ground units to close with enemy forces to the point of hand-to-hand combat, where the Japanese believed their spirit and elan would carry the day. In the defense, such a doctrine meant that Japanese soldiers, believing surrender would mean disgrace, fought doggedly to the last man. Yet by 1940, the nature of warfare had bypassed such Japanese concepts. As one Japanese witness of the period would write, "Enormous advances in weaponry meant that victory was not determined by the battlefield bravery of soldiers. The military went into the Pacific War still clinging to the concept of fighting spirit as decisive in battle. The result was wanton waste of Japanese lives, particularly in combat with Allied forces whose doctrine was based on scientific rationality."

The Japanese doctrine of warfare was reflected in the organization of the Army. Basically, it was a manpower-intensive, light infantry force--the ideal structure for closing with the enemy. Two types of division structures were employed, triangular (with three infantry regiments), and brigaded (with two infantry brigades). At the height of the war, sixty-nine of the Army's 127 divisions were triangular, with brigaded divisions accounting for twenty-five of the total. The triangular division consisted of about 16,000 troops with supporting artillery, cavalry, engineer, and transport regiments. While only slightly larger in size than a standard US division of the period, the Japanese triangular division was equipped with 2,200 more rifles. Brigaded divisions were somewhat smaller; they consisted of 12,000 troops and lacked some supporting armament. In general, brigaded divisions were used for garrison duty and anti-guerrilla operations. At the start of the Pacific War, most Army units were equipped with 6.5mm rifles and light machine guns. Profiting from their experiences in jungle fighting, however, the Japanese began to replace these weapons in mid-war with 7.7mm rifles and machine guns, since the muzzle velocity and bullet weight of the earlier models were inadequate.

The Japanese political and military system--a military largely free of civilian control, an autocratic government, an obedient and quiescent population--contrasted markedly with that of the United States. Long suspicious of standing armies, America had traditionally relied on citizen soldiers; even by 1939, the Regular Army totalled only 189,000 personnel. Only with the outbreak of the war in Europe did the United States begin recalculating its military needs. Increases in National Guard and Regular Army forces were authorized, and the following year about 200,000 National Guardsmen entered federal service. Finally, in the summer of 1940, Congress enacted military conscription. Before the war ended, over fifteen million men and women--five million of them volunteers--served in the armed forces.

The Army, with some 10,400,000 military personnel, was the largest service. The

US division structure was similar to that of the Japanese triangular division and consisted of three infantry regiments with supporting elements. Although the US division had fewer rifles, it had significantly greater firepower in the form of more automatic rifles and machine guns, and heavier field artillery (105mm and 155mm versus 70mm, 75mm, and 155mm weapons). In addition, the American division was highly mobile; all elements except the infantry were motorized. By contrast, the Japanese triangular division still included 5,215 horses in its table of organization and equipment at the end of the war.

The difference in political and military values between the United States and Japan were underscored by the vast difference in the war-making potential of the two nations. The US began the war with a population of 132,000,000--almost twice that of Japan. Although war industry accounted for only two percent of total US industrial capacity in 1939, America had vast reserves of raw materials, energy, and space. The Japanese themselves realized the American potential; in the summer of 1941, military planners estimated war potential and assigned the United States the following advantages: steel, 20:1; oil, 100:1; coal, 10:1; aircraft, 5:1; shipping, 2:1; labor force, 5:1. Japanese predictions were borne out as evidenced by the 1943 US production schedule: 125,000 aircraft, 75,000 tanks, 35,000 antiaircraft guns, and ten million tons of shipping per year.

Against the torrent of US industrial production, the Japanese found it impossible to hold their own. Lacking raw materials, the Empire was dependent on the arrival of merchantmen from the far-flung corners carrying the essential supplies: oil from the Indies, rubber and tin from Malaya, iron ore from China and Manchuria. By utilizing stockpiles, Tokyo managed to keep increasing production of war material until 1944. Beyond that point, however, the American submarine offensive began to have its effect, sinking 529 Japanese merchant ships that year alone. Such losses could be made good only by new construction, which was now impossible. Well before the war

began, senior officials realized that such an outcome would be possible in the event of a protracted war. As Admiral Yamamoto stated in the summer of 1941, "...I will unleash all I have in the first six months and promise you an uninterrupted sequence of victories. But I warn you, if hostilities continue for two or three years, then I have no confidence that ultimate victory will be ours."

True to Yamamoto's word, the Japanese did achieve a string of lightning victories in the efforts to secure both resources and a defensive perimeter. Simultaneously with the attack on Pearl Harbor, Japan launched assaults against other Allied positions in the Far East. Guam, Wake, and Hong Kong fell in December, and three days after Pearl Harbor, Japanese forces landed in the Philippines. On 15 February 1942, Singapore--along with 70,000 troops of the British Empire--surrendered. Less than two months later, Bataan capitulated, yielding 75,000 American and Filipino prisoners. By May 1942, Japan threatened India in the west, Australia in the south, and Midway and Hawaii in the east. Indeed, it looked as if Admiral Yamamoto's pre-war quote was well on the way to fulfillment. "After two years of war, we shall have made all the conquered territory in the south impregnable."

Despite Japanese hopes, it soon became apparent that the United States was not about to concede mastery of the Pacific to Tokyo. While America did not renounce its prewar strategy of defeating Germany first, it did begin to fortify lines of communication across the South Pacific to Australia. In addition, rather than accepting a completely defensive strategy, the United States began to take limited offensive actions. As early as February and March 1942, small carrier task forces hit the Marshalls, Wake, and Marcus Islands.

Eventually, a two-pronged offensive strategy against Japan emerged. In the south, two American forces would converge on the Japanese bastion at Rabaul on New Britain. Admiral Halsey, commanding the South Pacific Area, would advance northwest

along the Solomon Islands; at the same time, Southwest Pacific Area forces under General MacArthur would move up the north coast of New Guinea. Meanwhile, a second US advance would move west across the Central Pacific under the command of Admiral Nimitz. Featuring carrier warfare and amphibious landings, this drive would sequentially seize the Gilbert, Marshall, Caroline, and Mariana Islands. Both the southern and central Pacific advances would eventually converge on the strategic triangle formed by the south China coast, Luzon, and Formosa. Use of such a dual-axis advance would allow American planners a degree of flexibility; it permitted the shifting of resources to whichever axis appeared to offer the better chance of success.

The US offense against Japan began in earnest in August 1942, when the 1st Marine Division landed at Guadalcanal. Step by step, the Allied forces moved up the Solomons and the New Guinea coast, eventually encircling Rabaul and neutralizing it without the need for a frontal assault. Further north, the central Pacific drive seized the Gilberts in 1943 and the Marshalls in early 1944; by mid-1944, the Marianas had fallen. As the Allied forces closed in on Japan, debate began to emerge over where the two US drives should converge: Luzon or Formosa.

The American strategy was based on the premise that an invasion of the Japanese Home Islands would be required. A key prerequisite for such an operation would be aerial bombardment, which planners felt could best be undertaken from bases along the south China coast. In such a strategy, Formosa played a critical role; from here US forces could sever the air and sea lifelines from Japan to its Southeast Asia possessions. In addition, Formosa was less than 1,500 miles from Tokyo--well within range of B-29 bombers. General MacArthur, however, favored by-passing Formosa entirely. Rather, he desired to secure Luzon and then strike due north towards the Home Islands themselves. In addition to the strategic advantages, MacArthur argued that the liberation of the Philippines was a national obligation. By the fall of 1944, a

number of factors--loss of possible bases in South China, seizure of new airfields in the Marianas, logistic difficulties--made the Formosa operation look increasingly less attractive. On 3 October 1944, therefore, the Joint Chiefs of Staff directed MacArthur to launch the invasion of Luzon on or about 20 December.

Thus directed, MacArthur began planning the reconquest of the Philippines. The initial strategy called for an assault on Mindanao to secure air bases, followed by a large-scale assault on Leyte, and eventually landings on Luzon itself. However, finding Japanese strength in the central and southern Philippines unexpectedly weak, MacArthur proposed--and the Joint Chiefs of Staff approved--bypassing Mindanao and invading Leyte two months ahead of schedule. On 20 October 1944, four Army divisions landed abreast on Leyte, beginning what would be the largest US land campaign of the Pacific war.

Less than three months later--only slightly behind the schedule directed by the Joint Chiefs in the fall of 1944--MacArthur's forces began landing on Luzon. The main effort by the Sixth Army was made at Lingayen Gulf on the west-central shore of the island. This beachhead area provided direct access to the most critical military objectives on the island: the Central Plains-Manila Bay region. Within three days, five Army divisions, a separate regimental combat team, two artillery groups, an armored group, and supporting units were ashore.

If the United States was determined to reconquer the Philippines as a further stepping-stone on the road to Tokyo, the Japanese were equally determined to make the cost as high as possible. As early as September 1943, Allied successes had forced the Japanese to retrench from their earlier defensive perimeter to a new "absolute national defense sphere." Extending from the Kuriles southwards through the Bonins, Marianas, and Carolines, then westwards through the Sunda Islands and Burma, this perimeter encompassed the minimum area considered essential to achieve Japan's war aims (See Map 2). By mid-1944, however, this new perimeter had already been

fractured in several places. The fall of the Phillipines--particularly Luzon with its excellent air and naval facilities--would complete the process, since it would sever the Japanese lifeline to the Dutch East Indies and Southeast Asia.

Given the importance of Luzon Island, the Japanese originally envisioned that the decisive battle for the Philippines would be fought on that island. The US assault on Leyte, however, caused a change in Japanese strategy, and Tokyo began to commit significant forces there. The result was disaster; as one author wrote, "Leyte turned into a graveyard of Japanese hopes." By the time the struggle for the island ended, Japan had lost 56,000 dead, its Navy had suffered staggering losses--twenty-six ships, including four aircraft carriers--and several hundred carrier and land-based aircraft had been destroyed. The commander of the Japanese 14th Army Area in the Philippines, General Yamashita, had steadfastly opposed a major stand on Leyte. Eventually, he was able to convince his immediate superior, the Commander of the Southern Army, to abandon the island and direct reinforcements to Luzon.

Unlike MacArthur three years earlier, Yamashita did not intend to defend the Central Plains-Manila Bay region for several reasons. Knowing there was no hope of reinforcements, there was little need to keep a major port open. Also, Yamashita viewed the Bataan Peninsula as a cul-de-sac, where his troops would find little food and where the Americans could bring overwhelming fire and airpower to bear against him. Rather, he decided to fight a static defense, moving the bulk of his forces to mountain strongholds from where he hoped to delay the inevitable Allied advance on Japan. On paper, Yamashita commanded a significant force--some 275,000 troops. They were organized into three groups: Shoku Group, on the northern part of the island with 152,000 troops; Kembu Group, on the west side of the Central Plain with 30,000 troops; and Shimbu Group, consisting on 80,000 troops defending all of southern Luzon.

Despite the impressive strength figures, Yamashita's forces suffered from

serious deficiencies. Ammunition, demolitions, construction equipment, medical supplies, and food were all in short supply. As early as mid-November, daily rations had been cut from three pounds to nine-tenths of a pound; by mid-January, some units were receiving less than one-half pound per man per day. Compounding the supply problem were transportation problems. Not only were organic transportation units lacking, but Allied air attacks completely disrupted road and rail traffic. Equally important, command arrangements were unclear. This was highlighted when naval troops, only nominally under Yamashita's command, ignored his defensive concept and made a stand in Manila, leading to a costly twenty-nine day struggle for the capital.

Given Yamashita's strategy, the Japanese made little effort to contest the inital landings, and the Sixth Army rapidly consolidated its beachhead area. Indeed, up to D+2, total US Army casualties were 55 killed and 185 wounded, mostly due to indirect fire rather than infantry actions. On 11 January, the Sixth Army's two corps began moving out of the beachhead area; XIV Corps started southward toward Manila against light resistance, while I Corps began advancing north and northeast against the main Japanese resistance. On 27 January, units from the Eight Army--a cavalry division, a cavalry regimental combat team, and an infantry division--reached Lingayen Gulf. Upon landing, they were assigned to the Sixth Army. The 32d Infantry Division was assigned to I Corps by the 6th Army commander and began advancing slowly against the Japanese positions on northern Luzon. Part of that advance was along a narrow track through rugged terrain, called the Villa Verde Trail.

SECTION 3

REVIEW OF THE TACTICAL SITUATION

Climate and Weather:

The climate in Luzon during this operation was characterized by extreme heat with equally oppressive humidity. Although operations were conducted during Luzon's normal dry season, sporadic cloudbursts accompanied by fog resulted in poor trafficability and impacted adversely on the battle. Additionally, throughout early April, unseasonably heavy rains and dense fog severely curtailed operations. As the rainy season approached, nights became cooler and increasingly wet and damp which contrasted with the enervating daytime heat. Winds in the area were predominantly from the northeast. These winds favored the Japanese use of obscurants but also allowed effective use of US illumination rounds.

The weather had a significant effect on morale as well as combat efficiency and effectiveness. In the early stages of the battle, unprotected exposure to the sun exacted its toll on combatants. As the battle progressed into the more vegetated areas, torrential rains caused severe mud problems, and the dampness affected both personnel and equipment. The continuously changing weather compounded by rugged, precipitous terrain and a fierce Japanese defense, had a significant impact on US forces. Torturous terrain, an intense tropical sun, and insufficient supplies of water had a devastatingly debilitating effect on US forces. Heat exhaustion and poor hygiene gave way to tropical disease which resulted in extremely high rates of noncombat

casualties. The Japanese, on the other hand, were more acclimated to the area and fought from stationary, fortified positions. The weather had little impact on Japanese morale. It did, however, hinder their observation during poor visibility and, during clear weather, allowed US air interdiction and reconnaissance.

During the dry season, clear weather allowed unlimited visual observation and photography. This was extremely important to US forces in the development of accurate maps of the area. The Cabalisiaan River was easily fordable in February while it would have caused significant problems in April. Clear weather allowed US forces to take advantage of their air superiority in both a close support role and aerial reconnaissance.

Terrain:

Observation and fields of fire: The Japanese were defending in depth along the Villa Verde Trail. The first few kilometers of the trail crisscrossed the top of a bare ridgeline under the direct observation of Japanese who were occupying strongly fortified positions along the higher elevations of the trail. As the trail rose from a mere 400 feet at Santa Maria to nearly 5,000 feet at the Salacsac Pass, movement became more rigorous and restricted and was virtually limited to the poorly constructed road. As such, US movement was extremely vulnerable to Japanese machine gun and mortar fire. The Japanese were initially successful with a reverse slope defense but were later neutralized by US high angle mortar fire and air sorties. The nature of the terrain along the Villa Verde Trail was a significant combat multiplier for the Japanese. Their well-orchestrated defense and masterful use of the terrain allowed them to defend much longer than would have been expected.

Cover and Concealment: The terrain provided good cover and concealment from the effects of direct fire weapons. The effect of progressively higher elevation,

however, allowed the Japanese to cover the area with fire from key heights thus reducing the US ability to take advantage of the terrain. Thick forests and jungle vegetation in some areas of the trail also provided excellent cover and concealment. The advantage, of course, normally rests with a defender who can take advantage of the best possible terrain.

Obstacles: The entire Caraballo spur which divided the central plains from the eastern coastal plains was the major obstacle in this battle. The only east-west passage was the erratic Villa Verde Trail. The trail itself was so restrictive that it channelized US forces and compounded their susceptibility to enemy fire. The Japanese were able to defend in depth along the narrow trail and slowed US progress. The thick vegetation and the steep slopes along the trail also became an impediment to US progress. The composition of the soil could also be categorized as an obstacle. In dry weather, the dust affected equipment operation and obscured visibility. When it rained, the mud became severe enough to halt operations. The Cabalisiaan River crosses the trail twice; once near Santa Maria and again about five miles northeast of the first crossing. The 10th Reconnaissance Regiment attempted to stop the 127th Infantry at the second of these crossings but was unsuccessful. The river at this point was little more than a stream and presented no obstacle to the US operation.

Key Terrain: The key terrain in the area was the Caraballo Mountain chain, a spur which separated the central plains from the Japanese main supply route. The only promising passageway across the spur was the Villa Verde Trail which was little more than a carabao path. The total length of the trail was twenty-seven miles from Santa Maria to Santa Fe, but the air distance was eleven miles, indicating the winding character of the road. There are numerous hilltops and ridges along the path that could be construed as key terrain because they afforded the Japanese a marked advantage in their defense. The most notable terrain features, those which provided the best defensible terrain and which compartmentalized the battle, were the

Cabalisiaan River crossing and the western and eastern limits of the Salacsac Pass. The Japanese made superb use of the terrain and exploited every advantage the ground offered. They established an effective system of mutually supporting defensive positions that covered every twist and fold of the trail. Every knoll and hillock along the trail held at least one machine gun emplacement; every wooded draw providing a route for outflanking a position was zeroed in for artillery or mortars. Caves, natural or man made, came to characterize the Japanese defense.

Avenues of Approach: With the exception of the Villa Verde Trail, the rugged, heavily-vegetated precipitous terrain was totally inhospitable to ground maneuver of any military significance. In every instance, the terrain favored the defender. Direct and indirect fires by the Japanese were extremely effective due to the absence of maneuver space. With minor exceptions, the enemy could not be outflanked because of terrain limitations. The only approach was a direct frontal assault up the trail.

Strength and Composition, 32d Infantry Division:

As the campaign opened, the 32d Infantry Division had an assigned strength of 666 officers and 11,593 enlisted men. Of this strength, 625 officers and 10,499 enlisted men were actually present for duty on Luzon. The Division was almost 4,000 men understrength. This shortage included many commissioned and noncommissioned officers and was to be exacerbated by combat losses in April, losses which led to substantial leadership and morale problems later in the campaign. The problem was compounded because the Division came directly from action in western Leyte. The men had less than three weeks rest--some units less than two weeks--before being committed along the Villa Verde Trail.

For this operation, the Division was subordinate to the Sixth Army and I Corps. It consisted of the 126th, 127th, and 128th Infantry Regiments. Division Artillery

consisted of the 120th, 126th, and 129th Field Artillery Battalions (105mm towed). Normal combat support and combat service support was provided, and additional units were attached at various times. The structure was standard and was based on an effective TO&E. This would give the 32d Division an advantage over the Japanese 2d Tank Division which fought as an ad-hoc organization without its own established command and control systems.

Besides the support provided by its organic elements, the Division received corps artillery, close air support, and combat engineer assistance. Most of the engineer support was dedicated to road improvement. Artillery support was limited by the inadequacy of reinforcing artillery available for the Luzon campaign. This inadequacy included shortages of observation battalions, 240mm howitzers, 8-inch howitzers, and 155mm howitzers. The real problem with air and artillery support was not shortages, but the fact that the battle was fought against an enemy in dug-in positions in mountainous terrain. Although use of high angle fire provided some relief, both air and artillery were less effective in this environment than in more conventional terrain. No matter what combined arms teams were employed or what tactics were attempted, the majority of combat actions were characterized by small unit frontal attacks against prepared positions. Air and artillery were most effective in interdicting supply routes and forcing the 2d Tank Division to infiltrate supplies under the cover of darkness. During the campaign, the US infantry regiments were supported by platoons of A Company, 98th Chemical Mortar Battalion and by elements of the 755th Tank Battalion. The mortars were useful in sealing caves, but the terrain restricted the employment of tanks.

The entire Division was committed during the campaign, but because of the rugged terrain, it was never committed in mass. The terrain also restricted the influence of other friendly units. The success of the 32d Infantry Division in pinning Japanese forces along the Villa Verde Trail did influence the battle of the 25th

Infantry Division along Route 5. Section 4 will discuss in what sequence the three regiments of the division were committed during the campaign, but it should be noted that the rotation of regiments into and out of the line was necessary because I Corps had no other unit with which to replace the 32d Infantry Division. The Division was used in the front along the Villa Verde Trail long after it had lost its offensive spirit because there were no reinforcements to throw into the battle. Individual replacements and hospital returnees were received during the course of the campaign, and the end strength at the conclusion of the fight, even after battle casualties, numbered 623 officers and 12,258 enlisted men.

Strength and Composition, Japanese Forces: As US forces progressed along the Villa Verde Trail, they first encountered the 10th Reconnaissance Regiment which consisted of approximately 250 soldiers. The Japanese were forced to retreat, against overwhelming odds, through the Cabalisiaan River crossing to the best defensible terrain--the Salasac Pass #2. Once at the pass, the 10th Reconnaissance Regiment was reinforced by eight additional companies bringing their strength to approximately 1,100 effectives. Realizing that this was insufficient to halt US forces, the commander of the Bambang Branch, 14th Area Army, General Konuma, committed the recently reorganized 2d Tank Division to Salasac Pass #2. The 2d Tank Division's 4,300 men brought Japanese strength to approximately 5,400 in early March. Throughout the battle, the Japanese reinforced the 2nd Tank Division with an additional 3,300 men bringing the Japanese strength to nearly 8,800 soldiers. The 2d Tank Division's equipment consisted of twenty tanks, eight bulldozers, seven 75mm cannons, 400 automobiles, and nine machine guns. Combined with the forces at the Salacsac Pass, the Japanese had considerable mortars and machine guns, a moderate amount of artillery, but no anti-tank guns. The 2d Tank Division consisted of the following:

Division Headquarters--350 men

Division Security Unit--two companies, 200 men

Takahashi Unit--three companies, 500 men

Harada Unit--three companies, 500 men

Itaoaki Unit--three companies, 350 men

Takigami Unit--three companies, 350 men

Matsuck Unit (artillery)-- four companies, 500 men

Engineer Unit--four companies, 400 men

Sugamo Unit (signal)--150 men

Ishida Unit (transportation)--450 men

Omuro Unit (supply)--450 men

Chiba Unit (graves registration)--100 men

All of these units were directly committed to the defense of the Villa Verde Trail. As stated above, US forces faced approximately 5,000 Japanese up to and including the initial assault on the Salacsac Pass #2 defenses. As Japanese attrition grew, the 2d Tank Division was reinforced by the following units from the 14th Army Area:

Reinforcements southwest of Salacsac

Minematsu Unit--200 men

Maruo Unit--200 men

Ishikawa Unit--50 men

Kawamoto Unit--30 men

Reinforcements at Salacsac Pass #2

Suzuki Unit--80 men

Inui Bn--100 men

Fujikuro Bn--150 men

Hidaka Bn--150 men

Yamashita Unit--300 men

Tokunaga Unit--300 men

Mine Unit--500 men

Unnamed Bn/63d Regt--200 men

Ishii Arty Bn--180 men

Reinforcements at Salacsac Pass #1

Shirane Unit--200 men

Kaneda Unit--200 men

Morishita Unit--200 men

Yano Unit--200 men

Kikusui Unit--100 men

Kimijima Unit--50 men

Ueyama Unit--50 men

Reinforcements at Imugan

Fukatami Unit--200 men

As indicated previously, the 2d Armored Division which initially reinforced the 10th Reconnaissance Regiment on the Villa Verde Trail was deployed from those forces (2d AD, 105th ID) located in the vicinity of Dupax and designated as the Bambang Branch, 14th Area Army's reserve. No references could be found that indicated that reinforcements ever came from outside the island of Luzon. This was to be expected since the US Navy was putting considerable effort into isolating Luzon from the Japanese mainland and their other possessions. Available records indicate that the latest arrival date in Luzon for those Japanese officers assigned to the 14th Area Army and the 2d Armored Division was September-December of 1944.

US Technology: The technological level of US forces in the battle for Villa Verde Trail was at least equivalent to any in the world at the time. Due to the mountainous terrain, the heavy jungle vegetation, and the tremendous rainfall, it was difficult to completely bring this impressive technological superiority to bear. In the

final analysis, it was primarily the weapons of the infantry small unit which would decide the battle.

US forces held a decided edge over their adversary in technology, but in many instances were unable to capitalize on their advantages. Areas of major technological superiority included indirect fire systems, air superiority, and communications.

Improvements made in field artillery between the First and Second World Wars provided a longer ranged medium artillery weapon which, with its improved munitions, proved much more effective than its predecessor. The improved fire control system allowed unprecedented massing of fires. The rugged nature of the Villa Verde Trail constricted this ability to mass fires. It was generally impossible to position supporting artillery so that more than one battery (sometimes only a section of a single gun) could range a particular target. Thus, one of the major technological advantages of the US forces was usually unavailable to the 32d Infantry Division.

By this time in the Pacific theater, American air superiority was so pronounced it was virtually air supremacy. This allowed US ground units to plan for and use massive amounts of close air support. Unfortunately, the nature of combat along the Villa Verde Trail obviated the continuous application of close air support. The Japanese defenders were well dug in and had expertly camouflaged their positions. Probably, only point type munitions could have defeated these emplacements, but these were not available in 1945. Additionally, the battle occurred at such close range that it was highly improbable that close air support could have been employed without unduly endangering friendly forces. Finally, the weather in the area of operations was not conducive to air operations. The combination of fog and precipitous heights made air support potentially dangerous to the fliers as well as the ground forces.

The communication system tied these technological advances to the infantryman. Here the system worked well. Field wire and radios were netted together to

coordinate support and control front line units. In too many instances, the support requiring coordination simply was not available for the reasons mentioned earlier.

The .50-caliber machine gun was used with the 37mm mountain gun to support the frontal assaults with direct fire. These weapons were employed on the flanks of the attack to suppress enemy both on the objective and on interlocking supporting positions. The terrain required a weapon with a range of 1,000-2,000 yards, and the .50-caliber machine gun met that requirement.

Once the assault elements of the attacking force reached the Japanese positions, they had to clear bunkers, tunnels, and caves. Machine guns and mountain guns were of limited value here, but the flamethrower, military demolitions, and hand grenades proved their worth again and again. Flamethrowers and hand grenades provided close-in suppression, while demolitions were used to seal positions with the Japanese still inside.

This battle, as well as all of World War II, reflected the significance of technology on the American way of war. The development of superior weapons and attendant control systems allowed US forces to bring to bear massive amounts of fire power, fix an enemy in place, and finally attack his flanks and rear. In this particular battle, the application of superior technology was limited. As a result, the 32d Infantry Division experienced increased casualties, lower morale, and extended combat.

The technological superiority of US forces gave them an edge, but it did not prove decisive. Improvisation was still necessary in employing weapons to counter the effectiveness of the dug-in, heavily fortified, mutually supporting positions. The rough terrain and jungle vegetation precluded the unlimited use of the two technological advantages of the 32d Infantry Division and forced them into frontal, lightly supported attacks. It was the weather and terrain which dictated the tactics, not technology.

Japanese Technology: The battle of Villa Verde Trail was not truly indicative of

the overall level of Japanese military technology because the battle occurred during the last months of the campaign on Luzon. By this time the Japanese were on the defensive and had suffered excessive battle losses. Any advantages the Japanese may have enjoyed--such as superior aircraft--were erased by successive defeats, ineffective resupply and replacement operations within Luzon, and the isolation of Luzon from the Japanese mainland. Second, the nature of the constricting terrain along the trail downplayed the importance of the role of technology, thus allowing the Japanese to conduct a static defense that required US forces to "slug it out."

The Japanese doctrine and tactics of a static defense in depth with human-wave counterattacks could be adequately supported by the level of technology available. The Japanese displayed total mastery of cave warfare using a successive series of interconnecting positions along the trail. The Japanese 90mm mortar and individual weapons were the equal of their US counterparts. Their light machine gun was also equal in capability, but it was available in much greater quantities. Finally, their 47mm anti-tank gun was effective but limited in use because of the few areas allowing direct fire.

Technology did effect how the battle was fought, but it did not significantly alter the scheme of maneuver of either force. Technology's major contribution was to assist the US by limiting Japanese resupply and reinforcements through air attacks, the preparation of fortified positions prior to an attack through massive artillery and air attacks, and the clearing of caves through the use of napalm.

US Logistical and Administrative Systems: I Corps and the 32d Infantry Division had a well-developed logistical plan to support the Villa Verde Trail operation. A COMMZ was set up along the beaches followed further inland by a series of Quartermaster supply points/Army supply points. Truck transportation was utilized to move supplies as far forward as possible; in most cases this was to battalion supply dumps. From battalion supply dumps, the supplies were transported by pack animals to

front line troops. The division entered the campaign with the following levels of supply:

Class I	10 days of supply (DOS)
Class II & IV	10 DOS
Class III	20 DOS
Class V	Three units of fire

This was a remarkable accomplishment since the Division only had three weeks stand down between the Leyte operations and the Villa Verde Trail operation. With the following exceptions, availability of all classes of supply was not a problem.

1. "B" rations were short some components.
2. Engineer expendable supplies were limited.
3. Ordnance vehicles Class IX was limited.
4. Class V. 81mm mortar and artillery ammunition for 105mm and larger were limited during the period 10 April to 30 May.

With the low level of technology applied by the US, very few items of equipment were introduced into the campaign, explaining the low level impact maintenance operations had on the campaign.

Administration/Personnel: During the Villa Verde Trail operations, the 32d Infantry Division sustained a high rate of both battle and nonbattle casualties. Battle casualties amounted to 169 officers and 3,264 enlisted men; nonbattle casualties were 153 officers and 4,808 enlisted men. The US had a responsive, viable individual replacement system in operation throughout the campaign. A total of 238 officer and 6,661 enlisted replacements were received. Additionally, 214 officers and 5,747 enlisted men were reassigned to the Division from hospitals. Replacements from replacement depots were well-equipped with full field equipment. The only problems encountered with replacements from depots were the need to acclimatize them and provide additional training because they had only completed basic training.

Conversely, replacements from hospitals were ill-equipped and many had been declared physically unfit for combat. Even with the excellent replacement program, the Division did experience some critical shortages of infantry officers, medical corps officers, and medical department enlisted personnel.

Japanese Logistical/Administrative Systems: Throughout the battle, the Japanese were plagued by logistical and administrative problems. These problems were never resolved and eventually contributed to the Japanese defeat and subsequent withdrawal.

Due to the relatively static nature of the Japanese defense, the primary demands on the logistical system were for Class I, excessive amounts of Class V, (especially small arms, mortar and artillery rounds, and hand grenades), and limited amounts of Class III. Increased amounts of Class VIII were also required due to the number of casualties and the poor conditions in the fortified positions. Systems for equipment repair and major end item replacement were basically nonexistent. Japanese plans called for the transfer of supplies from northern Luzon to caches in the vicinity of Bambang, Dupax, and Sante Fe and then motor/foot movement of supplies to positions along the trail. The protracted nature of the battle required excessive quantities of food, water, and Class V.

As the battle began, the Japanese were already experiencing shortages in all classes of supply since resupply to Luzon from the Japanese mainland had been interdicted. As the battle progressed, shortages increased due to both in-country depletion and the interdiction of lines of communication. Japanese survivors indicated that throughout the battle, although ammunition remained plentiful, severe shortages in food, clothing, and medical supplies were experienced.

Japanese supply dumps throughout Luzon were routinely attacked and damaged by US aircraft. Additionally, the critically important food supply (rice) was obtained entirely from the Cagayan Valley and was subject to continuous Filipino guerrilla

attacks and US aircraft strikes. Medical supplies were apparently inadequate throughout Luzon, and there was no hope of improving the situation.

In addition to attacking the source of Japanese supplies, the Americans mounted an increasingly effective campaign against the Japanese LOCs. Japanese supplies were originally moved primarily by motor vehicle since their air capability had been completely destroyed. Upon reaching the Villa Verde Trail, supplies were moved by vehicle for a limited distance and then were off-loaded and moved by foot. Once again, US airpower and artillery were able to interdict these LOCs and limit resupply operations to foot movement during the hours of darkness when they were less detectable and less vulnerable. Additionally, these LOCs tying the Villa Verde Trail to other supply centers were routinely interdicted by Filipino guerrillas. Finally, the Japanese limited communication system precluded the rapid dissemination of requests for supplies.

As the battle progressed, the Japanese decided to stockpile each defensive position with Class I and V prior to occupation rather than relying on ground resupply during the battle. Eventually, the entire logistical system broke down due to excessive personnel losses and repeated US attacks. The Japanese solution was to use ever-increasing amounts of manpower to carry in supplies which became limited to Class V at the expense of all others. As the Japanese continued to "defend to the last man," salvage and maintenance operations ceased.

The Japanese personnel replacement system became limited to the retraining of all available troops into infantrymen and then rushing them as reinforcements to the Villa Verde Trail. Despite this desperate system, the tenacity and effectiveness of these soldiers was commendable.

The enormity of the personnel replacement requirements is evidenced by the casualty figures of the primary units. The 10th Reconnaissance Regiment was reduced to 80 of 250 personnel during its delaying operations, while the 2d Tank Division lost

the majority of its tanks and three-quarters of its personnel (5,000 remaining) in battles at San Jose a month earlier. The 2d Tank Division's losses included the majority of its combat troops and were so severe that the unit was stationed at Dupax to train its combat service support personnel as infantrymen. This was supposed to be a two-month process, but the Division had to be committed to the Villa Verde Trail after only one month's preparation.

Major General Konuma, the Bambang Front's commanding general, was aware of the unit's lack of training but committed it because it was the only combat unit available. During the remainder of the battle, no attempt was made to provide individual replacements. Entire combat service support units from the Front's assets would receive accelerated small unit tactical training and then be committed to the battle.

Undoubtedly, the overall shortages of personnel, equipment, and supplies contributed to the final Japanese defeat. The Japanese would routinely conduct human-wave assaults rather than remain in defensive positions once they had run out of ammunition. Their primary downfall was linked to their inability to reinforce critically vulnerable defensive positions and to recover from continued personnel losses resulting from suicide attacks. Rather incredibly, the Japanese spirit to resist was able to overcome the severe food shortages and the lack of medical supplies which resulted in numerous nonbattle casualties. These nonbattle casualties were often utilized on suicide missions. In summary, it appears that the relatively static nature of the Japanese strongpoint defense minimized the detrimental effect of poorly trained troops, who if required to conduct complicated offensive maneuvers, would have failed completely.

US Command, Control, and Communications Systems: The 32d Infantry Division organized its forces along TO&E lines. Employment was by regiment or regimental combat team. One order from the time of the Villa Verde Trail battle is available, and

it shows the following task organization.

126 Infantry Regiment (-3d Battalion)

127 Infantry Regiment

3/126 Infantry

2/Buena Vista Regiment

A/98 Chemical Mortar Battalion (-2d Platoon)

1/B/775 Tank Battalion

2/A/209

128 Infantry Regiment

2/A/98 Chemical Mortar Battalion

Buena Vista Regiment (-2d Battalion)

Division Artillery

129 Field Artillery Battalion: DS 128 Infantry

126 Field Artillery Battalion: DS 127 Infantry

120 Field Artillery Battalion: Support 1/Buena Vista, Reinforce 126 FA

121 Target Acquisition Battalion: GS

A/168 Field Artillery Battalion: GS

In this task organization, all subordinate headquarters are used, and support is provided to most of the engaged forces. The lack of artillery support to the 126th Infantry (-) is probably due to its mission which was (after relief by the 127th Infantry) to mop up isolated pockets of resistance. This example also shows evidence of task organizing, as one regimental headquarters (127th Infantry) controls five battalions plus supporting units. In some other instances, this task organizing was not followed, and the Division simply relieved units in place as they began to lose combat effectiveness. The Buena Vista Regiment was a Filipino unit outfitted with US equipment and utilized as a fourth regiment of the Division.

The resources used in this example enhanced the Division's combat power. Field

Artillery, mortars, and tanks were all used. Additionally, the 114th Combat Engineer Battalion operated in support of the 32d Infantry Division during the Luzon campaign. Their major activities included the construction of three combat roads: along the Villa Verde Trail, the Ambayang River Trail, and the Arboredo River Trail. The Villa Verde road was completed to a length of eighteen miles with half the construction two lanes. The remainder was only one lane. Some spurs and turn-arounds were built from this road, but no alternate roads were constructed. The road improvement proved valuable. Prior to this construction, the trail could support only man-packed, animal, or occasionally, one-quarter ton traffic. By April, over 148 vehicles were using the road daily, and this considerably eased the logistical burden of the Division. Additionally, four artillery battalions and a tank platoon were eventually employed from this road. In many other instances, the terrain hampered the utilization of these supporting units, and the Division's resources were limited to small arms and limited artillery support (usually in an H&I role).

The Division's I&R Platoon was another resource which was effectively used. This unit operated independently and provided much of the intelligence the Division was able to use. Later, when this force was attached to units in contact, it lost much of its effectiveness.

Aerial artillery spotting was the final resource used by the Division. The terrain imposed severe restrictions upon all aspects of the battle, and aerial forward observers were one solution which was especially useful.

The staff coordinated the use of resources, but factual information on staff responsibilities and functioning is lacking. Inferences based upon existing records and unit performance allow some suppositions concerning staff expertise. Continuous written orders were provided throughout the operation, and these orders followed the approved format although they were issued in an abbreviated form. The G2 emphasized patrolling and provided commanders with estimates of enemy capabilities

and probable courses of action. The staff then may be judged to have been reasonably well-trained and efficient. The only disclaimer is based upon message center complaints that the staff continually inundated their facility with exceptionally verbose message traffic.

Relationships between the division commander and his regimental commanders appear to have been good. Again, factual information is scarce, but the absence of information to the contrary leads one to believe that there were no unmanageable problems. None of the sources shed any light on the lower level (regimental to battalion level) relationships.

Orders were prepared throughout the battle. The Division's practice of issuing orders in the evening or even as late as 2300 for operations commencing the following day may not have allowed sufficient time for effective junior leader planning. These orders continued to identify the Division objective as Sante Fe without identifying reachable intermediate objectives. To some degree, this reflects I Corps' lack of touch with the actual situation, but the Division also shares the blame for these somewhat fanciful orders. The Division objective, as assigned by I Corps, may have continued to remain Sante Fe until changed to high ground near Imguan, but the Division commander's responsibility was to issue orders on how the unit was to get there. Instead, he continued to parrot higher echelon orders and stress operations of a frontal nature along the trail.

In conducting these attacks, heavy reliance was placed on a communications system constructed around wire and messenger service. Radios, suffering from range attenuation due to the terrain, provided a back-up to this system. Due to the slow nature of these battles, the system proved sufficient to handle requirements. At regiment and lower levels, emphasis shifted to primary reliance on radios, which were initially in short supply. The Division used teletype for communications with I Corps.

Enemy action did affect communications, especially wire systems. The Japanese

soldier had proved himself to be an expert in infiltration, and he used those skills to penetrate the Division's lines and cut wire. After initial experiences produced casualties, the Division refrained from repairing cut wire until the next morning. Loss of wire, when coupled with radio problems at night, did cause some loss of communications.

One of the Division's strong points concerned its transmission security. Sufficient code clerks were available as other message center personnel had been cross trained in cryptographic skills. Operations codes were well used and were changed during the operation with minimal disruption.

Japanese Command, Control, and Communications Systems: When discussing the Japanese C^3 systems, it is important to make the distinction between C^3 at the tactical and the division and higher levels. C^3 at the tactical unit level was characterized by hasty and relatively simple plans, executed by small staffs, and coordinated in relative isolation. At the division and higher level, planning became more detailed, but communications with higher headquarters and with forces available to influence the tactical situation became extremely limited. Due to the inability of the higher headquarters to influence the tactical battle, execution and planning became primarily decentralized.

During the battle, tactical units were primarily piecemeal organizations whose leadership, especially at the lower levels, was extremely fragmented. Although staffs and commanders had previously been extremely effective, their ranks were decimated by casualties and subsequent high turnover rates. Luckily, these types of defensive operations and limited counterattacks did not require detailed planning and could easily be controlled by aggressive small unit leaders. Thus, unity of command was maintained at the tactical unit level.

At division and higher level, the staffs became larger with less turnover of personnel, although their ability to influence the battle became extremely limited.

Unity of command was maintained through the campaign by a clearly defined chain of command, even though operations at battalion and lower level were primarily decentralized. Overall command in northern Luzon remained with General Yamashita and the 14th Army Area. Operations in the Villa Verde Trail region were controlled by Major General Konuma and the Bambang Branch of the 14th Army. This headquarters equated to a US corps headquarters and controlled the three divisions operating in the area. Konuma had previously been Yamashita's executive officer, so both men were familiar with one another. Along the Villa Verde Trail, command was originally invested in Major Suzuki of the 10th Reconnaissance Regiment and later with Lieutenant General Iwanaka of the 2d Tank Division. Throughout the battle, Major General Konuma was allowed a certain degree of autonomy, although major decisions and the introduction of new units required General Yamashita's approval. Apparently, as the battle continued, Konuma made the majority of the decisions without consulting Yamashita. Except for limited personnel reinforcements, Major General Konuma had no resources with which to influence the battle, and the options open to the Japanese required little planning.

A review of operation orders indicates that although the orders varied in completeness and detail, they basically consisted of a general statement on the concept of the operations and rather detailed listings of participating units. These concepts of operation did not contain detailed instructions, but rather statements such as "defend to the death" and "defend at all costs." Withdrawals were rarely conducted. Rather, the Japanese favored suicide counterattacks. In almost all cases, extreme difficulties were encountered in disseminating the operation orders, and they reached their addressees late.

Japanese prisoners of war and post-war debriefings indicated that communications at all levels were poor throughout the battle. At the tactical level, communications sources consisted of wire, wireless radios, and runners. US artillery

fires severely disrupted wire communications, and wireless suffered from poor maintenance. Runners became the primary method of communications, even with higher headquarters. At division and higher, wireless using morse code was the primary method of communicating. However, numerous outages occurred, and severe problems with transcribing messages were encountered, this resulted in the isolation of the individual headquarters. Messengers were routinely used, and commanders often had to walk to subordinate headquarters and personally brief operation orders.

Much of the Japanese difficulty with wireless may be attributed to US jamming. As the battle progressed, US intelligence personnel indicated that the Japanese COMSEC/TRANSEC procedures and control and dissemination of classified documents improved significantly, perhaps in response to their perception of US intelligence efforts. Ironically, Japanese efforts to encode transmissions often resulted in extreme difficulties in deciphering them.

Once again, the Japanese experienced numerous C^3 problems. However, their negative effects on the battle were minimized by the relatively static nature of the Japanese defense and the lack of additional resources to commit to the battle.

US Intelligence: The intelligence collection effort conducted by US forces was extremely effective because it integrated human, signal, and imagery intelligence. Additionally, all intelligence personnel in the 32d Infantry Division, from battalion to division, had attended formal training on enemy forces and intelligence operations before the campaign started. They were familiar with one another and the upcoming operation.

US forces faced a relatively unsophisticated Japanese intelligence collection effort consisting primarily of battlefield observation, patrolling, and limited radio intercept. Japanese counter-intelligence operations were initially weak, but they improved steadily thoughout the operation. Because of the terrain, it could be assumed that the Japanese would be aware of US front line troops dispositions, but

they would be relatively unaware of the larger scale operations and troop movements.

The primary use of US intelligence collection assets and any problem areas identified with their use are identified below. Aerial reconnaissance was perhaps the most effective asset. These requests originated at division, corps, and army level. The interface was at Sixth Army where liaison with the Air Force was maintained. Divisional requests were initially answered in Army G2 Reports which had at least a forty-eight hour turn around. After the problem was taken to I Corps, the turn around time was reduced to less than thirty-six hours. Overhead photos replaced maps while oblique photos were used to locate Japanese positions. These flights were able to identify large scale enemy movements, fortified positions, and troop concentrations as well as provide imagery for map production. The primary problems associated with air reconnaissance operations were their inability to identify dismounted troop positions and the delay in receiving pictures and interpretation results from Sixth Army. Patrols also provided valuable information and were conducted by both infantry units and the Division's Reconnaissance Troop. Missions included deep, long range penetrations, stationary observation, and local patrols to 4,000 meters. Most patrols were conducted during daylight, as they proved to be more difficult to detect than those conducted during hours of darkness, although all were forced to avoid the aggressive Japanese counter-screen patrols. Guerrilla patrols were also useful, but they normally provided information on deeper enemy targets. The importance of prisoners was limited to the relatively few that were captured. Throughout the battle, only fifty-two Japanese were captured, and they were normally extremely ill and had been separated from their units for several days. The information they provided was therefore of limited value. Enemy documents provided the primary method of identifying enemy units and intentions. However, as time progressed, fewer documents were obtained due to improved Japanese security measures and fewer "souvenir hungry" Americans. SIGINT sources were relatively effective in intercepting traffic, but they were limited in

effectiveness due to the small number of Japanese radio transmissions. Japanese attempts to encode their transmissions significantly slowed their flow of traffic. Finally, battlefield sightings were numerous and valuable. The only problems were the routine habits and lack of detail and/or generalization and assumptions.

Intelligence dissemination within the Division appeared to be adequate and utilized either immediate reports or the Periodic Intelligence Report (PERINTREP). The only problem with dissemination appeared to be the normal complaint that limited information was being received from higher headquarters.

The primary intelligence derived was unit identifications of forces in contact including unit strengths. Other information included scheduled reinforcements. The only problem experienced in the intelligence field was the lack of good maps, primarily of the Salacsac Pass area. Most maps lacked sufficient contour lines. The problem was solved by overprinting 1:10,000 photomaps.

Although the US had the superior intelligence collection system, there were several limits on the effectiveness of the intelligence gathered. The Japanese maintained a static strongpoint defense and rarely moved. So unless a US unit obtained a sketch of the enemy position, information as to who was inside it was of limited value. Offensively, all Japanese counterattacks were "spur-of-the-moment" actions normally following seizure of a position and were thus unplanned. The primary importance of intelligence proved to be the identification and interdiction of Japanese lines of communication and staging areas.

Japanese Intelligence: Throughout the battle, the Japanese faced a coordinated and rather sophisticated US intellience collection system which they could not possibly match. The primary sources of Japanese intelligence on US operations consisted of direct observation by front-line troops occupying dominant terrain and the effective use of small foot patrols. Additional methods of collection which proved to be less effective consisted of a limited radio intercept capability, isolated deep raids into the

US rear area, and attempts to use local nationals as agents. The effectiveness of intercept operations cannot be documented; however, the type information obtained would be of limited use in the static defense conducted by the Japanese. Rear area raids were limited in their effectiveness since the majority of raids had the primary purpose of sabotage, and few of these personnel ever returned. Although the Japanese felt that the local agent program was effective, in reality, local guerrillas had infiltrated the program in order to pass incorrect information to the Japanese.

Perhaps the greatest Japanese shortfall was their lack of aerial reconnaissance. Without air reconnaissance, they were unable to determine the "big picture" on a timely basis. Thus the flow of all intelligence was from the bottom up with higher headquarters unable to provide any information to its subordinates. This resulted in General Yamashita and Major General Konuma both initially underestimating the size of US forces attacking along the Villa Verde Trail. Only through successive delays by the 10th Reconnaissance Regiment were the Japanese able to move the 2d Tank Division onto the Villa Verde Trail in sufficient time to block the US advance.

At the tactical level, the Japanese were able to obtain sufficient information through direct observation and patrolling. Although the Japanese usually knew who they were fighting, their relatively static defense and limited counterattacks did not require detailed knowledge of US forces or intentions. Sufficient intelligence was passed up through command channels to allow Major General Konuma to provide the required reinforcements when the situation became critical.

It is significant to note that throughout the battle, the aggressive US intelligence collection effort resulted in significant improvements to the Japanese counterintelligence effort. These efforts included aggressive counter-screen patrols which attempted to capture US patrols, restriction of reinforcement and resupply to hours of darkness, limited use of artillery when aircraft were overhead, improved COMSEC/TRANSEC operations, improved control and dissemination of classified

documents, and excellent camouflage of defensive positions.

US Doctrine and Training: Current American doctrine as stated in FM 72-20, Jungle Warfare, emphasized the employment of an infantry division in the type terrain encountered along the Villa Verde Trail. The restrictions that thick jungle places upon mobility make such terrain virtually impassable to anything but foot traffic. For this reason, the employment of any other type unit would not only have been contrary to doctrine, but would have been ridiculous. Once past the coastal plain, northern Luzon was strictly infantry terrain.

The doctrine which required an infantry division also provided a basis for the tactics employed by the 32d Infantry Division. At battalion and higher levels, the doctrine in FM 100-5, Operations, as well as FM 72-20, seemed to have been closely followed. Jungle combat was characterized as being conducted without significant support by field artillery, and this proved accurate along most of the Villa Verde Trail. Single guns and sections were used more than massed battalions. Many battles were fought at such close quarters that the only feasible support was that provided by a fire base of the attacking unit. Mortars were suggested as being useful in the jungle, and this was also supported by experiences of the 32d Infantry Division. The high angle of fire of this weapon was especially desirable along the passes outside Imugan. Finally, aerial direction of artillery was proposed, and this was especially supported by the experiences of the Division. It was later reported that the mere sight of a Cub over Japanese positions was sufficient to frighten the defenders. They also realized the accuracy inherent in using aerial observation.

By the time of the Villa Verde operations, the 32d Infantry Division was a veteran jungle outfit. Its baptism of fire had been in the Papuan campaign. There the Division fought a battle remarkably similiar to Villa Verde. It crossed the Owen Stanley range and fought in a combination of mountain and jungle terrain similar to Luzon. During that effort, it had not adhered as closely to published doctrine. Later,

it had fought on Leyte, another jungle environment but without mountains. There the Division found it easier to apply doctrine. Thus, the Division had been exposed to mountain and jungle combat for over two years, but the influx of replacements mitigated to some degree its level of expertise. Many of these replacements arrived with a solid foundation of basic combat skills but were woefully unprepared to handle the rigors of combat in a Pacific jungle.

The doctrine which was applied at battalion and higher levels did not address the realities of combat at the squad and platoon level. Here innovation was the key to success as junior leaders handled day to day problems in an expeditious manner. Use of flamethrowers and shoveis to bury Japanese in caves were among the most frequently applied solutions in the battles to secure the Salasac Passes.

These innovative solutions reflect the state of the Division as it was upon commitment on Luzon. It was composed of veteran cadres, and although short some 4,000 men, it was a capable combat unit flushed with success after its operations on Leyte. This state of affairs was to gradually erode as attrition removed those combat experienced leaders. As combat losses removed the veteran officers and NCO's from their positions of leadership, the efficiency of the Division drastically declined. The problems were compounded as replacements, most without jungle training, began to make up the majority of the line units.

The losses of junior officers and NCO's was especially critical as this battle was fought at the small unit level. Combined arms were employed at battalion task force and higher, but the battle would be won or lost at the platoon level. It was here that most casualties were sustained.

Japanese Doctrine and Training: Japanese forces employed doctrinally sound and standard strongpoint defensive tactics. However, the forces deployed during the battle were poorly trained and consisted primarily of cross-trained combat service support personnel. Japanese tactical operations and individual/unit training will be discussed

separately below.

The first unit committed to the defense of the Villa Verde Trail was the 10th Reconnaissance Regiment which had an effective strength of approximately 250 soldiers due to battle losses during the previous month. Although reduced in strength, this regiment consisted primarily of well-trained combat hardened veterans. Although they fought an effective delaying action beginning north of Santa Maria and ending at Salacsac Pass, they had been no match for the superior US forces and had been unable to stop the 32d Infantry Division at any point along the trail. By the time they reached Salacsac Pass #2, their strength had been reduced from 250 to 80.

Major General Konuma, Commander Bambang Front, 14th Area Army, had expected the 10th Reconnaissance Regiment to hold the American forces which he anticipated would be smaller than they were. When it became clear that the regiment would not hold, he chose the 2d Tank Division, the only available combat unit in the area, to reinforce along the trail and assume command of all forces in the area. The 2d Tank Division had suffered casualties of approximately three-quarters of its total strength in January during the battle at San Jose. All but twenty tanks were destroyed, so the unit ceased to function as an armored division. It regrouped at Dupax where it was scheduled to undergo two months of intensive training. During this period, the primary objective was to cross-train approximately 4,300 combat support and combat service support soldiers into infantrymen and to redesignate the unit as an infantry division. However, the rapid American advance resulted in the employment of the 2d Tank Division along the Villa Verde Trail after only one month of training. Thus, the unit's level of training could be considered poor since the majority of men were performing new jobs in combat without the required level of training. Despite these shortcomings, the small core of combat arms soldiers and the determined Japanese mindset allowed this relatively untrained force to conduct a tenacious and effective defense for several months.

In the type terrain found along the Villa Verde Trail, Japanese doctrine called for the establishment of a strongpoint defense in depth, similar to that seen on other Pacific islands, while stressing the individual soldier's personal courage during close combat. Japanese tactics remained faithful to this doctrine. Tactics consisted primarily of interconnecting and mutually supporting fortified positions in depth, supported by limited counterattacks and isolated raids deep into the 32d Infantry Division's rear area.

Each Japanese defensive area was organized into three distinct areas. The first was the outpost line which consisted of well-emplaced small unit positions capable of covering all avenues of approach into an area. Next was the main line of resistance consisting of the main defensive positions. Behind that was the rear area, normally used for combat service support operations, operations virtually nonexistent throughout the battle.

In the main line of resistance, the Japanese became masters of cave warfare. All positions utilized excellently prepared terrain that afforded fields of fire along every avenue of approach. They often utilized reverse slopes for protection. All fortified positions were interconnected allowing undetected movement between them. The Japanese used alternate and supplemental firing positions. Each position could mass its fires in any direction and receive mutually supporting fires from several adjacent positions. Successful attacks against these positions were only possible by attacking several adjacent positions at once. The intricacy of these positions was amazing. Most contained work and sleep areas as well as fighting positions. There were large supply areas and positions from which artillery could be fired and then retracted under cover. These positions were capable of sustaining massive artillery and close air support preparations.

Japanese combined arms operations were limited to the use of supporting artillery fires. The level and accuracy of Japanese artillery fire was the most

effective experienced by US forces on Luzon. The Japanese also made excellent use of light and medium mortars as well as an apparently excessive quantity of light machine guns. There are even some indications that the 2d Tank Division removed some heavy machine guns and main guns from their tanks and mounted them along the trail.

Japanese offensive operations were limited to poorly executed linear counterattacks. These human wave attacks were normally conducted immediately following the loss of an objective, in the early morning, or as a delaying tactic. Its most frequent use was to regain a lost objective at which time all available artillery would concentrate on the objective regardless of Japanese soldiers in the area.

The deep raids were normally one-way suicide missions by small groups of sappers whose mission was to destroy some piece of critical equipment or a vital storage area. The Japanese also effectively employed night infiltration tactics and counter-screen patrolling to support their reconnaissance operations.

Considering the Japanese level of training and their complete lack of air power, their strategy of successive fortified defensive positions in depth appears to have been their best option. They were eventually defeated because of attrition, an inadequate flow of supplies, and the piecemeal commitment of reserves.

US Condition and Morale: The morale of the 32d Infantry Division was, in general, high at the beginning of the battle of the Villa Verde Trail. Before arriving in Luzon, the Division had successfully completed a two-month campaign in the mountains in western Leyte. The two week break, coupled with news of the successes in the European theater and public support from the home front, undoubtedly raised morale. This condition was to be short lived, however. As the 32d Infantry Division's battle progressed into a monotonous pattern of frontal assaults against heavily fortified defensive positions, the troops became tired and dispirited. The extremes of terrain and weather added its toll with nonbattle casualties often exceeding those

injured in combat. Morale declined precipituously until, by the middle of April, it was dangerously low.

The overall condition of the 32d Infantry Division was considerably lower than the morale initially exhibited by its troops. The Division had less than three weeks rest before reaching Luzon. When it arrived, the 32d Infantry Division was understrength by approximately 4,000 officers and men. Approximately thirty percent of the Division's men had been overseas for nearly three years and had participated in three to five campaigns before landing at Luzon. The quality of leadership, both officers and noncommissioned officers, had already deteriorated from losses in previous campaigns. Replacements were scarce and slow to arrive.

By mid-April, the 32d Infantry Division had suffered excessively high casualties during the three months of continuous combat. Each of the 127th and 128th Infantry Regiments had been reduced to approximately 1,500 effectives. The loss of leadership as officers and noncommissioned officers became casualties, the lack of reinforcements, and the character of the fighting had all taken a toll. Resupply operations along the narrow Villa Verde Trail were extremely difficult. The evacuation of sick and wounded was even more difficult. The resultant low morale was reported to General Krueger, 6th Army. The report confirmed the General's own views based on personal observations. Indicators were the high number of troops with battle fatigue among soldiers reported sick, the extreme caution of the front-line troops, and the increased scuttlebutt about rotation to the United States. The 32d Infantry Division could not be pulled out of the line to solve its morale problem because there was no division to replace or reinforce it. As its only recourse, the Division arranged to relieve each regiment in sequence for short periods--ten days to two weeks--of rest and refitting. Despite the morale building efforts which included films and mobile post exchanges for the troops, little could be done to alleviate the morale problems. Despite these problems, and due solely to the indomitable spirit of

the 32d Infantry Division, the Division ultimately accomplished its mission along the Villa Verde Trail.

Japanese Condition and Morale: Any discussion of morale must be preceded by the observation that the Japanese soldier's religion and loyalty to his Emperor caused him to fight effectively to the death, regardless of his mental and physical condition. His will to resist would not waiver regardless of decisions which would seem cruel by American standards. Proof of this philosophy included the capture of just fifty-two prisoners during the battle, the routine use of nonbattle casualties on suicide missions, limited counterattacks and stay behind positions, and placing artillery fire on friendly positions which had been overrun without insuring that all Japanese troops had withdrawn. The fact that the Japanese soldier would not surrender was hard to understand.

It should also be remembered that the soldiers of the 10th Reconnaissance Regiment and the 2d Tank Division had been severely beaten in previous battles. The 10th Reconnaissance Regiment had been reduced to one-third strength within the previous month and would be further reduced during their delay to only eighty men out of the original 250. The 2d Tank Division had more severe losses during their battle at San Jose in January, totalling about three-quarters of their strength and virtually all of their tanks. The 2d Tank Division would require two months of training to convert combat service support soldiers into infantrymen. These men would be committed to battle after only one month.

The weather and terrain took its toll on the Japanese soldiers as well as the Americans. However, the Japanese tended to move less than their American opponent, and this, combined with the reduced heat in their fortified positions, provided increased protection from the weather.

Food was always short, and dehydration and fever took a severe toll. As mentioned earlier, sick soldiers were normally sent on some type of suicide mission.

The American use of mortars, artillery, and aircraft fires on prepared positions temporarily disoriented soldiers and lowered their morale.

Regardless of US actions, the Japanese soldier never waivered in his belief in his cause. His discipline was exceptional, and personal courage in close combat had been indoctrinated in him throughout his military service. He remained basically isolated from the outside world, and there are indications that he was told he would be killed if he surrendered to the Americans.

During the battle, an interesting conflict in enemy morale occurred at the higher levels of command which may indicate Japanese resolve. When faced with the American advance into northern Luzon, many Japanese leaders realized they had insufficient forces and time to prepare their defense and thus recommended attacking the Americans regardless of the outcome. In the end, General Yamashita persisted in establishing a triangular defense of northern Luzon as the only feasible counter to US intentions. Major General Konuma related a second instance in which General Yamashita's headquarters became depressed and began to lose confidence in their ability to win in Luzon. Konuma and his staff consequently spent considerable time convincing Yamashita that victory was still possible. Both instances indicate the seriousness of the Japanese belief in honor above all else.

Regardless of one's personal opinion about the Japanese mentality, there can be no doubt that their resolve to continually fight to the last man significantly slowed the 32d Infantry Division's advance and increased US casualties.

US Leadership: At the beginning of the battle for the Villa Verde Trail, the officers and men of the 32d Infantry Division were relatively well-trained combat veterans. Although the Division was understrength, there were no mission-threatening shortages. Early in the battle, these leaders had a positive effect on operations. But as the experienced leaders were lost, combat efficiency declined. There were few leader replacements with sufficient combat experience to replace the casualties.

Hospital returnees provided some relief, but by March, the majority of the leadership positions were filled by inexperienced officers and noncommissioned officers.

The US Army had an extensive pre-war training and education system which had developed technically and tactically proficient leaders. By the time of the Luzon invasion, most of the personnel who had benefited from this system were in high leadership positions. The majority of the small unit leaders had arrived as replacements after attending some form of wartime training. They had learned their skills on the job in earlier campaigns. They had absorbed the tradition of good leadership. This, in conjunction with the exigencies of the situation which rewarded individual initiative, allowed the 32d Infantry Division to maintain at least a modicum of cohesion and finally achieve its mission.

There was no single leader who dominated the battle. With the exception of the division commander, no officer in a position of leadeship on 5 March held that same position on 29 May when the operation ended. The initial leaders had been killed, wounded, or promoted to succeed a casualty.

Japanese Leadership: There is limited information available on the leadership style of the Japanese, although many points may be derived from reviewing the situation. The majority of the commanders were veterans of numerous campaigns throughout the Pacific and were also regular army officers who had attended the normal Japanese service schools. However, as the battle progressed, casualties increased. Commanders were placed in unfamiliar positions, particularly at the lower levels.

Before the battle, US leaders had experienced numerous successes, while the Japanese leaders had only experienced a series of defensive actions and continuous withdrawals. The battle of Villa Verde Trail provided the Japanese leaders with only a limited opportunity for dynamic leadership since it was fought primarily from isolated static defensive positions. The only offensive actions were limited to platoon and

company level suicide counterattacks.

The senior commander in the area was Major General Konuma at the 14th Area Army Bambang Front. He consistently displayed a positive attitude and ordered the majority of his forces to "defend until the death," which they did without exception. Konuma did not have the additional forces or the opportunity to conduct any truly innovative operations. But his tenacity was directly responsible for the duration of the Japanese defense. It is significant to note that Konuma maintained his positive attitude despite the wavering attitude of his higher headquarters.

Undoubtedly, the Japanese Commander's job was made easier by each soldier's willingness to obey orders and maintain his honor to the death. However, most of the leaders, although demanding absolute discipline of their soldiers, led by example and were spoken of favorably by their soldiers.

US Immediate Military Objectives: The mission of the 32d Infantry Division was assigned by I Corps Field Order #12 dated 21 February 1945. The mission tasked the 32d Infantry Division to continue to secure the line San Macario-Batchelor-Santa Maria-San Felipe, advance to the north and east, capture Sante Fe, secure the line Santa Fe-Sapit, block the advance of hostile forces from Cagayan Valley, advance to the south along Highway 5 and secure and maintain the uninterrupted use of that highway from Sante Fe to Digdig (exclusive), establish and maintain contact with the 25th Division, push reconnaissance to the line Bambang-Kayapa-Balinguay (exclusive), and establish and maintain contact with the 33d Infantry Division.

The 32d Infantry Division's plan (Field Order #15, dated 22 February 1945) called for concurrent action by its three infantry regiments. The 126th Infantry was tasked to clear the Ambayabang Valley north for ten miles to the vicinity of Lawican, thereby opening a possible route toward Baguio. The 127th Infantry was to advance along the Villa Verde Trail to secure Santa Fe, then clear Route 5 south to Digdig. The 128th Infantry was to protect the Division rear and patrol the Caraballo Spur

east to Route 5.

The selection of the 32d Infantry Division's initial objectives was consistent with I Corps and Sixth Army goals at this stage of the Luzon campaign. Reaching these objectives, however, was probably not within the 32d Infantry Division's capabilities considering the terrain, weather, troops available, and the enemy strength and disposition along the Villa Verde Trail.

Japanese Immediate Military Objectives: The immediate objective of the Japanese was to defend the southern limits of the Bambang Front and repel the US penetration to the north. After a devastating defeat on the central coastal plains, the Japanese fell back to the mountains to defend their lines of communications in the Cagayan Valley. The Japanese disasterous attempts to battle US forces on even terms in the coastal plains where the flat terrain favored neither side and where success in battle came to the side with superior firepower caused the Japanese to move to terrain that was more advantageous for their defense. The Japanese had no alternative but to retreat to the hills. With no immediate reserve and with a lack of good roads to bring up reserves over the Caballaro Mountains, their defense of the lowlands would have been absolutely futile. The Japanese could not afford to let US forces sever their lines of communications along Route 5.

Feasible Courses of Action, US: There were three courses of action available to the 32d Infantry Division's assault on the Japanese holding the high ground and the Villa Verde Trail.

Course of Action 1: Seal off the western entrance to the Villa Verde Trail and apply frontal pressure to fix the Japanese in place. Simultaneously, flank the Japanese positions with attacks from the north and south to encircle them and cut their lines of communications.

Course of Action 2: Conduct a main effort with a frontal attack up the Villa Verde Trail from the west with supporting attacks from the north and south to keep

the enemy from concentrating his forces against the main attack.

Course of Action 3: Conduct frontal attacks up the Villa Verde Trail from the west with no supporting attacks.

As the results show, none of these courses of action proved to be feasible in achieving the assigned mission rapidly. Each course of action was attempted and Course of Action 3 ultimately used due to the constraints imposed by terrain and weather. The initial plan had been to follow Course of Action 1. Enemy resistance and the unfavorable terrain stopped the flank attacks and the 32d Infantry Division attempted to employ Course of Action 2. The supporting attacks from the flanks continued to be unsuccessful. It became obvious that coordination of frontal and flanking attacks in the Caballaro Mountains was impossible and the only recourse was to employ Course of Action 3, which finally succeeded, but only at a very high cost.

Feasible Courses of Action, Japanese: The Japanese had three courses of action. They could defend along the line San Quentin-Natividad-Santa Maria with their backs against the foothills of the Caballaro Mountains. This would have caused them to accept battle on US terms. The Japanese could also have attacked US forces. Japanese strength, however, was so depleted from the coastal plains battles that, combined with poor roads and few reserves, this course of action was not feasible.

The most prudent and feasible course of action was to defend along the Villa Verde Trail. This option allowed the massing of troops in depth along a narrow axis of advance. The Villa Verde Trail was the only passage of military significance which led to Santa Fe. This course of action was also most logical as it made superlative use of the terrain. The ground gave the Japanese a combat multiplier to apply against superior US strength. The Japanese were well aware of the tactical significance of the Villa Verde Trail and committed over 8,000 soldiers to its defense. The Americans underestimated the strength of the Japanese and consequently sustained heavy losses in a very protracted engagement.

SECTION 4

DESCRIPTION OF THE ACTION

Disposition of US Forces: (See Map 3, Overlay 1)

On 27 January 1945, the 32d Infantry Division, less the 126th Infantry Regiment, landed near San Fabian on the Lingayen Gulf, then moved to an assembly area vicinity Mapandan. Major combat elements completed the deployment by 29 January, and the Division was attached to I Corps on the 30th.

I Corps Field Order #7 was issued on the 29th. This directed the 32d Infantry Division to relieve elements of the 25th Infantry Division in the areas of Asingan-San Manuel-Pozorubio by the evening of the 30th. Starting at 310730 January, the Division was to secure the line San Quinten-Natividad-San Nicolas while pushing reconnaissance patrols as far as the line Digdig-Santa Fe.

Field Order #11, 32d Infantry Division, assigned objectives and boundaries to the 127th and 128th Infantry Regiments. The 128th, less its 2d Battalion which remained as division reserve, occupied Asingan while the 127th, less its 3d Battalion in I Corps reserve, occupied San Manuel. By 31 January, all points along the Division's objective line had been secured without opposition. The 127th was in San Nicoles while the 128th occupied San Miguel and San Pedro to the south.

The combat power of the Division was approximately five understrength maneuver battalions when it first encountered Japanese forces on 31 January. The entire 126th Infantry was still under Sixth Army control, and one battalion of the 127th remained as I Corps reserve. Division Artillery and all other assigned combat support elements were on hand.

At this time, the Division was operating under I Corps Field Order #8 which directed the seizure of a line from San Macario-Batchelor-Santa Maria-San Felipe. All objectives were secured without opposition except the town of Santa Maria, the entrance to the Villa Verde Trail, where a reconnaissance patrol from the 127th Infantry encountered a Japanese outpost covering the Cabalisiaan River crossing site.

Disposition of Japanese Forces: (See Map 3, Overlay 3)

Though the Battle of Villa Verde Trail is primarily concerned with actions between the 32d Infantry Division and the 2d Japanese Tank Division, the importance of the Villa Verde Trail to the overall defense of the Bambang Front must be considered in order to understand Japanese troop deployments. The overall mission of the Japanese forces in the region was to defend the southern approach to the Bambang Front following the devastating defeat of the Japanese on the southern coastal plains. Inherent in this mission was the need to consolidate all available forces to guard the entrance into the Cagayan Valley which had become the Japanese's major source of food.

The Japanese appreciated that the major avenue of approach into the region would be along Route 5 through Santa Fe. The Villa Verde Trail provided the second best approach through the Caraballo Range to Sante Fe and was expected to be utilized by US forces as a diversionary attack. The Villa Verde Trail was also significant in that it provided access to the Arboredo, Agno, and Ambayabang Valleys to the north which provided avenues of approach to Bambang. The Ambayabang Valley also provided direct access to the Baguio-Arita Road which was the main Japanese east-west supply route.

At the beginning of hostilities, the 32d Infantry Division was opposed by the following array of Japanese forces. On the Division's right flank was the 10th Japanese Infantry Division deployed across Route 5 with a main line of resistance five miles south of the Balete Pass and combat outpost north of San Jose. The 10th

Division's mission was to defeat the advance of the US 25th Infantry Division along Route 5 and secure Santa Fe.

To the 32d Infantry Division's left flank were elements of the 23rd Japanese Infantry Division which were in defensive positions to protect approaches to Bambang. The closest forces were company strongpoints throughout the Arboredo Valley. Additionally, two infantry companies under the operational control of the Bambang Front Commander were in defensive positions in the Ambayabang Valley.

Directly in front of the 32d Infantry Division, along the Villa Verde Trail, was the 10th Reconnaissance Regiment with an effective strength of only 250 of its original 750 personnel. They had assumed an outpost line across the Villa Verde Trail approximately two-and-a-half miles northeast of Santa Maria and were conducting patrols along the Trail to the southwest. The only other Japanese forces between the 32d Infantry Division and its objective at Sante Fe were an infantry battalion (-) consisting of two companies, one howitzer battery (-) with three tubes, and one medium mortar company. These forces were preparing defensive positions in the Salacsac Pass area which provided the best defensive terrain along the Trail.

The missions of the various Japanese forces consisted of the following. Company strongpoint positions in the valleys to the north were to hold their positions and block US advances to Bambang and the Baguio-Arita Road. The 10th Reconnaissance Regiment was to delay US advances along the Villa Verde Trail, weaken those forces, and gain time for the continued preparation of defensive positions in the Salacsac Pass area. These forces in the Salacsac Pass would defeat the remaining US forces and thus protect the approaches into Sante Fe. Captured Japanese operations orders indicated the overall scheme of maneuver to be, "continuous resistance in depth, local counterattacks, continuous committment of reserves and the destruction of the enemy by fire and charges."

The 10th Reconnaissance Regiment had been in its current outpost line positions

for approximately two to three weeks. It consisted strictly of dismounted infantry and had an effective strength of 250 personnel. The unit was highly motivated and consisted entirely of seasoned combat veterans. Japanese commanders unanimously expected the 10th Reconnaissance Regiment to conduct a deliberate calculated retrograde operation from their current positions northeast of Santa Maria to the Salacsac defensive positions at which point the US forces would be destroyed. The relatively small size of the 10th Reconnaissance Regiment required the majority of its forces to be deployed along the outpost line and precluded a defense-in-depth along the Trail. Inherent in the Japanese disposition of forces was the belief that those forces initially deployed along the Villa Verde Trail would be sufficient to defeat what was expected to be only a US diversionary attack. The construction of fortified positions had begun in January, and the massing of troops in these positions, along the narrow axis of advance, was expected to provide the Japanese with the tactical advantage.

Opening Moves: (See Map 4)

The 127th Infantry, 32d Infantry Division, reacted to the Japanese outpost covering the Cabalisiaan River crossing by deploying the 2d Battalion on the north side of the Trail and initiating a heavy mortar and artillery preparation which lasted until the 5th of February. When the fires were lifted, the battalion attacked and seized the first of a line of Japanese outposts covering the Trail entrance.

The attacks were continued until the evening of 8-9 February when the Japanese counterattacked the 2d Battalion. This counterattack and the arduous progress up the Trail had sapped the battalion's offensive spirit. They were relieved by the 3d Battalion, returned from corps reserve, on 10 February.

For two days after relieving the 2d Battalion, the 3d Battalion limited its activities to probing Japanese defenses in an effort to find flanking routes to the rear. The strength of the enemy defenses and his unparalleled observation from

heights commanding the battlefield convinced the battalion commander to attempt a night attack to envelop the Japanese right flank. One company was committed to this effort. They were moving in single file toward their objective when they encountered 200-250 Japanese. US forces were disorganized and used artillery and mortar fire to cover their withdrawal.

This artillery and mortar fire was continued until the 22d when the entire battalion launched a supported attack to force the Japanese from their positions. One company conducted a series of frontal assaults which were supported by an intense artillery preparation, close air support provided by sixteen P-51's, and direct fire from a sister company. As the attack began to face mounting enemy resistance, the 1st Battalion was released from its mission in the Ambayang River Valley and attacked the Japanese rear from the northwest. Additionally, G Company of the 2d Battalion was committed deep to establish a road block 2,000 yards in the Japanese rear. The accumulated effects of these coordinated attacks crushed resistance, and by 1500 hours on the 24th, the objectives were secure.

The 32d Infantry Division successes led I Corps to expand the divisional boundaries by Field Order #12 as shown on Map 3, Overlay 1. As mopping up operations in the objective area, known as the "Bowl" to the Red Arrow soldiers, continued, the 2d Battalion was passed forward to continue pressing the Japanese defenses. They moved rapidly along the trail until they encountered prepared positions at the Cabalisiaan River crossing 6,000 yards northeast of the Bowl.

These positions included individual foxholes as well as improved cave positions (See Illustrations IV-1 and IV-2). The 2d Battalion fought for two days in the area and reduced twelve cave positions. This opened one route and allowed the 1st Battalion to pass forward to continue the attack toward the Salasac passes on 6 March.

During these initial battles along the Villa Verde Trail, US forces demonstrated an ability to fully utilize field artillery, mortar, and close air support. Smoke could

have been employed to screen movements from Japanese observation, but it was either unavailable or unused.

Command and control was effected through wire, radio, and messengers. The system worked well during this period as evidenced by the coordination of air and ground operations over exceptionally difficult terrain. Flank attacks, a turning movement, and frontal attacks were synchronized with air and field artillery support in driving in the Japanese outpost line.

Tactics were standard, and application followed current doctrine. The one exception was the night attack conducted by the 127th Infantry on 8 and 9 February. The preferred solution to this type of problem was to move toward the enemy defenses at night and assault at first light rather than attack at night. The attack was unsuccessful due to the unexpected encounter with Japanese forces prior to the objective more than from any other reason.

The 32d Infantry Division was probably at the height of its effectiveness during this portion of the campaign. Leaders at all echelons were experienced and handled their duties well. The synchronization of frontal attacks supported by all available fires and augmented by maneuver would not be evident later in the battle. Soldier reaction was good, and unit cohesion was maintained throughout the opening phase which was a distinct victory for the 127th Infantry.

Casualties during this phase of the operation were relatively light. Coordination of combat support and maneuver had assisted the division in defeating the 10th Reconnaissance Regiment without suffering the attrition which would characterize the remainder of the action. Although exact figures are not available, the Division completed this phase of the action with its combat power intact.

Assessing this portion of the battle in terms of the principles of war shows application of maneuver and offense by the 32d Division. The terrain, although restrictive, did allow some routes around Japanese flanks, and the Division used these

routes for their maneuver. In so doing, they reduced the enemy's ability to fight from a series of prepared positions covering the Villa Verde Trail and susceptible only to frontal assaults. These operations, which never surrendered the initiative to the Japanese, exemplified the principles of the offense.

Probably more as a result of the multitude of missions assigned by I Corps than through any conscious choice, the Division never was able to mass its forces against the 10th Reconnaissance Regiment during this phase of the battle. Usually, only portions of two battalions were available, and this lack of troops undoubtedly contributed to the length of time required to reduce the Japanese positions. Had another regiment been available to bypass or assault the Bowl area between 12 and 24 February, or later to assist in the Cabilisiaan crossing actions, units could have conceivably arrived in Salacsac Pass #2 ahead of the 2d Tank Division. This would have significantly reduced the Division's problems during April and May and would have led to an early capture of Sante Fe. The regiment was available, but it was involved in a less-critical activity in the river valleys to the west.

Japanese opening moves include actions from the initial contacts northeast of Santa Maria to the defensive positions one-and-a-half miles west of Salacsac Pass.

The two-company defensive positions in the Ambayabany Valley were quickly enveloped by US forces, and surviving elements withdrew north of Lawican to await the arrival of two additional infantry companies dispatched as reinforcements. Japanese 23d Infantry Division defensive positions in the Arboredo proved too strong for penetration. Subsequently, increased resistance along the Villa Verde Trail required the 32d Infantry Division to abandon its efforts to the north and concentrate on the Trail itself.

The 10th. Reconnaissance Regiment's initial forward defense along the outpost line was rather quickly bypassed by US forces who were able to skirt the defensive positions utilizing numerous trail networks. Once the Japanese positions were passed,

US forces established a blocking position along the Trail in order to trap the Japanese. The 10th Reconnaissance Regiment correctly assessed their plight and were also able to bypass the US defensive positions by utilizing flanking trail networks. The Japanese intent was to reach the Cabalisiaan River bridge pass and establish a hasty defense capable of slowing the US advance. However, the Japanese were never able to outdistance US forces by a margin sufficient to allow them time to prepare adequate defensive positions. The Japanese arrived only slightly before US forces and were required to quickly resume their withdrawal to the east.

Major General Konuma, Commander of the Bambang Branch, 14th Area Army, quickly realized that the 32d Infantry Division was capable of conducting a breakthrough and thus ordered the 10th Reconnaissance Regiment to establish a deliberate defense approximately one-and-a-half miles east of the Cabalisiaan Bridge and the same distance west of Salacsac Pass. The constriction of the Trail and associated over-looking banks provided optimum positions for a strongpoint defense.

Major General Konuma also realized that the 10th Reconnaissance Regiment lacked sufficient strength to stop the US forces and quickly realigned his forces along the Villa Verde Trail. Initial reinforcements consisted of the two infantry companies, one howitzer battery (-), and one mortar company previously located in the Salacsac Pass. Added to these forces were two infantry companies previously scheduled for the Ambayabang Valley and four additional infantry companies from the 10th Infantry Division. Total reinforcements consisted of approximately eight companies, all of which were attached to the 10th Reconnaissance Regiment, raising its strength to approximately 1,100 men. Because all of the forces from the Salacsac Pass had been committed to the forward defensive position, immediate additional forces were required. Major General Konuma was forced to commit the 2d Tank Division (cross trained as an infantry division) to the Salacsac Pass approximately one month prior to the completion of their scheduled training period. The command of all forces along

the Villa Verde Trail was given to Lieutenant General Iwanaka, the 2d Tank Division commander. This piecemeal commitment of reserve forces characterized Japanese operations throughout the battle and limted their ability to ever mount effective counterattacks. With the exception of the previously mentioned artillery and mortars, there were virtually no reinforcing combat support units.

Throughout the initial operations, Japanese supporting fires were limited to mortars and light machine guns with limited artillery support available only at the last defensive position. Air support was nonexistant, and there are no indications that they employed flamethrowers or gas. Japanese use of smoke was limited to the employment of smoke canisters in attempts to confuse US close air support operations.

The critical incidents during the initial hostilities were the initial breach of the 10th Reconnaissance Regiment's outpost line and the subsequent rapid US advance along the Trail. The 10th Reconnaissance Regiment lacked sufficient forces to counterattack and was forced to withdraw in order to block the US forces. The most critical event was the inability of the Japanese to establish an effective defense at the Cabalisiaan Bridge since it sent the signal to reinforce the entire area, defend forward of Salacsac Pass, and commit the 2d Tank Division earlier than previously scheduled.

Japanese command and control proved to be sufficient to support operations at the regimental, divisional, and higher levels. Communications by both radio and messenger between the 10th Reconnaissance Regiment and the Bambang Front Headquarters supported timely decisions that avoided a rout by US forces. Command and control at the regimental level proved to be an easier task since the unit was reduced in size, operations were primarily small unit engagements and characterized by relatively static defensive positions. Maneuver was extremely limited and was restricted primarily to existing trails.

Japanese tactics were the standard doctrinal tactics as seen throughout the

Pacific theater and made the most effective use of their limited forces and the restrictive terrain. These tactics were characterized by interconnecting and mutually supporting fortified strongppoint defensive positions in depth, strong outpost lines, and limited counterattacks. The Japanese lack of sufficient forces during this phase of the battle precluded the normally desired deep patrols and raids.

Leadership throughout the initial phases of the battle was extremely effective. Major Suzuki had commanded the 10th Reconnaissance Regiment during all its operations on Luzon and was respected by all his soldiers. These soldiers were combat hardened infantrymen and were not retrained combat service support troops who would make up the majority of the Japanese follow-on forces. This unit's loyalty to its leaders and the solider's willingness to defend "to the death" caused the Regiment to be more effective than would be expected of a unit of its reduced strength. Unit cohesion remained strong even in the face of heavy casualties and the lack of food, water, and medical supplies. The Regiment's only shortcoming was its inability to completely break contact with US forces and gain sufficient time to establish effective defensive positions.

In assessing the results of the initial hostilities, the tactical advantage was gained by the US because the Japanese had failed to hold the western portions of the Villa Verde Trail. However, the Japanese ability to withdraw and establish a secondary formal defense and their continued resistance along the Trail significantly slowed US advances below all estimations. Although the Japanese had underestimated the total US strength along the Trail, their tenacity combined with US inability to employ any more than a regiment (-) at a time in the restrictive terrain, significantly increased their effectiveness.

Japanese casualties, as in all phases of the Villa Verde Trail battle, were extremely heavy. It is estimated that only eighty of the 10th Reconnaissance Regiment's original 250 men survived to participate in the defense west of Salacsac

Pass. Japanese leaders had expected heavy losses, but they underestimated US troop strength and so their forces were attritted more quickly than expected. It ultimately resulted in the commitment of eight infantry companies to augment the 10th Reconnaissance Regiment and the early commitment of the 2d Tank Division. These actions resulted in a lessening of available forces for the major battle in Salacsac Pass and the commitment of the majority of the reserve forces.

An analysis of Japanese operations as compared to the principles of war indicates the following. The Japanese ability to effectively delay US forces was attributed to the successful implementation of the following principles. Their objective to delay and destroy US forces was clear and direct. They were able to achieve mass by utilizing restrictive terrain that canalized US forces and precluded the commitment of any more than a regiment (-) at one time. Economy of force was achieved through the effective use of the terrain. Operations basically involved only one unit (10th Reconnaissance Regiment) and were relatively unsophisticated strongpoint defenses, thus achieving unity of command and simplicity. The Japanese were unable to stop US forces due to the following problem areas. Security and surprise could never be achieved because defensive operations were restricted to the Trail, and the Japanese lacked sufficient forces (mass) to conduct envelopments and flank attacks. The bottom line is that the extremely restrictive terrain and the Japanese inability to attain numerical superiority precluded maneuver and offensive operations, thereby resulting in their inability to ever attain tactical victories.

PHASES OF THE BATTLE

Salacsac Pass Number 2: (See Map 5)

The 1st Battalion, 127th Infantry passed south of the 2d Battalion and forced a crossing of the Cabalisiaan River. They then moved along the Villa Verde Trail and began to draw long range machine gun fire from the vicinity of hill 502. An air strike was called in to suppress this fire, and the battalion followed a reconnaissance patrol

to the base of hill 502 where they came under intense artillery shelling.

On 4 March, another air strike hit hill 502 while artillery continued to pound the Japanese positions. As the fires were shifted and the aircraft changed to flying dry runs, elements of C Company attacked hill 502. The climb was arduous and was accomplished under direct and indirect Japanese fire. Eventually, this assault was driven back. Further patrolling revealed an uncovered draw leading up the northern side of hill 502, and this was exploited by B Company. Using artillery support, B Company was able to reach the crest by mid-day on the 5th, but the hill was not yet secure. Two days of laborious reduction of caves and bunkers would be required before the hill was finally cleared of Japanese defenders.

By this time, it was evident that the tedious and costly reduction of successive Japanese positions by frontal attack would be necessary unless some means of turning the positions along the Trail could be found. It was this problem which caused the regimental commander to commit the 3d Battalion against the Trail from the south near Valdez.

The 3d Battalion made slow progress up hills 517, 507, and 508 south of the Trail. By late afternoon of 21 March, L Company had captured the D-nose of hill 507 while K Company held hill 508 about 1,000 meters to the east. Both of these hills commanded the trail, and the gap between the battalions was less than 1,500 meters. As K Company began to reconsolidate, it was hit by a Japanese artillery barrage. When this barrage was lifted, the Japanese counterattacked and drove the entire battalion from its hard-won positions. Both lead companies joined I Company of hill 517 and, on 23 March, the flanking attempt from Valdez was abandoned.

During these initial attacks against Salasac Pass #2, internal command and control at the battalion level appears to have been adequate, but there was little demonstrated ability to coordinate the frontal and flanking attacks. The total gain for this operation was less than 1,000 yards along the Trail at a cost of over 800

casualties. By 23 March, the 127th Infantry had suffered such extensive losses that combat efficiency was minimal and cohesion was beginning to disintegrate. This increased Japanese resistance caused I Corps to reduce the Division's mission by Field Order #13 (See Map 3, Overlay 2).

On 23 March, the 128th Infantry began relieving the exhausted and depleted 127th Infantry as directed by 32d Infantry Division Field Order 16. Relief was completed by 25 March.

The 128th attacked with the 1st Battalion, occupying a line which followed the reverse slope of hill 502, down into the saddle, then up the crest of hill 504 and back down the slope to the Trail. B Company, 2d Battalion, had a foothold on the southwest slope of hill 505. The 3d Battalion attacked over the crest and around the slopes of hill 504 with the 2d Battalion placing neutralization fires on the interlocking Japanese positions on the lower slope of hills 504 and 506 from hill 505. Simultaneously, the 3d Battalion poured its fire on the crest and sides of hill 505 to protect the 2d Battalion as it pushed over the crest. The 128th and the Japanese attacks and counterattacks exchanged control of ground on hill 505 until 27 March.

On 27 March, the 1st Battalion successfully attacked along the Villa Verde Trail east from hill 504 to clear resistance between hills 504 and 505 and joined B Company, 2d Battalion on hill 505. From 28 March until 1 April, the 1st Battalion expanded its foothold on hill 505. On 31 March, the 2d Battalion relieved the 1st Battalion on hill 505. The 3d Battalion was clearing Japanese out of caves on hill 504. The Japanese attacked, pushing elements of the 3d Battalion off hill 504 the evening of 31 March. The 3d Battalion counterattacked at 010200 April to retake hill 504. By 5 April, the 2d Battalion had pushed over the crest of hill 505 and had opened the Trail between hills 504 and 505.

Elements of the 1st Battalion moved from hill 502 and joined the 2d Battalion forces attacking hill 506. Elements from the 1st Battalion by passed hill 506 and

secured a foothold on the southeast nose of the hill on 9 April; the remainder of the company joined the lead platoon under the cover of darkness. The rest of hill 506 was secured the morning of 10 April. Elements of the 1st Battalion then moved to a point midway between hills 507f and 507. Concurrently, the 3d Battalion attacked east and secured the Japanese track being used for resupply on 10 April. Salasac Pass #2 was secured. The US line ran from hill 518 to the west slope of hill 511, back east to the Japanese track, south to the Villa Verde Trail, around the east nose of hill 505, around the east slope of hill 506, and back toward hill 507f.

The battle for Salasac Pass #2 had taken it toll on the 128th Infantry. The regiment suffered severe casualties, control and cohesion disintegrated toward the end, and leadership began to fail.

It had become apparent by 1 April that the 32d Infantry Division on the Villa Verde Trail was engaged with the enemy's main line of resistance. The only way the Division could be reinforced was for I Corps to relieve the 126th Infantry Regiment of its mission in the Ambayabang and Arboredo River Valleys. On 5 April, 32d Infantry Division Field Order #17 directed the movement of the 126th Infantry to the Villa Verde Trail sector.

The 126th Infantry Regiment was immediately committed in the Salacsac Pass area, on the left (north) of the 128th Infantry. Its first objectives were hills 518 and 519. To reach its objectives, the 126th Infantry was to strike off the Villa Verde Trail from a point about a mile-and-a-half west of hill 502 and push northeast along the Miliwit River Valley.

The 3d Battalion, 126th Infantry, moved east through the Miliwit River Valley to the Salacsac Pass area and contacted the enemy on hills 518 and 519. Hill 519 was captured before dark on 6 April, and hill 518 was gained the following day.

The 1st Battalion, 126th Infantry reached the much-used Japanese track which led north from the Villa Verde Trail on 6 April. On 7 April, the 1st Battalion reached

the base of hill 511, and by 10 April had reached a point about 350 yards due south of hill 511.

The Japanese reacted violently to the advance of the 126th Infantry with concentrations of artillery fire, particularly on the 3d Battalion. On 8 April, 200 rounds of artillery and mortar fell within the zone of the 126th. A high casualty rate and a large number of shock cases resulted from this continual artillery pounding.

In spite of the artillery and against stiffening resistance, the 126th Infantry pushed eastward. By reaching the Japanese track, the 126th Infantry had cut the 2d Tank Division's secondary route to and from Salacsac Pass and had taken some of the pressure off the 128th Infantry.

The Japanese had set up outposts along the southern edge of the Villa Verde Trail. These initial outposts, just north of Santa Maria, were held by elements of the 10th Division's 10th Reconnaissance Regiment. Strong attacks by the 127th Infantry broke through the outposts and forced the Japanese to pull back along the Trail.

The intent of the 14th Area Army Commander, General Konuma, was that the 10th Reconnaissance Regiment would be able to defend in the good defensive terrain where the trail crossed the Cabalisiaan River. The 10th Reconnaissance Regiment's strength was less than 250 of an authorized 750 men. The unit was both outflanked and overpowered and had no time to establish defensive positions at the crossing because they were forced to withdraw further up the trail.

General Konuma became thoroughly alarmed about this situation. Failure to take advantage of the key terrain at the Cabalisiaan crossing meant that he would have to capitalize on the next defensive terrain--the Salacsac Pass area--and prematurely commit additional forces to this area of defense of the Bambang Front. It was obvious at this point of the battle that the 32d Infantry Division was attempting to use the Villa Verde Trail to enter the strategically important Route 5. Failure to stop their advance would be catastrophic.

General Konuma's first move was to reinforce the battle-weary 10th Reconnaissance Regiment. He did this by redistributing forces already at the Salacsac Pass area bringing the regiment to 550 men. He further directed the 10th Division to dispatch four rifle companies bringing the regiment's strength to nearly 1,000 men on 3 March. Further analysis of the situation caused General Konuma to order the 2d Tank Division into the Salacsac Pass area. On 4 March, the 2d Tank Division would move west from Dupax with nearly 4,300 men. Together with the reinforced 10th Reconnaissance Regiment, the Japanese would have nearly 5,000 men defending the Salacsac Pass #2 under the command of General Iwanaka's 2d Tank Division.

On 5 March, the 127th Infantry arrived at the western entrance to the Salacsac Pass as the 2d Tank Division was barely closing on the position. The 10th Reconnaissance Regiment had managed to delay the 127th Infantry just long enough for the 2d Tank Division to come up.

Through this portion of the battle, the Japanese made very effective use of the terrain. Sharply outnumbered, they used cave warfare, mutually supporting converging fires, and sporadic night counterattacks to delay the numerically superior American force moving up the trail. The Japanese defense in Salacsac Pass #2 was tenacious. Large numbers of machine guns in well-emplaced positions, supported by mortar fire, gave the Japanese command of the torturous trail. The battles were so intense and the terrain was so restrictive to the advancing 32d Infantry Division that American forces were barely able to move 1,000 yards in thirty days. The Japanese defensive tactics were extremely successful in delaying the US forces. The extremely effective network of supportive fires that covered virtually every inch of the trail from well-fortified and equipped caves was eventually neutralized by overpowering air strikes, artillery, and simultaneously attacking mutually supportive weapons. The commitment of the 128th Infantry to replace the 127th was moderately successful although that regiment lost as many troops in two weeks as the 127th did in three

weeks. The flanking movement by the 126th Infantry was key to the success of the US forces. This two-regiment attack allowed US forces to concentrate their power against a very determined Japanese defense.

For the thirty days ending on 4 April, the Japanese lost over 1,000 men killed in the defense of Salacsac Pass #2. Moreover, American air strikes were making resupply and reinforcement to the Pass area virtually impossible. General Iwanaka directed his troops to defend in place while he prepared defensive positions at Salacsac Pass #1. By 18 April, the 128th Infantry had broken through the Japanese defenses at Salacsac Pass #2 while the 126th Infantry had severed the 2d Tank Division's secondary route to and from the pass. From 5 April to 18 April, the Japanese lost another 1,100 men at the Pass bringing their death toll to over 2,500 men killed.

Salacsac Pass Number 1: (See Map 6)

On 11 April, the 2d Battalion, 128th Infantry launched a three pronged attack against hill 506. The 1st Battalion attacked with one company against hill 506B; one company attacked from the south nose of hill 506 east toward the Villa Verde Trail, while a third company attacked toward the crest of hill 507. C Company, 1st Battalion, reached the Villa Verde Trail on 12 April and established a road block. Leaving one company in the regimental sector north of the Villa Verde Trail, the 3d Battalion moved to hill 507 on 13 April to attack southeast along hill 507 with one company following and clearing. Elements of the 2d Battalion reached the Villa Verde Trail on two sides of hill 506A on 14 April. Elements of the 3d Battalion secured hill 507 by 15 April. By the night of 17-18 April, the 128th had reached the Villa Verde Trail at four points in sector. However, they had become combat ineffective, morale was poor, and leadership ineffective.

32d Infantry Division Field Order 19 designated hills 509, 508, and 515 as Division Intermediate objectives and also directed the relief of the 128th Infantry by

the 127th Infantry. The commanding ground overlooking Imugan was still the Division's objective.

On 17 April, the 127th Infantry, after completing a three week rest, began relieving the 128th Infantry along the Villa Verde Trail. This was completed by the 19th. Initially, elements of the 2d Battalion supported the 126th Infantry attacking toward hill 515 and the unnumbered, or X hill.

After providing this support, the 2d Battalion began to clear the Japanese positions from hill 506B to hill 507. This was a slow process which was accomplished with the support of massed field artillery fires. The operation had moved so slowly that the artillery battalions were finally able to set up along the trail and provide effective massed support.

In the 126th Infantry sector, the 1st Battalion swung due north on 10 April and attacked the south flank of the enemy strong point of hill 511, which had defied the 3d Battalion's efforts for three days. On 12 April, the 1st Battalion crushed all resistance on hill 511 and captured hill 512. The 2d Battalion relieved elements of the 1st Battalion on hill 512 on 13 April and attacked south toward hill 515 on 16 April.

The 2d Battalion continued its attack south and on 22 April, secured the crest of hill 515, which marked the north side of Salacsac Pass #1. On 23 April, K Company, 3d Battalion, fought its way from hill 511 southeast parallel to the Villa Verde Trail and joined the 2d Battalion on hill 515. K Company was assisted in its attack by supporting machine gun and 37mm fires of the 2d Battalion, 127th Infantry on hill 506B.

Having secured hill 515, the 2d Battalion sent G Company toward the unnumbered or X hill due south and overlooking the Villa Verde Trail on 24 April. To assist G Company, the 2d Battalion with K Company, 127th Infantry attached, moved from hill 515 on 28 April and swung wide to approach the unnumbered hill from the west. By 1 May, 2d Battalion occupied the crest of X hill.

The 1st Battalion, 126th Infantry moved from hill 516 to occupy hill 525 and to establish a block on the Villa Verde Trail. On 25 April, the 1st Battalion captured hill 525 after only slight opposition. Three days later, a company from the 1st Battalion established the roadblock on the Villa Verde Trail immediately south of hill 516, effectively cutting the Japanese main line of communications to Salacsac Pass #1.

By the 26th of April, the 2d Battalion, 127th Infantry, was able to continue east toward hill 508 although the trail itself would not be secure until 3 May. The attack on hill 508 was made against stiffening resistance and frequent counterattacks which would continue until 4 May. When the counterattacks had subsided, the 127th held hill 507D, hill 508, the ground between, and had established one company along the Trail itself. These positions, in conjunction with the ground held by the 126th Infantry to the north, effectively isolated the Pass, and the trail to the west was clear of enemy forces.

The cost of this success had been high. The 127th had taken an additional 750 casualties, many of which were non-battle (including ten self-inflicted gunshot wounds). By now, the regiment was virtually broken and was in dire need of relief. After this battle, the regiment would only be able to accomplish mop up operations in the Division rear.

The 126th Infantry was the strongest regiment of the 32d Infantry Division on 5 April when it began operations north of the Villa Verde Trail. The Regiment was 900 men understrength as a result of operations in the river valleys to the west of the Division's sector. From 17 April until 4 May, the 126th Infantry incurred another 229 battle and 233 non-battle casualties. By early May, the Regiment could muster but 1,875 front-line effectives. Morale problems were pressing, and many of the non-battle casualties included combat fatigue and pyschoneurotic cases.

32d Infantry Division Field Order 20 directed the relief of the 126th Infantry. The 2d Battalion was relieved by the 2d Battalion, 128th Infantry on hill 525 on 3

May. On 9 May, the 1st Battalion, 127th Infantry relieved the 1st Battalion, 126th Infantry on hill 516 and the X hill.

Salacsac Pass #1 provided good defensive terrain for the Japanese. General Iwanaka's intent was to hold a north-south line extending from Mt. Imugan two-and-a-half miles south of the trail to hill 508. General Iwanaka also placed a force of 500 men on highground one mile southwest of Imugan and a 300-500 man force, as reserves, immediately west of Imugan along the ridgeline. As the 127th Infantry relieved the 128th and began to push east, the Japanese counterattacked several times.

Each counterattack was very costly. On 28 April, the 126th Infantry effectively cut the main Japanese line of communications to Salacsac Pass #1. The only route of withdrawal or reinforcement now left to the Japanese led through heavily wooded, broken terrain south of the trail. The Japanese remaining at Salacsac Pass #1 fought valiantly continuing their effective use of cave warfare and night counterattacks. It would not be until 24 May that US forces could consider Salacsac Pass #1 secure.

IMUGAN: (See Map 6)

The 128th Infantry relieved the 126th and attacked with the 2d Battalion on 3 May toward hill 526 securing it by 5 May. The 2d Battalion then attacked toward hill 527. The 1st Battalion attacked through the 127th Infantry along the Villa Verde Trail toward hill 526 on 8 May. On 10 May, the Japanese counterattacked and cut supply lines to the 2d Battalion and established roadblocks cutting off the 2d Battalion. The plight of the 2d Battalion became desperate, with wounded stacking up at the aid station, and ammunition and rations running low. A new trail was cut on 16 May to provide relief for the 2d Battalion and attacks continued against the Japanese positions until they were cleared on 19 May. Meanwhile, the drive to clear Salacsac Pass #1 continued. US counterbattery fire had eliminated the bulk of Japanese artillery.

By 22 May, the 2d Battalion had secured hill 527, then moved to and secured hill 526. On 23 May, contact was made with elements of the 2d Battalion by a patrol from the 1st Battalion, Buena Vista Regiment. The same day, the 3d Battalion, 128th Infantry, reached the Villa Verde Trail south of hill 516. On 25 May, the 2d Battalion, 128th Infantry cleared hill 527 and on 26 May hill 528, lying on the south side of the Villa Verde Trail opposite hill 527, was secured by the 1st Battalion, Buena Vista Regiment. The two battalions had cleared the high ground immediately west of Imugan, the 32d Infantry Division's final objective as assigned by I Corps Field Order #17 (See Map 3, Overlay 2).

On 28 May, the 1st Battalion, Buena Vista Regiment, attacked east from hill 528 and secured hill 524. Elements of the 2d Battalion, 128th Infantry and the 32d Reconnaissance Troop entered Imugan on 28 May and contacted the 126th Infantry on hill 530. Imugan was secure. The 126th Infantry, under 25th Division control, had gained control of the Villa Verde Trail from Sante Fe to Imugan.

As the 32d Infantry Division secured its objective, the 127th Infantry was involved in mopping up scattered pockets of resistance. By this time, the 127th Infantry could no longer perform in the main battle area due to excessive casualties, low morale, ineffective leadership, and virtually non-existant cohesion. During the final phase of the battle, the regiment suffered 480 casualties, but 350 were non-battle casualties.

On 30 May, all elements of the 32d Infantry Division, except for the 126th Infantry, began to withdraw from the Villa Verde Trail. Still under the control of the 25th Division, the 126th Infantry continued patrolling west from Sante Fe and up the Imugan River valley for another two weeks.

During the operations to clear the Villa Verde Trail, the three regiments of the 32d Infantry Division had suffered 2,985 battle casualties. Another 6,000 men were evacuated from the front lines either permanently or for varying periods because of

sickness and disease, combat fatigue, and associated psychoneurotic upsets.

While he abandoned all hope for Salacsac Pass #1, General Iwanaka hoped to establish yet another defensive line along the high ground just west of Imugan. He attempted to thwart US progress by cutting off the supply line to the 2d Battalion, 128th Infantry and was moderately successful until 19 May. The battle for Imugan never materialized. The Japanese saw no advantage in countering the 32d Infantry Division again and thereby withdrew up the valley of the Imugan River. This decision was based on two factors. In the east, the 10th Division was losing ground rapidly to the 25th Division, and the 2d Tank Division was sustaining casualties too rapidly as well. There was no longer any tactical or prudent reason to continue to defend the Villa Verde Trail.

The 2d Tank Division was virtually annihilated during the operation. The Division was committed to the Villa Verde Trail on 3 March with 4,300 soldiers. It was further reinforced by 4,400 men during the next ninety days. These reinforcements were from various fragmented units within the 14th Arear Army of the Bambang Front.

Approximately 6,000 of the 8,700 men of the 2d Tank Division were killed during the Villa Verde Trail operation. The 2d Tank Division would no longer be an effective fighting force.

KEY EVENTS

The events considered key to the 32d Infantry Division's operations during the battle of the Villa Verde Trail are as follows.

a. The 127th Infantry broke through the Japanese outpost line on 24 February with little opposition from the enemy. This led the commander of I Corps to underestimate the capability and intent of the Japanese.

b. Subsequently, the reduction in the area of responsibility of the 32d Infantry Division on 25 March by I Corps allowed the Division to concentrate its efforts on the

Villa Verde Trail and rotate the regiments in contact to continually apply pressure on the Japanese.

c. Securing Salacsac Pass #2 was imperative to provide the US with a position to launch an attack on Salacsac Pass #1 and to provide a secure base of communications.

d. The actions of the 126th Infantry in cutting the Japanese supply lines south of hill 516 cut off the Japanese forces in the Salacsac Pass #1 area and led to a rapid collapse of their defense.

e. The narrowing of the 32d Infantry Division sector and the changing of their objective by I Corps on 23 May was a decisive event as the Division had expended its reserves, human and materiel. Additionally, the 25th Division under less pressure from the enemy had had better success along Route 5 and was in better position to take Santa Fe than the 32d Infantry Division.

The key events in the Japanese operations along the Villa Verde Trail can be summed up as follows.

a. The initial route of the 10th Reconnaissance Regiment's outposts on the southern segment of the trail. This horribly reduced unit did miraculous things against a numerically superior US force but was unable to hold initial key terrain along the trail. With the US forces virtually on their tail, the 10th Reconnaissance Regiment was unable to take advantage of the key terrain along the Cabalisiaan River where it crossed the Villa Verde Trail. This misfortune caused the 14th Area Army Commander to prematurely commit the 2d Tank Division. This threw off the enemy's timetable and caused them to react rather than follow a preconceived plan.

b. Premature commitment of the 2d Tank Division. This division was decimated during the fighting in the coastal plain and was reorganizing and retraining at Dupax when called upon for commitment to the Villa Verde Trail. The Division had barely 4,300 troops and was making the transition from an armored force to infantry. The

Division was characteristic of the depleted and fragmented Japanese forces frantically thrown into battle during this operation. Even so, the 2d Tank Division fought admirably. It had been anticipated that the Division would have at least another thirty days to retrain before it went into battle. The unexpected drive by US forces up the Villa Verde Trail did not allow this to happen as the Division was committed on 3 March.

c. The defense of Salacsac Pass #2 and #1. The Japanese were forced to make their primary defense of the Villa Verde Trail in this area because of earlier losses in the lower valley. The Salacsac Pass was, in fact, the best defensible terrain in the area, but the Japanese arrived about the same time as the Americans and did not have time to properly prepare the area for the forces they were about to commit there. The withdrawing 10th Reconnaissance Regiment occupied previously prepared positions while the arriving 2d Tank Division hastily prepared positions. The Japanese did, however, take advantage of the ground and employ tactics that inflicted grave losses on US forces. Cave warfare, mutually supporting converging fields of fire, and a tenacity not witnessed before prolonged the US advance up the Trail. US air superiority, heavy artillery, concentration of forces, and perserverence were key in this engagement. The Japanese supply routes were severed and those reinforcements that were committed were battle-weary troops from other engagements or service troops with inferior infantry training.

d. Air superiority, outflanking, reinforcements. Once the Japanese were committed to the Salacsac Pass, they knew that this piece of terrain was the only formidable ground between US forces and Santa Fe. Everything had to be committed to that area. While it was great defensive terrain, it was also an area where US forces could commit all of their forces and perhaps outflank, which they did. The battle was one of attrition. As long as replacements were funneled into the pass, the Japanese could hold. US air eventually eliminated that option. Heavy artillery and

incessant airstrikes kept supplies and troops from moving west to the pass.The Salacsac Pass was also the first time the 32d Infantry Division had full control of its three regiments. This allowed the Americans to execute a flanking maneuver with the 126th Infantry. This was most successful in that it allowed the US forces to concentrate on multiple enemy strongholds and effectively neutralized the Japanese converging and supportive fire network. Over 3,300 replacements were sent to the Salacsac Pass to reinforce the 2d Tank Division. These replacements were fragments and remnants of other units rendered combat ineffective, or they were service troops being committed from higher echelons of the 14th Area Army. No heavy weapons were able to make it to the pass due to US air interdiction, so replacements were armed with individual weapons at best. The quality of these troops was not as good as the initial troops committed. Approximately 6,000 of the 8,700 men committed to the trail were killed.

e. The collapse of the 10th Division. After securing Salacsac Pass #1, the 32d Infantry Division was virtually unopposed to Santa Fe, although the Japanese could have defended along the high ground near Imugan. The collapse of the 19th Division along Route 5 against the 25th Infantry Division left General Iwanaka with no alternative but to withdraw up the Imugan River Valley and let the Americans move to Santa Fe.

OUTCOME

The 32d Infantry Division had not accomplished its original missions to clear the Villa Verde Trail, seize Santa Fe, and secure Route 5 from Santa Fe south to DigDig. However, Sixth Army and I Corps had expected too much of the 32d Infantry Division, especially in light of the unit's personnel problems, underestimating the rugged terrain, as well as Japanese capabilities and intentions regarding the defense of the Villa Verde Trail.

In spite of not accomplishing the original mission, the outcome of the battle of

the Villa Verde Trail must be judged by the accomplishments of the 32d Infantry Division.

a. The Japanese committed their reserve, the 2d Tank Division, to the defense of the Villa Verde Trail approach to Santa Fe.

b. The 2d Tank Division was subsequently destroyed with the loss of almost 6,000 soldiers.

c. The 32d Infantry Division tied down the Japanese defenders and made possible the decisive actions of the 25th Division along the Route 5 approach to Santa Fe.

d. The US lost 825 killed, 2,160 wounded, and 6,000 non-battle casualties, nearly 9,000 men in all. All casualties were evacuated by litter down the Villa Verde Trail.

The Japanese forces involved in the battle of Villa Verde Trail clearly suffered a complete and total tactical defeat. They failed to stop the 32d Infantry Division's advance to Imugan, suffered tremendous losses estimated at 5,750 dead out of the 8,750 participants, and were forced to commit an entire division (2d Tank Division) which was being retained for future operations. However, though the Japanese were totally defeated, they were able to inflict a large number of casualties on US forces through the skillful use of the terrain, despite their overall poor level of training. It is quite possible that the Japanese achieved the maximum possible effectiveness out of a unit which would have been destined to be destroyed during subsequent campaigns.

A review of the factors involved in the Japanese defeat indicates the following. The Japanese were never able to attain a numerical superiority despite the commitment of all available forces in the region. Their organization remained sound, and they conducted effective defensive operations, eventually being overwhelmed through attrition and superior firepower. Although they may have enjoyed a slight superiority in light machine guns, they were completely outnumbered in mortars,

artillery, and close air support. Although the 10th Reconnaissance Regiment equalled the 32d Infantry Division in leadership, training, and battlefield experience, the follow-on 2d Tank Division forces consisted of retrained combat support and combat service support soldiers with limited experience as infantrymen. Their overall quality of leadership declined slightly, but there were sufficient combat leaders remaining to control the relatively unsophisticated defensive operations. The Division's lack of training and experience was overcome by the individual soldier's incredible will to resist and loyalty to his superiors. The Japanese logistical support system was inferior to the US system and was degraded by air and artillery interdiction. Supplies were initially stockpiled at the various defensive positions and then infiltrated during the hours of darkness. Regardless of the success of US interdiction efforts, Japanese defensive positions were normally overrun before supplies ran out. The terrain and weather took its toll on both the Japanese and Americans. However, the Japanese were able to utilize the restrictive terrain to overcome their numerical inferiority. Luck, although undoubtedly involved in several company-level contacts, cannot be credited with playing a significant role in the battle. Rather, it appears that the effective use of the terrain and weather combined with the effective defensive tactics and the tenacity of the individual soldier were the keys to the stiff Japanese resistance.

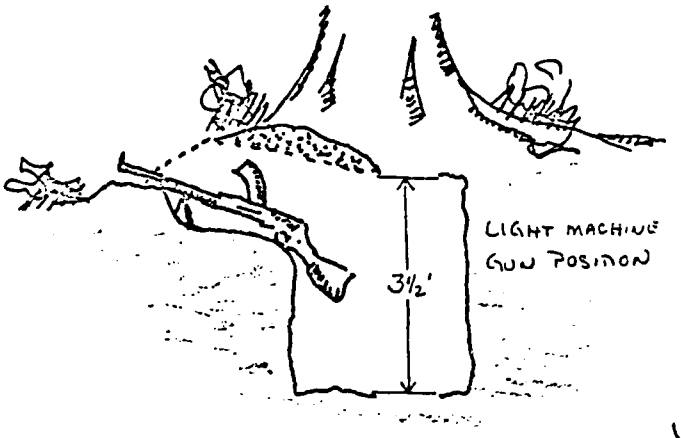
In the strictest sense, the Japanese accomplished their mission of delaying the 32d Infantry Division in capturing Santa Fe although it was taken instead by the 25th Infantry Division. However, the delay of the 32d Infantry Division required a tremendous reserve commitment (2d Tank Division) that would adversely impact on the future battle for northern Luzon. The large commitment of reserve forces was required because the Japanese had underestimated the size of the US effort along the Villa Verde Trail.

As mentioned previously, the Japanese lost 5,750 of the 8,750 men committed to

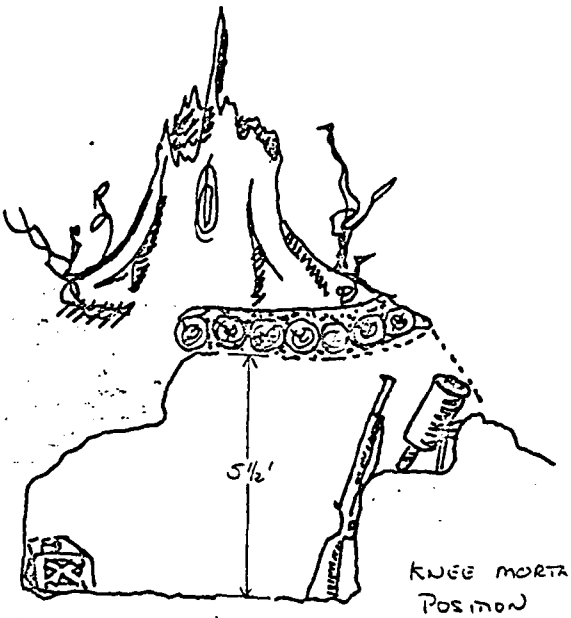
the battle. This high death rate reflected not only the heavy fighting, but the Japanese inability to adequately treat or evacuate their battlefield casualties. In the majority of cases, medical supplies were extremely limited, and those soldiers unable to move were often left behind to man defensive outposts. Severely wounded or ill soldiers were often selected to conduct suicide attacks or deep raids against US forces. The majority of prisoners captured by the Americans fell into this category of battlefield casualty.

By 24 May, although the Japanese maintained their defenses west of Imugan, Lieutenant General Iwanaka realized that the battle had been lost. The 10th Infantry Division's defenses along Route 5 to the east had been penetrated, and both his supply lines and Santa Fe were in danger. With the defenses on Route 5 penetrated, there was no longer any need to delay US forces along the Villa Verde Trail. Lieutenant General Iwanaka began withdrawing his remaining forces to the north through the Imugan River Valley before they became decisively engaged. His objective was to consolidate his forces in the vicinity of Dupax in order to participate in the Bambang Front's new defensive line. In reality, however, the 2d Tank Division had been destroyed as an effective fighting force.

In the final analysis, it can be said that the 32d Infantry Division achieved a successful but costly victory along the Villa Verde Trail. The four months it took to reach its objective saw numerous casualties. The Japanese could only measure success in the fact that they inflicted grave losses on US troops and delayed the numerically superior Americans from reaching their objective for over four months.

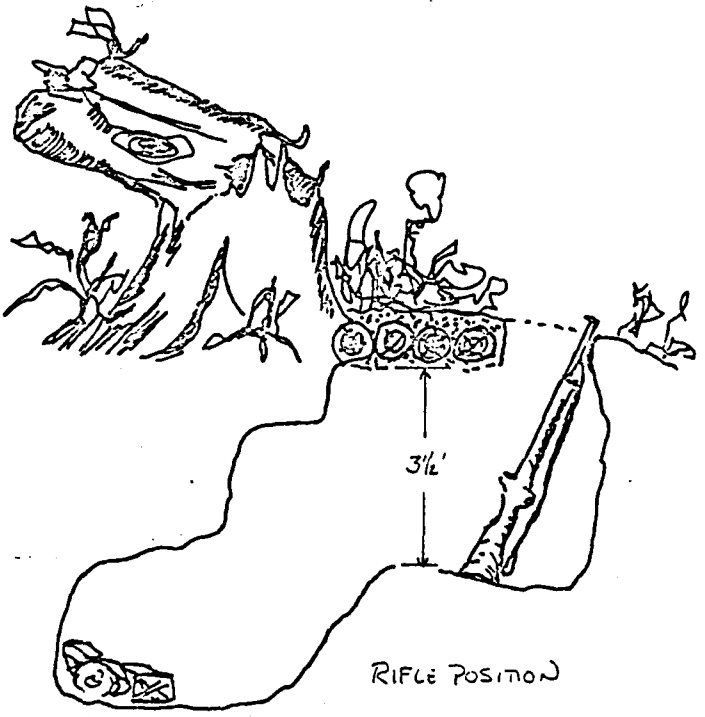


LIGHT MACHINE GUN POSITION



KNEE MORTAR POSITION

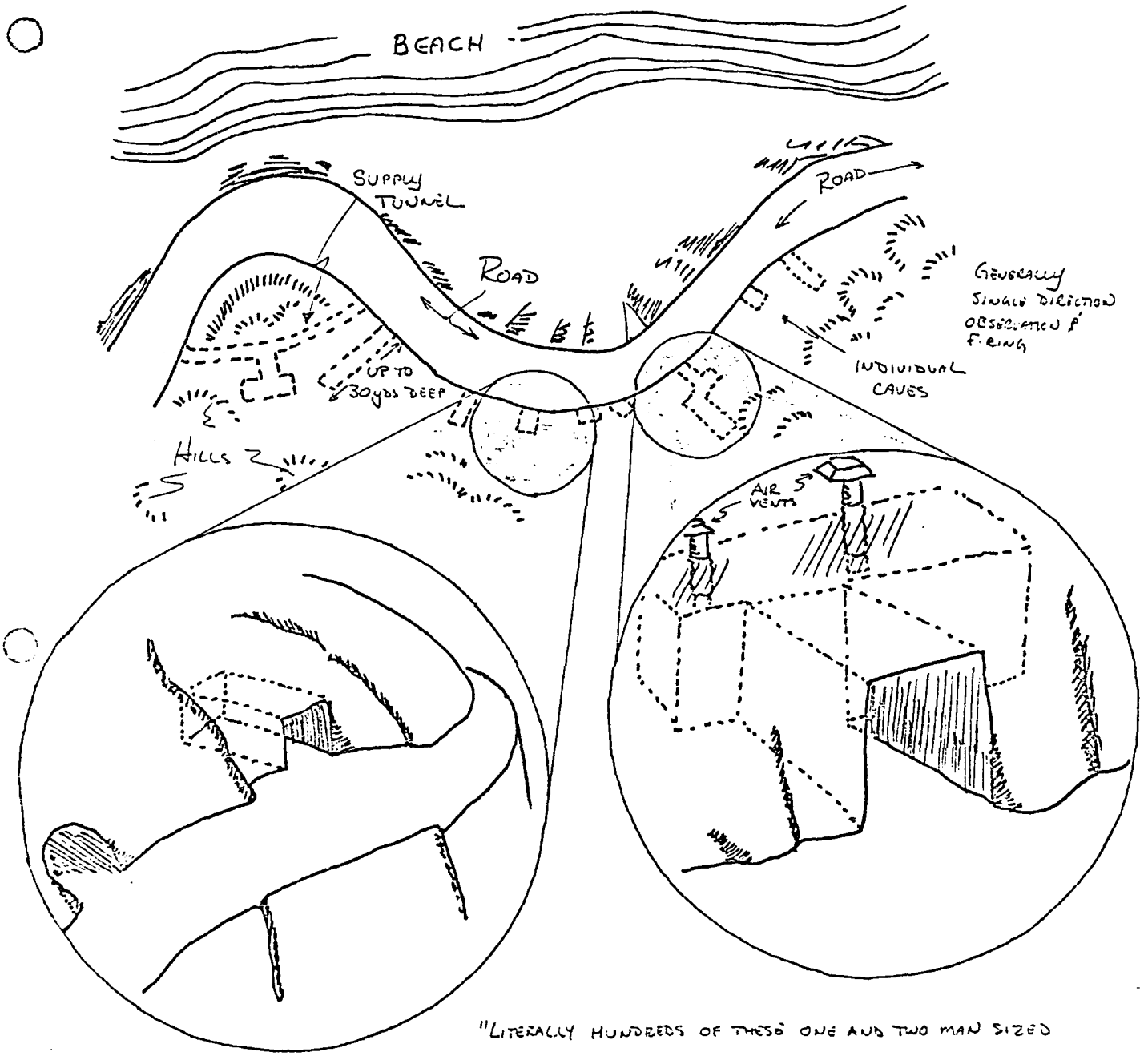
HEAVY MACHINE GUN POSITION



RIFLE POSITION

"SKETCHES OF JAP POSITIONS STORM KING MT 18 FEB 1945"

Illustration 4-1 Japanese foxhole fighting positions



"LITERALLY HUNDREDS OF THESE ONE AND TWO MAN SIZED NICHES CUT INTO HILL ALONGSIDE OF THE ROADS. THERE WERE NO TWO OF THESE ALIKE."

"THE CROSS SECTION VARIED FROM 2'x2' TO 4'x6'. THE DEPTH PERPENDICULAR TO ROAD VARIED FROM 2' TO 10'. THERE WAS NO APPARENT EFFORT TO CAMOUFLAGE, ALTHO' THE SPOIL HAD BEEN DISPOSED OF."

Illustration 4-2 Japanese Cave positions

CHAPTER 5

THE SIGNIFICANCE OF THE ACTION

IMMEDIATE

The 28 May 32d Infantry Division G-3 Operations Report contained the following: "This morning elements of the 128th Infantry and the 32d Cavalry Reconnaissance Troop captured the important village of IMUGAN. This village, the center of enemy activity for deployment of troops to the east, south and west, was secured at 1000I when contact was made with elements of the 126th Infantry, now attached to the 25th Infantry Division, on Hill 530 (1000 yards north of IMUGAN)."

This note of triumph at the successful completion of operations suggests that the battle of the Villa Verde Trail in and of itself was not decisive. This battle did, however, significantly contribute to the Bambang Front campaign.

I Corps anticipated that the Japanese were prepared to defend all approaches to the first vital objective on the Bambang Front--the Santa Fe-Belete Pass area. It appeared that the Japanese would place defensive emphasis along Route 5. I Corps fully expected the 32d Infantry Division to make the decisive effort on the Bambang Front, anticipating that the Division, in a quick drive up the Villa Verde Trail, would seize Santa Fe. The 32d Infantry Division could then attack the rear of the strong Japanese defenses that the 25th Infantry Division would undoubtedly encounter along Route 5.

A converging attack toward Santa Fe by two divisions, the 32d and the 25th, was necessary from the beginning. If I Corps had concentrated its right flank forces on one axis of advance, the Japanese in turn, would have been able to concentrate

their full defensive potential. Neither of the divisions could achieve success without the help of the other.

The 32d Infantry Division actually engaged the main defenses of the Japanese which were along the Villa Verde Trail as opposed to Route 5. The initial successes and continual advance of the 32d Infantry Division caused the early committment of the Japanese reserve forces. Thus the 32d Infantry Division had pinned down the Japanese 2d Tank Division and its attachments to the defense of the Villa Verde Trail. Destroying the 2d Tank Division and making sure that approximately 6,000 Japanese were no longer alive to fight again, the 32d Infantry Division had made possible the more decisive operations of the 25th Infantry Division along the Route 5 approach to Santa Fe.

With its initial objective secured, I Corps could reach the eastern coast and continue its attack toward northern Luzon. In doing so, it would initially operate without one of its major subordinate commands. The 32d Infantry Division had been decimated between San Nicolas and Imugan, and by the end of the campaign was essentially combat ineffective. Although it would later participate in limited actions in northern Luzon, it was no longer able to assume a major role in the war against Japan.

LONG TERM

For the Japanese, the major long term effect of the battle of the Villa Verde Trail was the destruction of the 10th Division's 10th Reconnaissance Regiment and the 2d Tank Division.

On the US side, the 32d Infantry Division suffered 2,985 combat casualties and 6,000 non-combat casualties. The Division would require major refitting of personnel and equipment and undergo extensive training before it could be judged a combat effective unit.

Although the Japanese were successful in tying down US forces in a battle of

attrition, there was no effect on the long term objectives of either nation. The outcome of the battle had little effect on the Japanese and did not decide the outcome of the war. It did not even appreciably delay the timetable for the US assault on the Japanese home islands.

LESSONS LEARNED

The 32d Infantry Division learned many lessons covering a variety of subjects ranging from infantry tactics to methods of cross training code clerks. Because of the nature of the battles, most of the militarily-significant lessons are applicable at the tactical rather than the operational level.

The most pertinent lesson was that the doctrine, as espoused in period field manuals, was effective. This was specially mentioned in the after action report, but it is also evident from other comments made in the lessons learned sections. Many of these comments simply re-emphasize procedures which had not been followed as described in the field manuals. Other lessons highlighted the expedients used by small unit commanders.

Coordinated fire planning was instrumental in the successful assaults and, when absent, contributed to the heavy casualties suffered during unsuccessful attempts. Heavy weapons and machine guns were positioned on the flanks. Supporting positions on adjacent terrain features were included in the fire plan. Mortars used a walking rather than a bracketing technique, and corrections as small as five yards were common. Artillery generally employed high angle fire which proved more effective against reverse slope and was less prone to altitude errors than low angle fire. The net result of coordinated fire planning was fire superiority at the moment of the assault.

Initially, these assaults consisted of isolated attacks by single units. These were frequently unsuccessful as the prepared Japanese works allowed reinforcement of a threatened sector even in the face of tremendous US fire superiority. Subsequent

attacks employed as many a three concurrent attacks by small units with a mobile reserve centrally positioned. This reserve would exploit the most successful attack and then maneuver against other positions in the vicinity. Fire superiority had to be maintained to isolate the sectors of the battlefield involved. The three-pronged attack kept the Japanese from reinforcing an easily identified point, but once the attack had cleared two, or at most three, positions, the axis of advance became apparent, and reconsolidation was required before reemploying the same tactic later.

The necessity of employing proper troop-leading procedures was noted. Too often, there was insufficient time for reconnaissance. Evidently, the 2/3-1/3 rule of subordinate to senior planning time was not enforced. The lack of reconnaissance would have a significant impact on combat, because map reconnaissance, which was the only opportunity open to the commanders, was completely ineffective. The scale of maps provided (1:50,000) simply did not show the terrain in sufficient detail to be useful. On those rare occasions when sufficient time was available to conduct reconnaissances, improper patrolling techniques compromised the mission.

The reconnaissance patrols were frequently too large to perform their mission without alerting the enemy. This may have been a result of attempts to beef up these patrols so that they could seize terrain forward of the line of departure. This mixture of missions generally resulted in a compromise force that was capable of neither efficient reconnaissance nor effective terrain seizure.

The 32d Infantry Division did not, as a rule, operate at night. This may have been due to the significant losses of small unit leaders and the loss of personnel experienced in night operations. Another factor which had dramatic impact was the difficulty of conducting night operations in mountainous, jungle terrain, especially for personnel without previous training. Additionally, the Japanese were more adept at night operations in the jungle because of their training and experience. The psychological impact of the fear of fighting the Japanese at night also played an

important role in restricting night operations. The Americans did conduct a successful night operation early in the campaign; however, with the loss of key leaders, this lesson was forgotten quickly.

Other lessons learned included the utility of aerial observation, the formation of ad hoc assault teams, and cave-clearing techniques. With the advent of the field radio, use was made of spotters in aircraft to call for and adjust artillery fires, greatly enhancing the accuracy of indirect fires in the rough, mountainous, jungle terrain. The 32d Infantry Division became adroit at forming ad hoc assault teams to cope with the situation in the tough terrain against a tenacious enemy, crossing regimental boundaries when necessary. US soldiers also learned to adjust to the Japanese tactic of holding up in caves. The use of hand grenades and flame throwers and the techniques developed with these weapons assisted future operations.

One of the most important lessons learned was that most of the Division's casualties were from non-battle causes, such as trench foot, fungus, malaria, and dysentery. Battle fatigue developed rapidly in the hot, wet, claustrophobic jungle where the strength of the soldier was drained by the heat, the threat of attack by snipers, and the strain of soldiering.

These lessons were applied during subsequent combat in the northern reaches of Luzon's jungles. The 32d Infantry Division was never again involved in operations as intense as those they had faced along the Villa Verde Trail, but they were able to learn and profit from these experiences. Their examples could be applied today by a small unit leader faced with the same combination of terrain and enemy. The lessons are applicable at the battalion and lower level and may be of more interest to the tactical rather than the operational commander.

AD-A165 908 BATTLE ANALYSIS: VILLA VERDE TRAIL LUZON DELIBERATE ASSAULT MOUNTAIN JUNG..(U) ARMY COMMAND AND GENERAL STAFF COLL FORT LEAVENWORTH KS COMBA.. 2/2

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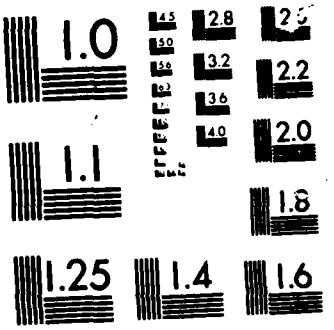

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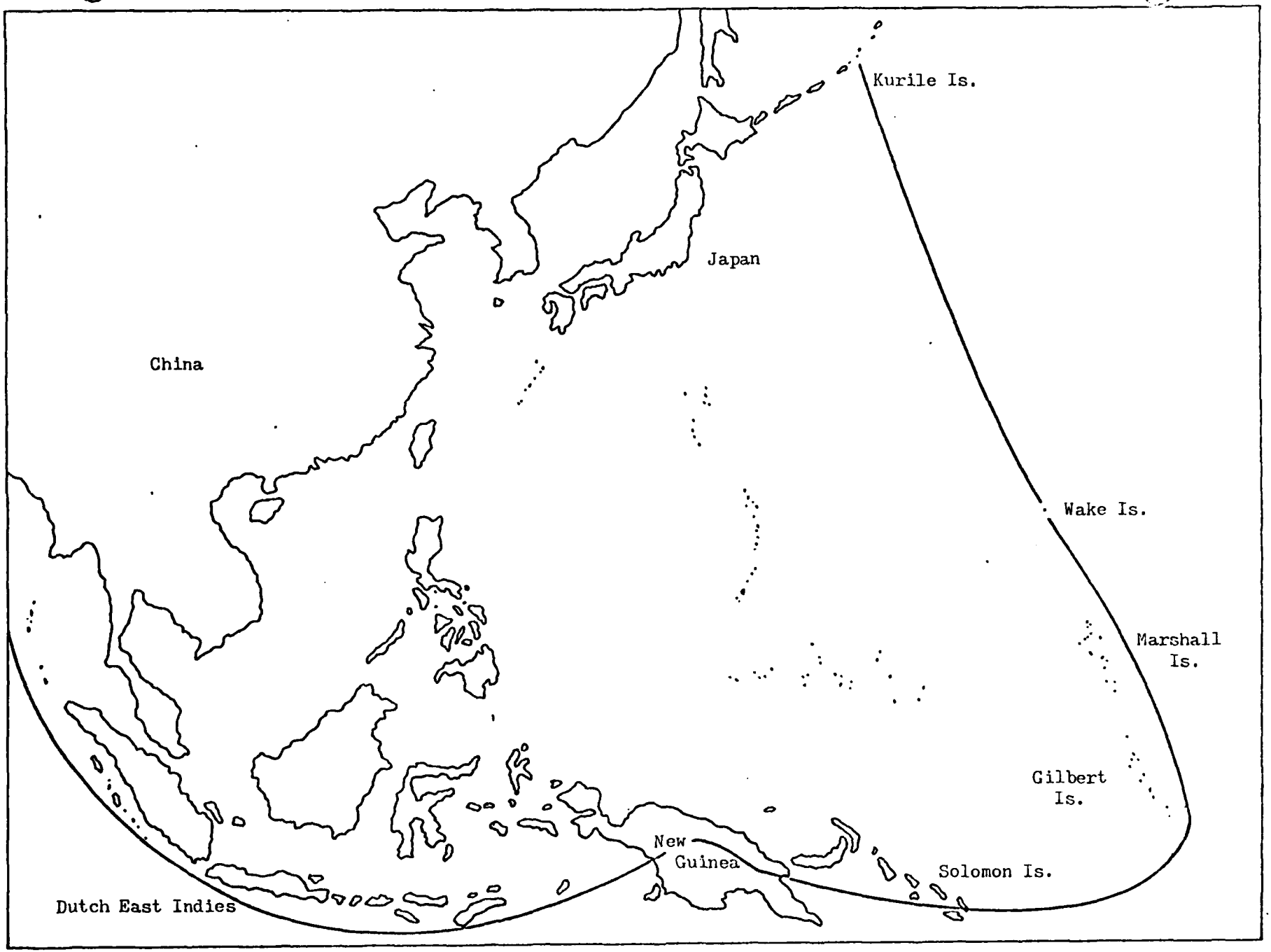
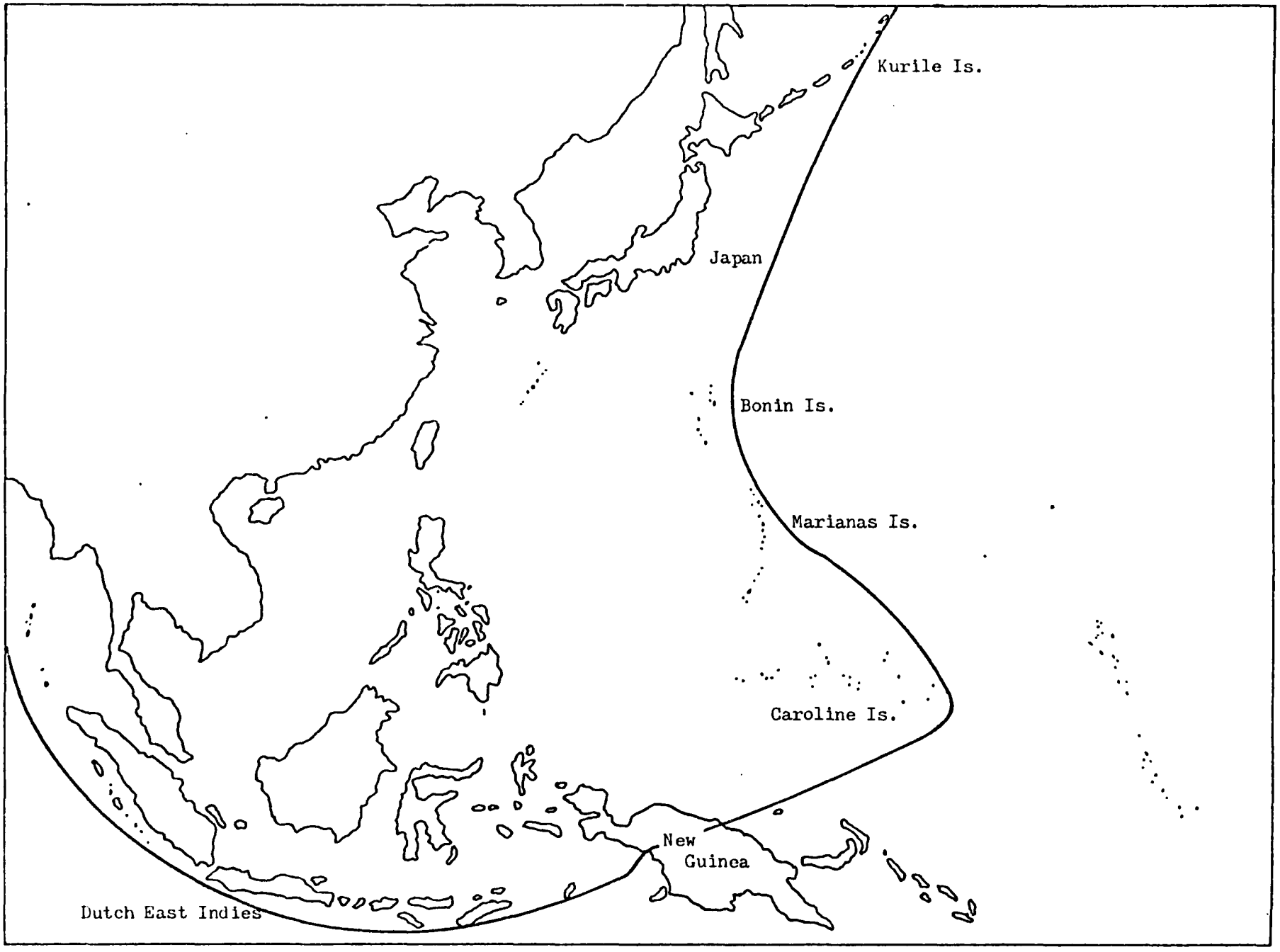
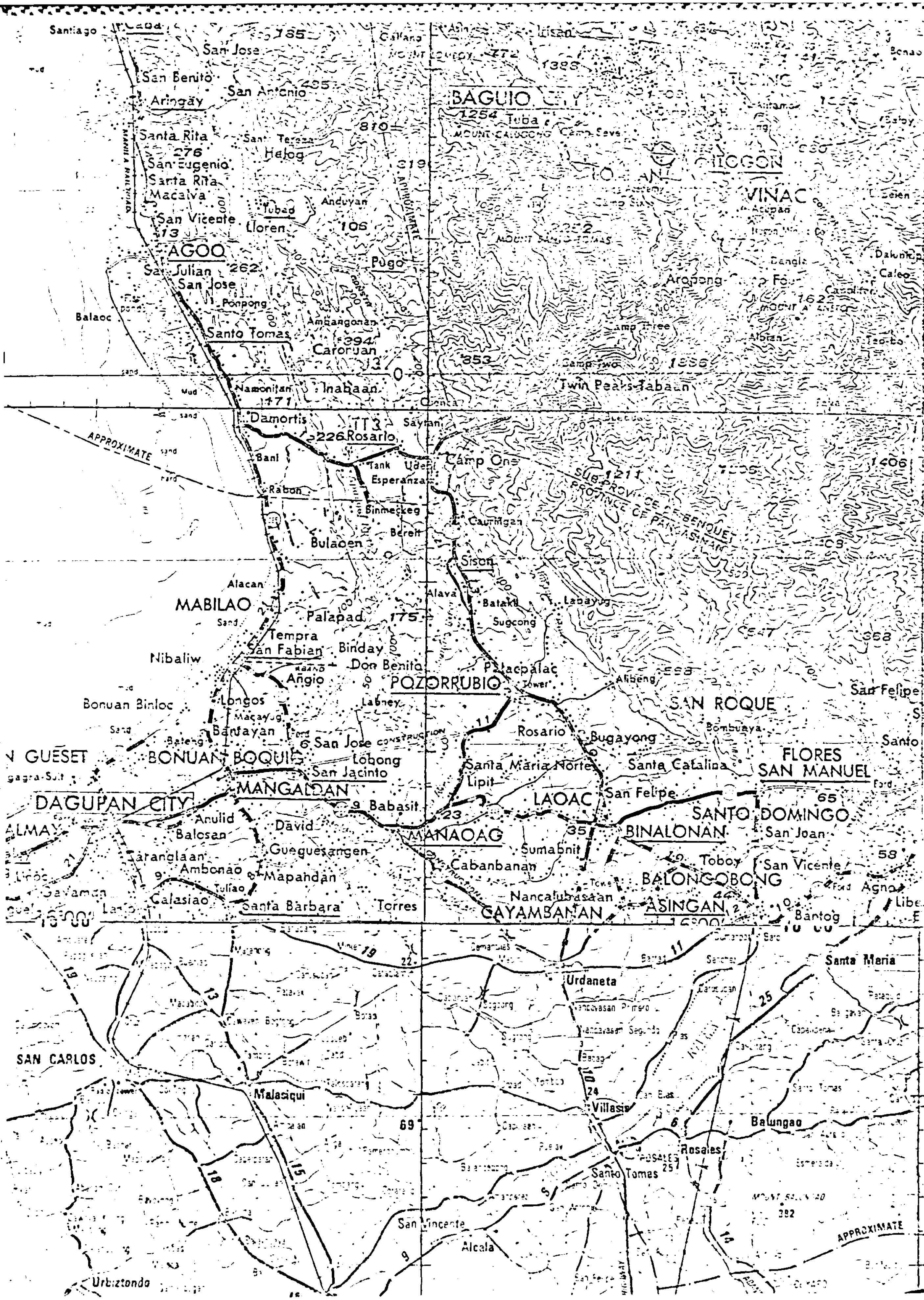


Map 1. Japan's Initial Defensive Perimeter



Map 2. Japan's "Absolute National Defense Sphere"



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Tubao
Anduyan
ITOGON
VINAC
San Vicente
Lloren
AGOO
Pugo
San Julian
San Jose
Aropong
Balaoc
Santo Tomas
Ambangonan
Caroruan
Camp Three
Camp Two
Namonitan
Inabaan
Twin Peaks Tabaan
APPROXIMATE
Damortis
Rosario
Bani
Tank
Udel
Esperanza
Camp One
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San Juan
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Cabanbanan
Toboy
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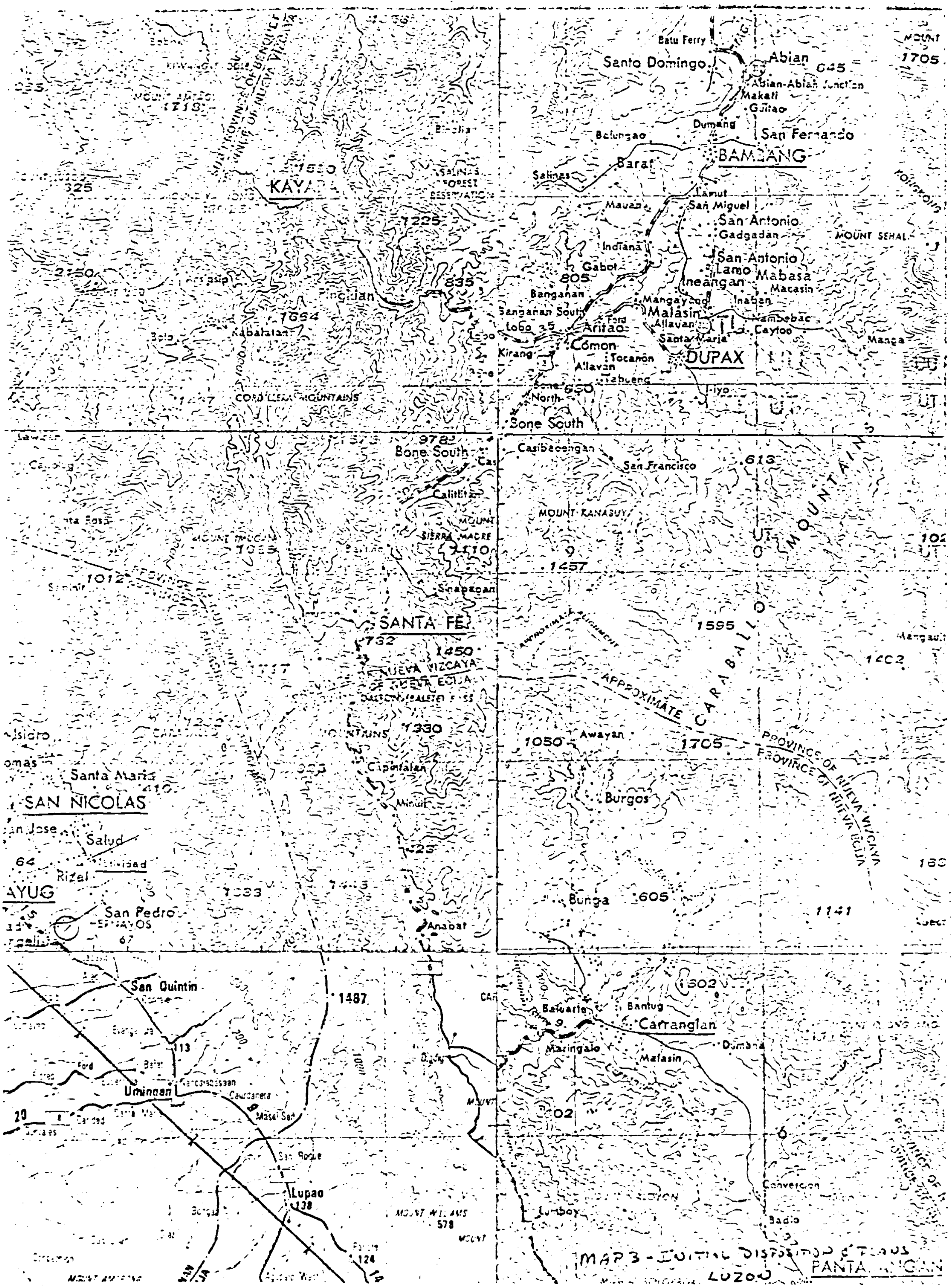

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San Fernando
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San Miguel
Mauan
San Antonio
Gadgadan
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San Francisco
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MOUNT SIERRA MADRE
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APPROXIMATE ALIGNMENT
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APPROXIMATE
CARABALLO MOUNTAINS
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PROVINCE OF NUEVA VIZCAYA
PROVINCE OF NUEVA ECIJA
Santa Maria
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Capintalan
Burgos
Minuli
Salud
Rizal
San Pedro
Bunga
Anabat
San Quintin
Baluarte
Bantug
Carranglan
Maringalo
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MAP 3
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