

# The Battle of Manila

Thomas M. Huber

The Battle of Manila, 3 February 1945 to 3 March 1945, was the only struggle by the United States to capture a defended major city in the Pacific War. Manila was one of few major battles waged by the United States on urban terrain in World War II. It is arguably one of the most recent major urban battles conducted by U.S. forces. The case of Manila offers many lessons large and small that may be instructive for planning future urban operations. Basically, Manila was an instance of modern combined arms warfare practiced in restrictive urban terrain in the presence of large numbers of civilian inhabitants. Manila provides many lessons relevant both to the combined arms aspect of the struggle and to the civilian affairs aspect of the struggle.

The road to Manila was a long one. After the Japanese navy's attack on Pearl Harbor in December 1941, the United States mobilized for an extended struggle. U.S. forces in the Philippines had resisted Japanese invasion doggedly but unsuccessfully from December 1941 to May 1942. Late in 1942, however, U.S. forces under General Douglas MacArthur's Southwest Pacific Area theater command fought their way back through the Solomons and New Guinea. Beginning in November 1943, forces under Admiral Chester Nimitz's Pacific Ocean Areas theater command seized Tarawa, the Marshalls, and the Marianas. By October 1944, MacArthur was prepared once again to contest the Philippines and landed major forces at Leyte Gulf. Leyte was secured after hard fighting so that by January 1945, MacArthur was ready to land forces on the shores of Luzon (the main island in the northern Philippines) and drive toward the Philippine capital city itself, Manila.

The city of Manila in 1945 was one of urban contrasts. In some highly traditional sections, the teeming population still lived in nipa-thatched huts. In other sections, citizens lived in modern air-conditioned apartments. The city covered an area of approximately 14.5 square miles, extending 5.5 miles north to south and 4 miles east to west, from the eastern edge of Manila Bay. The metropolitan population in 1944 was 1,100,000.<sup>1</sup>

Manila was bisected by the Pasig River, which flowed roughly east to west, and was interlaced with many smaller streams called "esteros." Six bridges spanned the Pasig in January 1945, all of which

the Japanese severed during the battle for the capital. North of the Pasig, along the bay, was the North Port area, and north of that was the Tondo district, a populous working class residential district. Just inland from the port area was a business district that housed retail stores, manufacturing plants, movie houses, and restaurants. East of that lay older middle- and upper-class residential areas.

South of the Pasig along the bay were more modern port facilities, and just inland from that was Intramuros, the old Spanish walled city. Intramuros was an arrowhead-bastioned sixteenth-century fort with walls 40 feet thick at the base. The north wall faced the Pasig, and the other walls were fronted by park land formed by filling in the fortress's moat. East and south of Intramuros were major government buildings, hospitals, and schools. These were constructed of reinforced concrete and many were built to be earthquake proof. Large apartment buildings also of reinforced concrete could be found in this area. Eastward from the civic buildings and parks surrounding Intramuros were prosperous modern residential districts, more recently built than the prosperous eastward suburbs north of the Pasig. In February 1945, American forces found themselves fighting their way through all these areas and conducting their final siege operations against the old walled city of Intramuros.

By the time U.S. forces reached Manila on 3 February 1945, much of the city was already fortified by the Japanese defenders, especially south of the Pasig. The overall commander of the Japanese army forces in the Philippines was General Tomoyuki Yamashita. Yamashita's command was subdivided into several "groups," with the Shimbu Group under Lieutenant General Shizuo Yokoyama responsible for Manila. Yamashita wished to pull all his forces into a mountainous stronghold in northern Luzon, so he ordered Yokoyama to conduct an orderly evacuation from Manila and not defend it. This order included Japanese naval forces in the Manila area, which were under Yokoyama's command. However, Vice Admiral Denshichi Okochi, commander of the Southwestern Area Fleet based in the Philippines, who reported to Combined Fleet, not to Yamashita's 14th Area Army, had ordered naval personnel to defend naval facilities in Manila regardless of Yamashita's withdrawal strategy. So as Americans approached Manila in January 1945, Japanese army troops moved out of the city while Japanese naval troops moved in. Okochi organized the Manila Naval Defense Force (MNUF) and placed in command Rear Admiral Sanji Iwabuchi, already the commander of the 31st Naval Special Base Force in the Manila area. Okochi himself relocated to Baguio,

Yamashita's headquarters, early in January, but ordered Iwabuchi to hold Manila and Nichols Field south of the city as long as possible, and then to destroy all Japanese naval facilities and supplies in the Manila Area.<sup>2</sup>

What this meant was that Iwabuchi in Manila was ordered by General Yamashita, his legal superior, to withdraw, but ordered by Vice Admiral Okochi, his superior by way of loyalty and training, to stand firm. It eventually became clear that Iwabuchi intended to resist Japanese army expectations, and instead to fulfill his naval missions at all costs. Yamashita and Yokoyama evidently wished throughout that Iwabuchi would leave Manila and not fight there. Yokoyama's and Iwabuchi's staffs held a series of probably tense conferences from 8 to 13 January, in which the latter made clear that they intended to defend Japanese naval facilities in Manila. Yokoyama felt he had little choice but to accept this; however, at the end of January, he issued still somewhat equivocal orders to Iwabuchi that authorized defense of the city. Yokoyama, in accord with standard Japanese practice, placed Japanese army forces still in Manila under Iwabuchi's command. These army elements were gathered under Colonel Katsuzo Noguchi as the Noguchi Detachment and would later be given responsibility to defend north of the Pasig.<sup>3</sup>

Nonetheless, even as late as mid-February, when U.S. forces had already invested Manila, Yokoyama was still trying to get Iwabuchi to leave the city. On 13 February, Yokoyama ordered Iwabuchi to move to Fort McKinley (southeast of Manila) and then to break out of the American ring as Shimbu Group forces broke in with coordinated attacks on 17-18 February. Iwabuchi did not move to Fort McKinley at this time, however, and instead radioed to the Shimbu Group that leaving the city was now impossible. Still, the several thousand Japanese troops already in Fort McKinley did manage to evacuate eastward to join the Shimbu Group in the mountains during the Shimbu Group's otherwise largely ineffectual attacks toward Manila on 17-18 February.<sup>4</sup>

To Yokoyama at Shimbu Group headquarters, Iwabuchi radioed his response to the order to evacuate to Fort McKinley: "In view of the general situation, I consider it very important to hold the strategic positions within the city. . . . Escape is believed impossible. Will you please understand this situation?" Meanwhile to Okochi, commander of Southwest Area Fleet, he radioed, "I am overwhelmed with shame for the many casualties among my subordinates and for being unable to discharge my duty because of my incompetence. . . . Now, with what

strength remains, we will daringly engage the enemy. ‘Banzai to the Emperor!’ We are determined to fight to the last man.” Iwabuchi reported legally to one commander, but morally to another.<sup>5</sup>

The gap in understanding between the Japanese army and navy at Manila may strike some readers as unusual. The basis for this gap lay not only in the particular circumstances at Manila, but also in the traditions of the respective services. The prewar Japanese army and navy were well known for their insularity. Each strove to operate independently of the other as much as possible. They were engaged in bitter budgetary struggles at each other’s expense and tended not to share intelligence. The Japanese army operated its own maritime shipping system—to include its own cargo submarines at the end of the war—so as not to depend on the navy. The prewar Japanese army and navy constituted a good case study of the high cost of failing to achieve effective interservice cooperation.

The Japanese navy fought in Manila without the help of the Japanese army and in defiance of the Japanese army joint commander’s direct orders to evacuate. Fighting alone had enormous consequences. The MNDF would operate with no armor, little artillery, and with what was probably a limited supply of close-combat weapons. Moreover, the MNDF had no prior organization or training for urban warfare. Iwabuchi’s force consisted of the 31st Naval Special Base Force as its core, to which were added ship and aviation crews stationed in the Manila area, Korean and Formosan construction troops, and some civilian employees of the naval base.<sup>6</sup> The MNDF were naval staff of every description. Few had had training for ground warfare of any kind, let alone urban warfare. One of the lessons of Manila was that it is possible to defend a city for a time without prior doctrine, organization, training, or equipment for urban warfare.

The MNDF defended Manila using found equipment. Their most abundant weapon was the 20mm machine cannon, intended primarily for aviation and anti-aviation use. They deployed 990 of these guns, evidently dismantled from naval aircraft. They used 600 machine guns of 7.7mm and other calibers, and sixty 120mm dual-purpose naval guns. They had a few field pieces, including ten 100mm and 105mm guns and howitzers. The MNDF appear not to have had flamethrowers or submachine guns. Apparently not all had rifles, and some of those who did carried a variety of American weapons captured in 1942. Some defenders carried spears made of bayonets fixed to poles. Grenades seem to have been generally available, though MNDF defenders sometimes used Molotov cocktails, suggesting local shortages.

Artillery shells and depth charges buried fuse up became mines. In some cases, they dropped aerial bombs from upper floors of buildings.<sup>7</sup>

All of the Japanese naval defenders' equipment was improvised. They had almost no equipment for ground warfare already supplied to them or routinely included in their organizational requirements. They were aided first by the proximity of naval and air bases and second, by the city itself, which served as a kind of great warehouse for much of what they needed: American rifles stored in the city since 1942, barbed wire, gasoline, and the like. Cities by their nature provide not only restrictive terrain for the defense, but also abundant materiel for the defense.

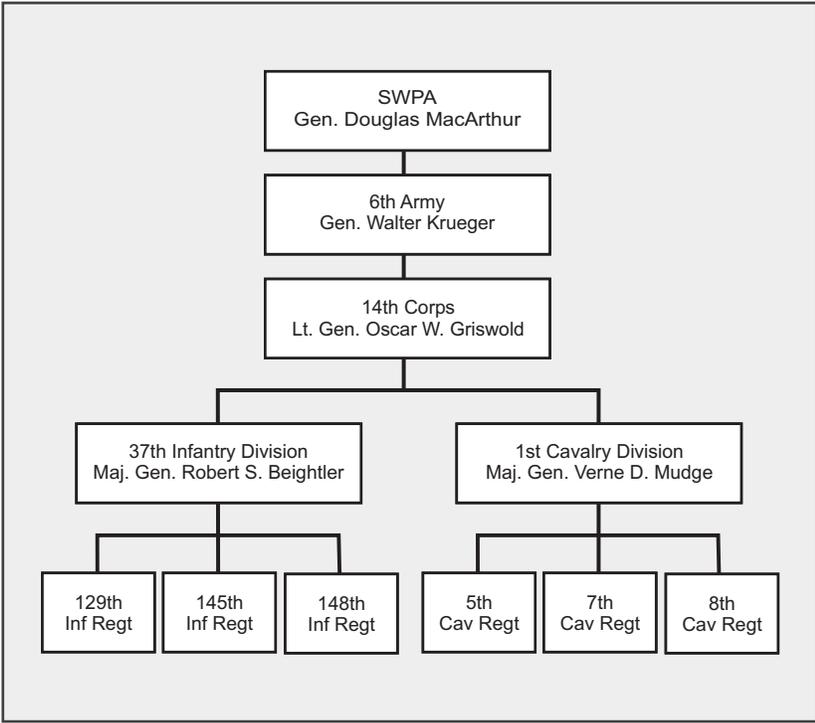
Iwabuchi's command evidently consisted of about 17,000 troops. Some 4,500 of these were deployed north of the Pasig in the Noguchi Detachment. Iwabuchi directly commanded about 5,000 troops south of the Pasig. In that Iwabuchi had expected major U.S. attacks to come from the south, approximately 5,000 more were stationed south of the city in defense of Fort McKinley and Nichols Field. A few thousand more Japanese naval troops were deployed in partially sunken ships in the bay or east of the city toward the Shimbu Group.<sup>8</sup>

Deployment and creation of fighting positions was all done hastily, because it had only been in December 1944 that the Japanese navy decided to defend Manila in the wake of the Japanese army's departure.<sup>9</sup> This meant not only that the Japanese defenders had no training, doctrine or equipment of siege warfare, but also that they had little time to fortify their positions. Consequently, they could fortify existing structures but not dig deeply into the earth, which would have allowed them to shelter more of their force from American firepower. Nonetheless, when U.S. forces encountered Japanese lines north of the Pasig on 3 February 1945, their impression was that they faced a well-prepared and formidable adversary.

In January 1945, U.S. commanders were also engaged in an animated debate over whether and when to capture Manila. MacArthur, commander of the Southwest Pacific Area, believed it was essential to seize the city as soon as possible. Manila provided port and aviation facilities needed for the coming invasion of Japan, and also had major political significance as the Philippine capital. Nonetheless, Lieutenant General Walter Krueger, commander of the U.S. 6th Army, apparently believed that Manila was not a genuine center of gravity and planned to bypass it. Krueger, whose force landed on the beaches of Lingayen Gulf on 27 January 1945, also favored delaying any attack on Manila until he could build up his assets and consolidate his position on the Lingayen

coast. He was concerned, with some justification, that if he immediately advanced 100 miles to Manila, his lines of communication would be exposed to counterattacks from Yamashita's Kembu and Shobu Groups.<sup>10</sup> MacArthur, however, favored entering Manila as soon as possible. He hoped that the Japanese would abandon the city and declare it open, as he himself had done in 1942. In fact, Yamashita's 14th Area Army's policy was to do exactly this; at the end of January, MacArthur's intelligence told him, accurately, that the Japanese army was evacuating Manila.<sup>11</sup>

The principal U.S. units involved in the Battle of Manila, the 37th Infantry Division and the 1st Cavalry Division, had not fought in cities before, but they apparently had to some extent been trained for city fighting and followed established doctrine for urban warfare (see the figure). Their methods differed from doctrine on only two points: air strikes were not allowed within the city, and artillery fires in the early phases of the battle were prohibited except against observed pinpoint targets known to be enemy positions. Both the 37th Infantry Division



and the 1st Cavalry Division had had abundant recent experience in jungle warfare and were trained, organized, and equipped for fighting in restrictive terrain. While jungle fighting and urban fighting differ in many respects, tactically both fights have an important similarity in that both take place in restrictive terrain. Although by happenstance more than planning, these units were fairly well prepared for the kind of tactical fighting they would face in Manila.<sup>12</sup>

MacArthur set the Manila operation in motion personally on the night of 31 January by visiting 1st Cavalry Division headquarters, then still in the vicinity of the Lingayen beachhead. The division set out for Manila at one minute after midnight on 1 February, without 24-hour reconnaissance or flank protection. It employed “flying columns,” battalion-size forces entirely on wheels to expedite the advance, covered the 100 miles to Manila in 66 hours, and entered the outskirts of the city on 3 February. MacArthur visited the other major unit that would assault Manila, the 37th Infantry Division, on 1 February and set it in motion toward the city. It reached the Manila area on 4 February.<sup>13</sup>

MacArthur ordered the 1st Cavalry to seize three objectives: Santo Tomás University, where U.S. and Allied internees were held by the Japanese; Malacanan Palace, the presidential residence; and the Legislative Building. The division’s flying columns moved easily to capture the first two of these, but heavy Japanese resistance kept it from reaching the Legislative Building that lay south of the Pasig River.<sup>14</sup>

On 3 February, the 8th Cavalry Regiment entered and liberated Santo Tomás at 2330. The guards, mostly Formosans, offered little resistance. Some 3,500 jubilant internees were freed, but 275 Americans were still held hostage in the education building by 63 Japanese troops. On 5 February, these 63 were escorted through American lines in exchange for release of the hostages. Suddenly, the 1st Cavalry Division was responsible for feeding and otherwise accommodating the 3,500 freed internees. This task was complicated by the fact that Japanese forces had cut the division’s lines of communication by blowing up the Novaliches bridge. By 5 February, the 1st Cavalry was very low on food for both itself and the internees. The division was surrounded, as historians of the plodding 37th Infantry Division point out. The 37th Infantry Division had to “rescue” the 1st Cavalry Division on 5 February by breaking through Japanese positions and reestablishing 1st Cavalry’s supply. A convoy with food and ammunition reached the division on the evening of 5 February. The division’s lines of communication continued to be insecure, however. Japanese forces killed twelve 1st Cavalry drivers during these weeks.<sup>15</sup>

Administering a city requires not only looking out for the needs of the individual inhabitants, but also safeguarding city functions such as water and power. Lieutenant General Krueger was therefore eager to preserve the water and power supplies of Manila as U.S. forces entered the city. Manila's steam power generating plant was on Provisor Island, on the south side of the Pasig, and elements of the 37th Infantry Division would not reach it until 9 February. Manila's water system lay northeast of the city, and securing and protecting it was one of the first missions assigned to the 1st Cavalry Division. The main features of the system were the Novaliches Dam, the Balara Water Filters, the San Juan Reservoir, and the pipelines that carried water among these and to Manila. From 5 to 8 February, the 7th Cavalry Regiment captured all of these facilities intact, despite some being wired for demolitions. They spent the rest of the battle for the city guarding these installations.<sup>16</sup>

The 37th Infantry Division moved into Manila shortly after the 1st Cavalry Division, on an axis of advance just west of 1st Cavalry Division's. On 4 February, the 37th Infantry Division moved through the working class Tondo residential district adjacent to the bay and, on its left flank, reached the Old Bilibid Prison where it discovered 1,330 U.S. and Allied prisoners of war and civilian internees left under their own recognizance by retreating Japanese. The division left them there for the time being because the area outside was not yet secure. On 5 February, however, fires in the city threatened Bilibid, so the 37th Infantry Division had to evacuate the 1,330 internees hastily and care for them elsewhere. All available troops and transportation assets were devoted to this emergency move, which was complicated by the fact that many internees were unable to walk. Divisional troops were heavily engaged in this work, and the internees were moved to the Ang-Tibay Shoe Factory north of the city—the 37th Infantry Division's command post. The division provided cots and food for the internees and dug latrines. The next day, the fires subsided and the internees were moved back to Bilibid, where their needs could finally be provided for more thoroughly.<sup>17</sup>

In the vicinity of Bilibid Prison and southward toward the Pasig, the 37th Infantry Division and the 1st Cavalry Division began encountering major Japanese resistance (see Map 1). As the 1st Cavalry Division moved southward on the multilane Quezon Boulevard, it encountered a defended barricade just south of Bilibid Prison. The Japanese had driven steel rails into the roadbed, wired a line of trucks together, laid mines in front, and covered the whole roadblock with fire from four machine gun positions. The barricade of trucks was unusual in Manila, but



**THE CAPTURE OF MANILA: THE ENCIRCLEMENT**  
3-12 February 1945

① MALACAÑAN PALACE	→ U.S. AXIS OF ADVANCE, DATES INDICATED
② MALACAÑAN GARDENS	..... U.S. FRONT LINE, EVENING 7 FEB
③ PROVISOIR ISLAND	U.S. FRONT LINE, EVENING 12 FEB
④ PACO SCHOOL	<b>JPSE</b> JAPANESE DEFENSE AREAS, 12 FEB
⑤ PACO RR STATION	⚓ JAPANESE NAVAL DEFENSE UNIT

1 0 2 MILES  
 1 0 2 KILOMETERS

Map 1

the minefield covered by obstacles and machine guns would be a common feature of the Japanese defenses both north of the Pasig and elsewhere.<sup>18</sup>

The 148th Infantry Regiment had to cross the Estero de la Reina bridge to approach the Pasig but was stymied by mines and five 500-pound bombs on the bridge, by blazing fires in buildings to its right and front, by exploding demolitions and gasoline drums, and by machine gun fires trained on intersections and streets. Most of the American units approaching the Pasig probably faced similar challenges. Another feature of the early fighting north of the Pasig was that the Japanese Noguchi Detachment on 5 February set fire to major buildings near the river in order to halt the U.S. advance; the Japanese also exploded demolitions in major buildings and in military facilities. Until these fires could be brought under control on 6 February, U.S. personnel were forced back from the river, and the U.S. advance was delayed. The 37th Infantry Division also on 5 February faced interactions with civilians that it would see more of, such as when “. . . swarms of the native population . . . crowded the streets cheering the American troops, forcing gifts upon them, and . . . engaged in unrestrained looting.” Both the jubilation and the looting obstructed military operations, and the 37th Infantry Division would see more of both.<sup>19</sup>

By 7 February, U.S. forces were in control of Manila north of the Pasig. Surviving Noguchi Detachment troops had withdrawn south across the river and destroyed all of the bridges. On 5 February, Lieutenant General Oscar W. Griswold, commander of 14th Corps, extended the 37th Infantry Division’s area of control eastward into what had been the 1st Cavalry Division’s zone and also gave 1st Cavalry responsibility farther to the east. This change made possible the next phase of operations in which the 37th Infantry Division would fight its way across the Pasig in the downtown area while the 1st Cavalry Division swept wide around the city, east, south and west again to the bay, thus isolating the Japanese defenders from any source of resupply or relief.<sup>20</sup>

Many cities contain harbors or lie on rivers so that urban warfare frequently requires some amphibious warfare assets. On 7 February, the 37th Infantry Division began the difficult work of crossing the Pasig. The 148th Infantry Regiment crossed first at 1515. Troops had the benefit of an amphibious tractor battalion and thirty engineer assault boats. They were covered by artillery fire and smoke and departed from four different concealed launch points. The first wave crossed without incident, but the second was raked by machine gun and

automatic cannon fire from Japanese positions lying to the west on the south bank of the Pasig. These fires shattered some of the plywood boats and oars. Troops paddled on as best they could with oar handles and rifle butts. The landing area was the Malacanan Gardens, the only point on the south bank without a seawall that would obstruct amphibious tractors and disembarkment. Troops found few Japanese in the disembarkment area and established a bridgehead with little difficulty. On 8 February, the 37th Infantry Division built a pontoon bridge across the Pasig to support the bridgehead. The bridge had two tracks, one for personnel and one for vehicles. No sooner was the bridge built, however, than hundreds of Philippine civilians began pouring across it from south to north, trying to escape the fighting.<sup>21</sup>

The 37th Infantry Division completed its crossing of the Pasig on 8 February and began deploying south and west out of its bridgehead.<sup>22</sup> The hardest fighting the 37th Infantry Division would face in Manila was in this district south of the river, between the crossing of the Pasig on 7 February and the assault on Intramuros on 23 February. Japanese defenders had established a series of strongpoints in major buildings in this area and contested them fiercely. On 8 February, the 129th Infantry Regiment moved westward along the Pasig shore and on 9 February crossed the Estero de Tonque by boat to assault Provisor Island where Manila's steam electrical generation plant was located. The Japanese defenders placed sandbagged machine gun emplacements in buildings and at entrances and were able to blanket the whole island with machine gun positions to the west, southwest, and south. The 129th Infantry Regiment approached the island in engineer assault boats, then conducted a cat and mouse struggle with Japanese for control of the buildings, fighting with machine guns and rifles among the structures and heavy machinery. The 129th was able to secure the island on 10 February, but lost twenty-five troops killed in the process. The vital electrical generation equipment, which Krueger in 6th Army's plans had hoped to capture intact, was hopelessly damaged by both Japanese defenders and American fires.<sup>23</sup>

While the 129th Infantry Regiment swept west out of the Malacanan bridgehead in a close arc, the 148th Infantry Regiment swept southeast in a broad arc, then back westward. The two regiments moved in line through the Pandacan district to the southeast with relatively little resistance, but then found themselves in a pitched battle in the Paco district for control of the Paco Railroad Station, Paco School, and Concordia College. On 9 February, both 129th Infantry Regiment and 148th Infantry Regiment advanced only 300 yards.<sup>24</sup>

Given the new intensity of the fighting in the 37th Infantry Division's sector, the division requested and received a lifting of the restrictions previously imposed on artillery fires. To that point, fires had been restricted to observed enemy positions but had failed to force an enemy withdrawal. Thereafter, fires would be allowed "in front of . . . advancing lines without regard to pinpointed targets." In other words, fires could blanket enemy positions U.S. troops were assaulting. "Literal destruction of a building in advance of the area of friendly troops became essential," as the *37th Infantry Division Report After Action* put it.<sup>25</sup>

The Japanese defensive positions U.S. troops encountered in the Paco district were well developed, as they would be for the rest of the battle. Japanese observers were present in almost every building. At street intersections, machine gun pillboxes were dug into buildings and sandbagged so as to cover the intersection and its approaches. Artillery and antiaircraft weapons were placed in doorways or in upper story windows. Most streets and borders of streets were mined, using artillery shells and depth charges buried with their fuses protruding an inch or so above the surface. The streets were a fireswept zone forcing Americans to move between streets and within buildings. Americans entered and searched each building and house, top to bottom, and neutralized whatever enemy they found.<sup>26</sup>

Besides controlling the urban terrain with fires, the Japanese in the Paco district and points west had fortified particular sturdy public buildings as urban strongpoints. In some cases, these buildings were mutually supporting. The first of the urban strongpoints the 37th Infantry Division encountered was the Paco Railroad Station. The Japanese had machine gun posts all around the station, and foxholes with riflemen surrounded each machine gun post. Inside at each corner were sandbag forts with 20mm guns. One large concrete pillbox in the building housed a 37mm gun. About 300 Japanese troops held Paco station. The Japanese placed observers in the Paco church steeple, and the station could not be approached until the Paco School and other neighboring positions had been cleared.<sup>27</sup>

Americans inched forward to within 50 yards of the Paco station building, set up a bazooka or Browning Automatic Rifle (BAR), and pounded the building as riflemen rushed forward covered by fire. The station was finally seized at 0845 on 10 February after 10 assaults. Between the Provisor fighting and the Paco station fighting on 9 and 10 February, the 37th Infantry Division suffered 45 killed in action (KIA) and 307 wounded in action (WIA).<sup>28</sup>

American troops would have much more such fighting ahead. Once the 129th Infantry Regiment and the 148th Infantry Regiment had secured Provisor Island and the Paco Railroad Station respectively, both swept westward toward Intramuros and the bay. The 129th Infantry Regiment collided with the Japanese strongpoint at the New Police Station, and the 148th Infantry Regiment collided with the strongpoint of the Philippine General Hospital (see Map 2). The 129th Infantry Regiment began its assaults on the New Police Station on 12 February. The strongpoint consisted of the police station itself, the shoe factory, the Manila Club, Santa Teresita College and San Pablo Church. By nightfall, the 129th Infantry Regiment had consolidated its lines on Marques de Camillas Street fronting the strongpoint. Maintaining lines—keeping units that advanced faster than others from leaving hazardous gaps in the line—offered many challenges in the highly compartmented urban environment.

The bitter fighting at the New Police Station went on for eight days, until 20 February. On 17 February, the relatively fresh 145th Infantry Regiment replaced the battle-worn 129th Infantry Regiment. The first tanks arrived on 14 February to assist the Americans. Tanks were not present earlier in this part of the city because they could not cross the Pasig. Once committed, they were used for direct-fire bombardment on the New Police Station and in later operations.

The American method was to bombard the resisting structure with tanks and 105mm guns and howitzers, then to conduct an assault. Sometimes the Japanese defenders counterattacked, driving the Americans out, in which case the whole process was repeated. The Japanese had trenches and foxholes outside the buildings and numerous sand-bagged machine gun positions inside. U.S. artillery reduced the exterior walls to rubble, but infantry still had to go into the buildings and clear them room by room and floor by floor. The preferred American method was to fight from the roof down, but the troops were unable to do this at the New Police Station, probably because no structures were near enough to give roof access. Thus, they had to work from the ground up. Japanese defenders cut holes in the floors and dropped grenades through them. They also destroyed the stairways to prevent access to upper stories. Nevertheless, the 145th Infantry Regiment managed to secure the New Police Station strongpoint by 20 February.<sup>29</sup>

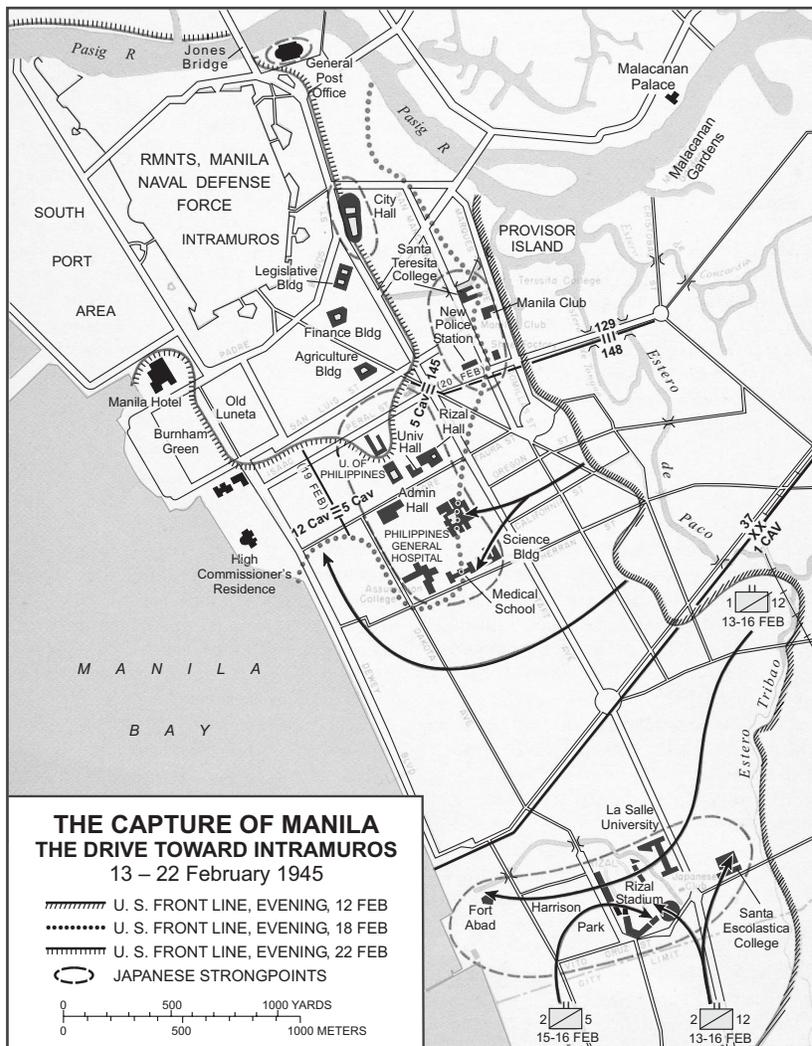
From 20 to 22 February, the 145th Infantry Regiment repeated this exercise a block to the east at the city hall and general post office. At the city hall, the regiment employed the usual method of having artillery pound the exterior walls and then assaulting into the structure that

remained. As at the New Police Station, the process of bombardment and assault had to be repeated several times. Americans in the assault made generous use of “submachine guns, bazookas, flame throwers, demolitions, and hand grenades.” At one point when Japanese resisters in a first floor room refused to surrender, the Americans blew holes in the ceiling, put flamethrowers through them, and annihilated all of the defenders. Americans sometimes had to fight their way into prepared positions in the darkened basements of these buildings. By the evening of 22 February, the 145th Infantry Regiment had fought its way through the worst of the strongpoints to the walls of Intramuros.<sup>30</sup>

Meanwhile, the 148th Infantry Regiment was fighting its way through the Philippine General Hospital and the University of the Philippines, operating parallel to and just south of the 129th Infantry Regiment and its follow-on 145th Infantry Regiment (see Map 2). The tactical battle here was similar to that elsewhere but complicated by the fact that there were still civilian patients in the hospital. When the 148th Infantry Regiment discovered this on the afternoon of 16 February, it tried to limit its artillery fires to Japanese positions in the foundations of the hospital buildings. During the day of 17 February, the 148th escorted 2,000 patients out of the hospital, and 5,000 more that night.<sup>31</sup>

On the morning of 19 February, the 5th Cavalry Regiment, having been assigned to the 37th Infantry Division from the 1st Cavalry Division, relieved the battle-worn 148th Infantry Regiment. The 5th Cavalry Regiment continued attacks in this sector on the University of the Philippines strongpoint. The Japanese here not only had established the usual defenses of sandbagged machine gun nests, but also had cut firing slits through the foundations just above the ground and put machine gun nests on the flat roof. After assaults on Rizal Hall, the 75 Japanese survivors of the original complement of 250 committed suicide on the night of 23 February. The next morning, the 5th Cavalry Regiment made the final assaults into University Hall, so concluding the strongpoint fighting for the 148th Infantry Regiment and the follow-on 5th Cavalry Regiment. For these units, as for the northerly 129th and follow-on 145th Infantry Regiments, the hardest strongpoint fighting was now over, and U.S. forces had secured Manila south of Intramuros.<sup>32</sup>

While the battle of the strongpoints raged, 7 to 24 February, the 1st Cavalry Division was sweeping wide east, south, and west, around the city to Manila Bay (see Maps 1 and 2). When the 37th Infantry Division crossed the Pasig at Malacanan Gardens, the 129th Infantry Regiment pivoted sharply west, campaigning toward the east wall of Intramuros.



Map 2

The 148th Infantry Regiment swung more broadly south, west, and north, bringing it up against the south wall of Intramuros. The 1st Cavalry Division swung on an axis parallel to these, but flung farther out, around the whole city. Thus, the 1st Cavalry Division implemented a standard element of siege doctrine: isolate the defenders.

On 8 February, as the 37th Infantry Division was crossing the Pasig at Malacanán Gardens, the 5th and 8th Cavalry Regiments began a

sweep around the east and south sides of Manila (see Map 1). The 8th Cavalry Regiment swung close and the 5th Cavalry Regiment swung wide. The 8th Cavalry Regiment crossed the Pasig at the Philippine Racing Club against little opposition; the 5th Cavalry Regiment crossed at the suburb of Makati against intermittent machine gun fire. On 10 February, the 5th Cavalry Regiment secured the Makati electrical power substation, following Krueger's policy of sparing as much city infrastructure as possible. By 12 February, both the 12th Cavalry Regiment, relieving the 8th Cavalry Regiment, and the 5th Cavalry Regiment had reached the waterfront, completing the encirclement of the city. They both had contact with the 37th Infantry Division on their right.<sup>33</sup>

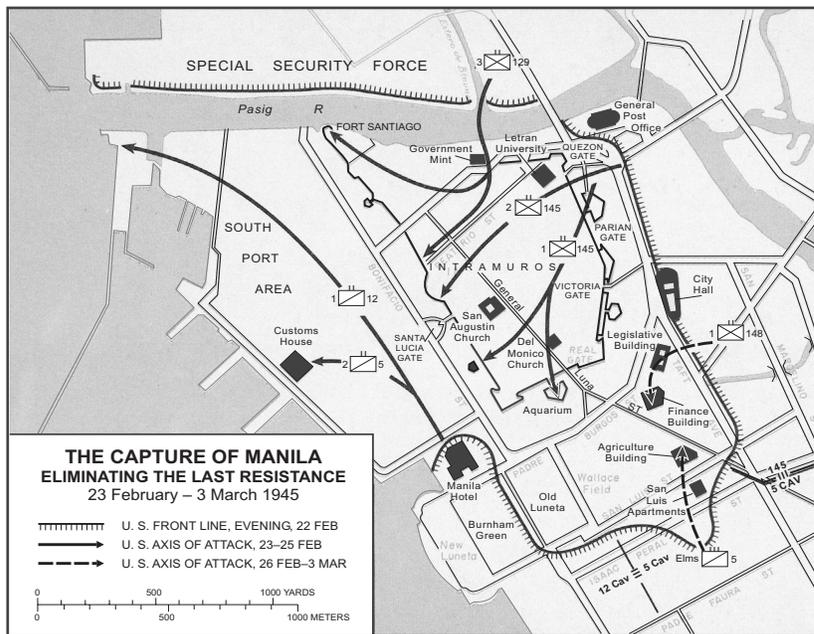
Once they reached the waterfront, the 12th Cavalry Regiment and the 5th Cavalry Regiment immediately turned northward, to move up the shore and join their forces to those of the 37th Infantry Division as it closed in on Intramuros (see Map 2). Moving abreast, the two regiments encountered a developed Japanese strongpoint in the Harrison Park area, which contained Rizal Stadium, La Salle University, and other structures. The 1st Cavalry Division fought pitched battles there, as the 37th Infantry Division had at the Paco Railroad Station and elsewhere. Japanese defenders had constructed heavy bunkers all over the baseball diamond at Rizal Stadium, which the 1st Cavalry finally overcame with the use of flamethrowers, demolitions, and three tanks.<sup>34</sup>

On 16 February, the 1st Cavalry Brigade (5th and 12th Regiments) passed from the 1st Cavalry Division's operational control to that of the 37th Infantry Division for the assault on the central city. At this point, the 5th Cavalry Regiment relieved the 148th Infantry Regiment, and the 12th Cavalry Regiment continued advancing northward and on 20-22 February cleared the High Commissioner's Residence, Burnham Green, and the Manila Hotel. There was a hard fight, floor by floor, for the Manila Hotel, and MacArthur himself appeared on the scene, since he had resided in a penthouse apartment of the Manila Hotel during his former stay in the Philippines.<sup>35</sup>

By 23 February, the 37th Infantry Division had fought its way to the eastern wall of the Japanese stronghold of Intramuros and was prepared to assault it. Intermittent bombardment of the fortress began on 17 February. There was then a focused bombardment from 0730 to 0830 on 23 February, the day of the assault. This preparation employed an abundance of 105mm and 155mm howitzers, 75mm tank guns, 4.2-inch mortars, a few 8-inch howitzers, and other pieces; in other words, it was almost all of the 37th Infantry Division's artillery assets. The 8-inch

howitzers proved most effective against the thick walls of Intramuros. Thirty machine guns were used for the artillery preparations, of which 26 were trained on Japanese machine gun positions and four were reserved for targets of opportunity before and during the assault. Overall, 7,487 high-explosive shells were dropped on Intramuros.<sup>36</sup>

At 0830, a red smoke signal was fired to mark the end of the artillery preparation and the beginning of the assault. Ten minutes later, a second bombardment began placing a smokescreen east to west across the central section of Intramuros to obscure the north-lying assaults from Japanese gunners in the south-lying Legislative, Finance and Agriculture Buildings (see Map 3). The 129th Infantry Regiment assaulted southward across the Pasig in engineer boats at 0830, the first troops disembarking at 0836. Simultaneously the 145th Infantry Regiment assaulted the east wall. Japanese fires within Intramuros evidently were less intense than in earlier encounters because the heavy bombardment had destroyed or disorganized them. Both the 129th Infantry and the 145th Infantry Regiments therefore moved easily through the breached walls and then through the streets of Intramuros. The 145th Infantry Regiment's progress was soon blocked, however, by the flow of 2,000 refugees, women and children, from Del Monico



Map 3

Church on General Luna Street where the Japanese had been holding them. Many would be evacuated from the west gate of Intramuros by a truck convoy of the 37th Quartermaster Company. Male civilians had evidently been separated by the Japanese, detained in the Intramuros' old citadel, Fort Santiago, and executed there en masse. By nightfall of 23 February, the 129th and 145th Infantry Regiments held nearly all of Intramuros and would secure the rest the next day.<sup>37</sup>

The hardest fighting in Intramuros was the 129th's effort to capture Fort Santiago in the northwest corner of the old walls. They fought room to room, and then through subterranean dungeons and tunnels, using flamethrowers, phosphorus grenades, demolitions, and bazookas. In some cases, they poured gasoline or oil through holes in the floor then ignited it to flush out the die-in-place defenders. The regiment did not secure the last of the fort's tunnels until 1200 on 25 February.<sup>38</sup>

During the fighting in Intramuros, some Japanese troops attempted to exfiltrate wearing U.S. uniforms and carrying M1 rifles. Others showed a white flag in the belfry of Del Monico Church only to follow up with rifle fire. None of this helped them. Only twenty-five Japanese surrendered in the Intramuros fighting, all of them Formosans of the Imperial Japanese Labor Force. At dawn on 26 February, seeing that the Intramuros stronghold had fallen, Rear Admiral Iwabuchi and his staff committed suicide at their headquarters in the Agriculture Building.<sup>39</sup>

Despite the loss of Intramuros, the Japanese still held three strong positions, the Legislative, Finance and Agriculture Buildings, which lay just southeast of the old fortress. Since Iwabuchi had expected U.S. attacks to come from the south, he had fortified these buildings more thoroughly than the more northerly strongpoints. It is probably also for this reason that Iwabuchi had put his headquarters in the Agriculture Building. The Legislative, Finance, and Agriculture Buildings were of reinforced concrete. Window-sited machine guns covered exterior approaches. Sandbags and barricades blocked all ground-level doors and windows. Interiors were also fortified as in other strongpoints.

The U.S. artillery preparation on the buildings began on 25 February. However, the 1st Cavalry Division, then deployed along the bay shore west of Intramuros, reported shells falling on its positions. These were 37th Infantry Division rounds that had overshot the government buildings to fall on the 1st Cavalry Division. Major General Robert S. Beightler, commander of the 37th Infantry Division, immediately ordered a cease-fire at 1050 to resolve this problem by shifting troops out of the fire zone. Fires resumed at 1245.<sup>40</sup>

On 26 February, the 148th Infantry Regiment assaulted the Legislative Building and secured it by 28 February. The regiment's troops were harassed by Japanese firing up through holes in the floor and had to withdraw after their first assault to allow more shelling of the still vigorously resisting defenders. On 26 February, the 5th Cavalry Regiment assaulted the Agriculture Building after an artillery preparation, but troops had to withdraw because of withering Japanese covering fire from the nearby San Luis Terrace Apartments. The 5th Cavalry Regiment had to spend 27 February clearing out the apartments. On 28 February, the regiment returned to the Agriculture Building with a three-hour artillery preparation. Point-blank 155mm howitzer fires alternated with point-blank tank and tank-destroyer fires, with all of these fires aimed no higher than the first floor of the Agriculture Building so as to avoid endangering friendly troops. Much of the Agriculture Building thus pancaked on its own first floor, and the 5th Cavalry Regiment assaulted into what was left. A flamethrower tank reduced a pillbox on the southeast corner, and other tanks swarmed around the building to provide point-blank 75mm fire. The 5th Cavalry Regiment otherwise used flamethrowers, bazookas, and small arms.

On 1 March, the 5th Cavalry Regiment made a surrender appeal to Japanese survivors. When there was no response, the regiment employed demolitions and burning gasoline and oil against remaining defenders. An artillery preparation was applied against the sole remaining Japanese position, the Finance Building, on 28 February and 1 March. A surrender appeal this time garnered twenty-five Japanese responses. After more artillery preparation on 2 March, the 148th Infantry Regiment assaulted the building. They cleared the last of the Japanese defenders from the elevator shaft on top of the building on the morning of 3 March.<sup>41</sup>

On the afternoon of 3 March Lieutenant General Oscar W. Griswold, commander of 14th Corps, reported to General Krueger of 6th Army that all resistance had ceased. The struggle to capture Manila was over.<sup>42</sup> The struggle to administer the battle-torn city, however, was just beginning. U.S. military assets on the scene would play a major part in reviving and running Manila for several weeks after the battle. The task of administering the city was complicated by the enormous toll the battle had taken. U.S. casualties in the battle were 1,010 KIA and 5,565 WIA, for a total of 6,575. Japanese counted dead were 16,665. In addition, there were an estimated 100,000 civilian casualties, of varying degrees of seriousness and of diverse causes; most were probably generated by Japanese executions and atrocities toward

Philippine civilians, by friendly fire from American artillery, and by mishap or exposure associated with dislocation. Much of Manila itself was in ruins. The water system within the city needed extensive repairs. Sewage and garbage collection systems were not functioning. The electrical system was out. Most streets were ruined and public transportation no longer existed. The major government buildings, the Philippine General Hospital, and the University of the Philippines were destroyed, along with many residential districts. The port installations were severely damaged. Besides all this, numerous homeless civilians were milling about seeking food, shelter, and medical care.<sup>43</sup>

U.S. forces in Manila were immediately enlisted for occupation duty. After the battle, the 37th Infantry Division bivouacked near Grace Park, in the northern suburbs. On 5 March, the division was removed from 14th Corps, placed directly under 6th Army, and given the mission of providing security for the city. Troops from the division were distributed to Filipino police stations, and so they had to deal with collaborators brought in by civilians until the Counterintelligence Corps could investigate. Looting was a major problem for the division's security troops. Large-scale looting was conducted during the battle by organized bands of Filipinos who moved just behind the American advance. The looters placed a point man in the American front lines to identify where the spoils were richest, allowing those behind to carry off the goods without delay. American security troops did not try to reverse the looting done during the battle. They stopped further looting when the battle was over, however, by mounting guard and patrol duty throughout the city, 24 hours a day.<sup>44</sup>

Security forces faced the problem of the city being strewn with numerous mines, unexploded shells, and booby traps. Areas where fighting had been heaviest were roped off from the public by military police until the 37th Infantry Division's engineer companies could clear them. On 8 March, the track was blown off a U.S. bulldozer on Dewey Boulevard. There were occasional casualties from mines throughout March. The 117th Engineer Battalion piled fifty tons of cleared mines and shells in Burnham Green Park, where on 16 March these exploded from causes unknown. There were no casualties. The 117th Engineers were also busy repairing warehouses, plumbing and electrical facilities, and building an airstrip and Red Cross recreation center.<sup>45</sup>

Troops of the 37th Infantry Division carried weapons in Manila until 17 March. Since the end of the fighting on 3 March, things had been done on a more relaxed basis. New movies were brought to the units

every other night. Seats for the troops were placed in open air, and the block of seats then roped off because of the crowds of civilians who also came and watched. Most of the units began holding dances weekly, attended by Filipinos and expatriate women. The Division Special Service Band sometimes played for these events, although the 2d Battalion, 129th Infantry Regiment had its own orchestra. Troops had fresh food every day, and there were no epidemics. Unit staffs also caught up on paperwork, replenished supplies, and began training the hundreds of arriving replacements. This respite was short-lived, however. 37th Infantry Division marched out of Manila on 29 March to begin its next campaign.<sup>46</sup>

The Japanese defense of Manila had failed. Nevertheless, there are some remarkable features of the Japanese effort. On the one hand, Japanese operations show the shortcomings of trying to fight without training, doctrine, or equipment, and without significant joint support. On the other hand, the Japanese showed how much could be done in defense of a city with nothing to work with but resolute personnel and the resources of a great metropolis.

Japanese tactics were simple but effective. Troops fought in small units that tenaciously defended particular assigned positions. They conducted a static defense with almost no maneuver or coordinated action between positions. On the streets north of the Pasig, they set up minefields and obstacles covered by interlocking machine gun fires. The mines were often made of artillery shells, depth charges, or aerial bombs, and the machine guns were often dismantled naval aviation machine guns. In strongpoints south of the Pasig, the Japanese set up positions in sturdy reinforced-concrete buildings and sometimes put foxholes outside. Typically they swept the approaches with automatic fires sighted through windows or loopholes. They put sandbagged machine gun nests throughout these buildings, sometimes fortified cellars and roofs, and sometimes fired through holes cut in walls, ceilings and floors. In most cases, they chose neither to surrender nor retreat, but instead died in place.

U.S. infantry who faced these positions perceived them as formidable. Nonetheless, it is remarkable what these positions lacked. They had little artillery, no armor, no air support, and few suppressive fire weapons for the close fight. They had almost no field radios allowing communication between units, and almost no trenches or tunnels connecting units. They had almost no underground positions except cellars in buildings. There were limited numbers of Japanese to man these positions: Iwabuchi had only 5,000 troops in the central

Manila force. There was also limited time to prepare: the Japanese army had decided to leave Manila in December 1944.

The Japanese had few artillery pieces compared to the Americans, most of them converted naval guns. They fired isolated rounds randomly or against preregistered junctions or bridges. Apparently, they had no forward observers with radios to direct fires and perhaps also had comparatively limited ammunition. The Japanese appeared to be short on close-range suppressive fire weapons also. There is no report of their using flamethrowers or submachine guns. They had grenades, but sometimes used Molotov cocktails, suggesting local shortages. Most but not all had rifles. Some of the rifles were U.S. makes captured in 1942. In place of rifles, some carried jury-rigged spears made of bayonets on poles. In other words, the Japanese were woefully lacking in both heavy weapons and light weapons. All they really had in abundance were machine guns and automatic cannon. They were fighting the Battle of Manila with naval aviation equipment, not ground warfare equipment.<sup>47</sup>

The Japanese naval defenders in Manila had military discipline and dedication. But they had no doctrine, no training, no armor, no air, little artillery, no communication between positions, no maneuver, no coordination, and no reinforcements. Nonetheless, they held the Americans at bay for four weeks. They showed what could be done by defenders who had nothing to work with but their own resoluteness, urban terrain, and the abundant resources of a great city. The Battle of Manila shows that urban warfare significantly favors the defender.

Although the Japanese navy conducted a remarkable ad hoc defense in Manila, U.S. forces ground their way steadily through the Japanese positions. American tactics were decisively more effective. What were the Americans doing that allowed them to advance? U.S. forces in Manila were practicing modern combined arms warfare against a static defense. They were trained ground forces with abundant troops, equipment, and service assets. They were experienced in fighting in restrictive jungle terrain. To their credit, they used all the assets available to them, except for some capabilities of airpower.

Corps and division staffs made sure that regiments and battalions were operationally and tactically coordinated. Tanks were used to the maximum for direct fires and suppressive fires from the time they became available to 37th Infantry Division on 14 February, and by 1st Cavalry Division throughout. Airpower, however, was never used to bomb or strafe Japanese positions in the city of Manila, as MacArthur repeatedly denied requests from subordinate units for air

bombardment. This was a major departure from U.S. combined arms doctrine, justified by MacArthur's desire to spare Philippine civilians in the city. Airpower was used in other ways, however. Cub planes were used continuously for artillery spotting. The 1st Cavalry Division used airpower, indeed joint airpower, for close air support and scouting in the division's sweep around the outer edge of the city. Marine Air Groups 24 and 32, flying from an airstrip near Lingayen Gulf, kept nine shipborne dive-bombers over the 1st Cavalry Division's leading elements, and P-40s from the 5th Air Force flew reconnaissance missions to 1st Cavalry's left and front. Moreover, U.S. airpower closed the skies completely to Japanese aircraft.<sup>48</sup>

The restrictions on air bombardment within the city may have mattered little, however, because the enemy was contained within a confined space easily within artillery range. U.S. forces had abundant artillery assets and could get effects similar to those of air bombardment by employing massed artillery. Initially, artillery fires were also limited by MacArthur to "observed fire on known targets." These restrictions were abandoned on 10 February because of mounting U.S. casualties. This was shortly after the 37th Infantry Division had crossed the Pasig and encountered developed Japanese strongpoints. Permission was obtained for "area artillery fire in front of advancing lines."<sup>49</sup>

The American method, once area artillery fires and tanks became available, was to pulverize the building they faced and then to assault into the remains. They used bazookas and flamethrowers against machine gun nests. They used abundant light suppressive fire weapons, grenades, and mortars, as well as small arms. Sometimes U.S. assaults failed because of withering fire or counterattacks, in which case troops would pull back and repeat the process. Tanks and tank destroyers were used in a direct-fire role for the artillery preparation. Their use beyond that was limited by mines, rubble, and the heavy concrete walls of the buildings themselves. Tanks could not follow infantry into the cellars and onto the roofs. Americans in Manila evidently learned to use their assets as they went along and used them to full advantage. Casualties suffered by the 37th Infantry Division when artillery restrictions were first lifted from 10-12 February averaged twenty-six KIA per day. By 21-23 February, when the division was fighting at city hall and assaulting Intramuros, casualties were down to six KIA per day on average.<sup>50</sup>

The Americans at Manila learned fast. They used artillery and tanks to the fullest to achieve their objectives with minimal loss of friendly troops' lives. The falling friendly casualty rates suggest that American

troops between 3 February and 23 February had refined all manner of urban warfare methods, at all operational levels, that allowed them to advance more efficiently at the end than at the beginning. American troops had superior assets from the start; by the end, they knew how to use them. Americans won at Manila because they applied a full range of combined arms methods against a static defense. They got better at it as they went along.

The Battle of Manila offers many lessons and insights that may be applicable to future instances of urban warfare. Some of these insights are tactical in nature. They show how to cope with the enemy force. Others are civil in nature. They show how to cope with the civilian population and with objectives relating to the civilian population. Many of the tactical lessons of Manila we have already explored in examining the methods of Japanese and U.S. forces. Some of these lessons are applicable to combined arms warfare in general, not exclusively to urban warfare. Some of the tactical features of Manila, however, are peculiar to cities and likely to recur in operations in other cities.

The tactical battle of Manila, like many other urban conflicts, was a tale of fire and water. On 5 February, the 37th Infantry Division was stymied by raging fires that it had no way to fight or bring under control. The possibility of fire is endemic to urban environments. Manila showed that firefighting may be a feature of urban warfare for ground forces. The Manila fighting also demonstrated that urban warfare may have an amphibious war aspect. Both the 37th Infantry Division and the 1st Cavalry Division repeatedly had to cross rivers and esteros in assault boats and on pontoon bridges, often under fire. Though little came of it, the Japanese defenders attempted an amphibious envelopment of American lines on 7 February, using barges on Manila Bay. The final Manila operation for Americans was the search on 6-7 March by elements of the 129th Infantry Regiment, deployed on landing craft, of 32 ships sunk in the harbor where Japanese continued to resist.<sup>51</sup> The amphibious element is not unique to Manila. Almost all great cities are situated on a river or harbor or both. Urban fighting usually requires some projection over water.

Several artillery issues at Manila are characteristic of urban warfare. To avoid counterbattery fire, Japanese defenders put 75mm guns on trucks and moved them after firing. A shell passing through a target was a concern in Manila; shelling a building could jeopardize friendly troops on the other side. This is a case where some urban operations would necessitate more coordination than other forms of ground warfare. Some other artillery issues are more difficult to resolve. When

is it justified to use massive area artillery bombardment, or air bombardment, when civilians may be present? It is a question that probably must be answered case by case. Commanders may be prudent to think through this question before they are in an operational situation. Study of the Manila battle may help them to do that.

Manila offered some tactical lessons for armor. Urban warfare is often siege warfare. Driving tanks around the city will not bring victory in itself, but it may achieve the first stage of victory, which is to isolate the enemy. Within Manila, tanks were useful for direct artillery fire and to suppress pillboxes in the open. Tanks could not get into the buildings, however, just as tanks cannot get into caves. Tanks accompanied infantry to the wall. Once through the wall, infantry were on their own. Tank movement was inhibited in Manila. Tanks did not reach the 37th Infantry Division until 14 February because they could not cross the light pontoon bridges over the Pasig. Japanese defenders had mined approach routes, so mine-clearing operations delayed tank movement every time lines moved forward. Electromagnetic mine detectors did not work because of all the metal already present in debris on the street.<sup>52</sup> Sometimes rubble thrown down by the giant artillery bombardments obstructed the tanks. Tanks were useful in Manila, but not as decisive as they would be in maneuver battles over open ground.

Infantry did the hardest work at Manila. Artillery reduced the walls, and armor accompanied them to the walls. The greatest challenge, however, lay inside the walls. Indoor fighting in Manila resembled World War I trench warfare in that it was heavily reliant on light suppressive fire weapons, flamethrowers, bazookas, mortars, and grenades. As in World War I, force fatigue was a potential problem, a problem that U.S. commanders astutely minimized by replacing fighting regiments with fresh regiments after about 14 days of heavy engagement.<sup>53</sup>

While Manila offers many tactical lessons pertinent to the military dimension of urban warfare, it also offers many lessons in the other dimension of urban warfare—the civic dimension. In this dimension, problems were not always as amenable to technical solutions as they had been in the military dimension.

What were Manila's lessons for civil affairs? Operators faced two categories of problems, one being to preserve or revive the functions of the city as a whole, and the other being to provide for the multitude of citizens as individuals. The Sixth Army was keen to keep the major collective services in the city—water and electricity—from being destroyed. The 1st Cavalry Division succeeded in preserving most of the

water system, which lay outside the city, but the electrical steam power generator at Provisor Island within the city was destroyed, in spite of Sixth Army's good intentions. Moreover, the city's refuse collection stopped, the sewage system was damaged, public transportation ceased to function, and roads and bridges were destroyed throughout the central city. Local government barely had existed in Manila during the early weeks of the battle but was revived soon after MacArthur reestablished the Commonwealth Government on 28 February. Local authorities, although they existed after 28 February, were heavily assisted by the 37th Infantry Division until the latter's departure on 29 March. The division also performed major service after the battle by keeping order, clearing mines, and helping repair facilities. The lesson of Manila as regards collective municipal functions—government, water, electricity, and the like—is to do as the 1st Cavalry Division and the 37th Infantry Division did: safeguard them as much as possible and, failing that, restore them as soon as possible.

The multitude of civilians also provided many challenges for U.S. forces in Manila. Civilians in pursuit of various purposes sometimes obstructed military activity for the 37th Infantry and the 1st Cavalry Divisions. One of these cases was the celebration by jubilant crowds at the beginning of the battle. This public celebration impaired force movement, though it may also have helped troop morale. On several occasions during the battle, civilians fled against or across the U.S. axis of advance, obstructing movement or fire. The presence of civilians made U.S. authorities unwilling to use air bombardment and reluctant to use area artillery fire. Americans believed Japanese were establishing positions in facilities such as hospitals and churches where civilians were present, knowing U.S. artillery would not fire on them there.<sup>54</sup> In one case, at Santo Tomás, civilians were held hostage by Japanese troops in exchange for safe passage of lines.

Besides hampering military operations, civilians often made positive demands on U.S. service support activities that could not be ignored. At Bilibid Prison, the 37th Infantry Division was suddenly forced to evacuate, then house some 1,300 internees in the way of an advancing fire. Civilians injured in the battle, some of whom were victims of Japanese atrocities, came to U.S. medical aid stations for help.<sup>55</sup> Finally, individual civilians immediately after the battle depended on military personnel to maintain order and protect them from looting and other transgressions.

The lesson here for operators in an urban warfare environment is that they must be prepared to exercise patience in their operations given that

in urban terrain, more than any other terrain, there are likely to be numerous nonbelligerents present. The lesson for planners in an urban warfare environment is to make sure that friendly forces have a superabundance of food and medical supplies, and of service assets, medical transportation, engineering, and so on. During and especially after the battle, they may have to devote these to that part of the mission objective that is to reestablish the fabric of civic life. The Manila battle is rich in lessons for urban warfare in its civil dimension as well as in its military dimension.

## Notes

1. For this and following information on Manila, see Robert R. Smith, *Triumph in the Philippines, The War in the Pacific, United States Army in World War II* (Washington, DC: Center of Military History, 1993 [1963]), 237-40, and Stanley A. Frankel, *The 37th Infantry Division in World War II* (Washington, DC: Infantry Journal Press, 1948), 243-47.
2. Smith, 241-42, appendix D and appendix E.
3. *Ibid.*, 242-44.
4. *Reports of General MacArthur, 2v.*, Gordon W. Prange, ed., Volume II, Part II (Washington, DC: Center of Military History, 1944 [1966]), (hereafter *MacArthur Reports II*), 498; Smith, 271-73; Richard Connaughton, John Pimlott, and Duncan Anderson, *The Battle for Manila* (Novato, CA: Presidio Press, 1995), 142.
5. *Ibid.*, 141-42.
6. *Ibid.*, 143, 187; and U.S. Army, 37th Infantry Division, *Report After Action on Operations of the 37th Infantry Division, M-1 Operations* (Headquarters, 37th Infantry Division, 1945) (hereafter 37th Infantry Division), 47. For organization of Japanese forces in Manila area see Smith, appendix D.
7. Smith, 308; Connaughton, 189-91; and 37th Infantry Division, 51.
8. Smith, 244-45.
9. *Ibid.*, 241-42, and Connaughton, 186-87.
10. *Ibid.*, 83, 180-81.
11. Smith, 249; Connaughton, 83, 179-81; and *Reports of General MacArthur, 2v.*, Gordon W. Prange, ed., Volume I (Washington, DC: Center of Military History, 1994 [1966]), (hereafter *MacArthur Reports I*), 276.
12. Smith, 249-50. For U.S. urban warfare doctrine of the day, see U.S. War Department, Field Manual 31-50, *Attack on a Fortified Position and Combat in Towns* (Washington, DC: 31 January 1944).
13. Connaughton, 83-84; Smith 217-18; Frankel, 242; and Bertram C. Wright, *The 1st Cavalry Division in World War II* (Tokyo: Toppan Printing Co., 1947), 128-29.
14. Wright, 129.
15. Smith, 251-52; Wright, 132-33; and Frankel, 255.
16. Smith, 250-51, 256, and Wright, 133.
17. Smith, 253-54; 37th Infantry Division, 41, 43; and Frankel, 254, 259.
18. Smith, 253.
19. Frankel, 252, 254-57; Smith, 255; and 37th Infantry Division, 41.
20. 37th Infantry Division, 43, and Smith, 254.
21. Connaughton, 109; 37th Infantry Division, 45; Smith, 259-60; and Frankel, 272.

22. 37th Infantry Division, 47.
23. Smith, 260-63; 37th Infantry Division, 49, 51; and Frankel, 275-76.
24. 37th Infantry Division, 49.
25. *Ibid.*, 51.
26. *Ibid.*
27. Frankel, 273-75, and 37th Infantry Division, 49.
28. Frankel, 273, 275, and 37th Infantry Division, 49, 52.
29. Above account of New Police Station strongpoint drawn from Frankel, 276-80, and Smith, 280-83.
30. Above account of city hall and general post office strongpoints drawn from Smith, 284-85, and Frankel, 280.
31. Smith, 285-87.
32. *Ibid.*, 287-90.
33. Wright, 134, 136; Smith, 264-65, 269; and Connaughton, 84-85.
34. Smith, 277-78.
35. Smith, 279-80, and Connaughton, 180.
36. *The 129th Infantry in World War II*, Regimental Staff ed. (Washington, DC: Infantry Journal Press, 1947) (hereafter *129th Infantry*), 107; Smith, 294, 296; and 37th Infantry Division, 77, 79.
37. Smith, 297-300; 37th Infantry Division, 79, 81; and Frankel, 291.
38. *129th Infantry*, 108; Smith, 298; and 37th Infantry Division, 83.
39. 37th Infantry Division, 81; Connaughton, 170-71; and Frankel, 292-93.
40. Smith, 303; Connaughton, 188; Frankel, 293-94; and 37th Infantry Division, 86.
41. Smith, 303-306; Frankel, 294-95; and 37th Infantry Division, 86.
42. Smith, 306.
43. *Ibid.*, 307; Frankel, 295-96; General Walter Krueger, *From Down Under to Nippon, The Story of Sixth Army in World War II* (Washington, DC: Combat Forces Press, 1953), 251; Wright, 136; and *129th Infantry*, 97.
44. Frankel, 297-98; 37th Infantry Division, 88; and *129th Infantry*, 109.
45. Frankel, 299.
46. *Ibid.*, 299-303, and *129th Infantry*, 110.
47. 37th Infantry, 43; Smith, 308; and Connaughton, 190-91.
48. On coordinating advance and consolidating lines, see Frankel, 276. On tanks, see 37th Infantry Division, 59. On airpower, see Smith 235, 249-50, 264, 294.
49. *Ibid.*, 249-50, 263-64, 296, and 37th Infantry Division, 51.
50. 37th Infantry Division, 53, 55, 75, 77, 81.
51. Frankel, 261, and *129th Infantry*, 109.
52. 37th Infantry Division, 59.
53. *Ibid.*, 65, 67.

54. Connaughton, 123; 37th Infantry Division, 53; and Frankel, 278.
55. Frankel, 277. For atrocities, see Connaughton, 113-25.

## Bibliography

- The 129th Infantry in World War II*. Regimental Staff, ed. Washington, DC: Infantry Journal Press, 1947. History of the 129th Infantry Regiment in the Pacific in World War II, prepared by the regimental staff. Describes operational events as seen at the regimental level. Useful appendixes.
- Connaughton, Richard, John Pimlott, and Duncan Anderson. *The Battle for Manila*. Novato, CA: Presidio Press, 1995. Excellent single-volume treatment of the Manila battle. Synthesizes earlier literature and provides interesting insights of its own.
- Frankel, Stanley A. *The 37th Infantry Division in World War II*. Washington, DC: Infantry Journal Press, 1948. A history of the 37th Infantry Division's service in the Pacific written apparently on behalf of the 37th Division's Veterans Association. Describes operational events and is especially good for details relating to divisional morale and unusual challenges the division faced. Useful appendixes.
- Krueger, General Walter. *From Down Under to Nippon, The Story of Sixth Army in World War II*. Washington, DC: Combat Forces Press, 1953. Memoir of the commander of Sixth Army in the Pacific. Describes succinctly Sixth Army's Pacific operations.
- Reports of General MacArthur, 2v*. Gordon W. Prange, ed. Washington, DC: Center of Military History, 1994 [1966]. Authoritative account of the Pacific war compiled by MacArthur's staff in Japan shortly after World War II. Volume I addresses U.S. operations in the Pacific, and Volume II addresses Japanese operations in the Pacific.
- Smith, Robert R. *Triumph in the Philippines, The War in the Pacific, United States Army in World War II*. Washington, DC: Center of Military History, 1993 [1963]. Official U.S. Army history of the Philippine campaign of 1944-1945. Contains detailed coverage of combat events, maps, casualty figures, and the like for U.S. ground forces.
- U.S. Army. 37th Infantry Division. *Report After Action on Operations of the 37th Infantry Division, M-1 Operations*. Headquarters, 37th Infantry Division, 1945. The day-by-day after-action report of the 37th Infantry Division. Describes daily deployments and results for the division. Thoughtful commentary is provided at many points by division staff officers.
- U.S. War Department. Field Manual 31-50. *Attack on a Fortified Position and Combat in Towns*. Washington, DC, 31 January 1944. Field manual describing U.S. Army doctrine for urban warfare during World War II.

Wright, Bertram C. *The 1st Cavalry Division in World War II*. Tokyo: Toppan Printing Company, 1947. History of the Pacific campaigns of the 1st Cavalry Division compiled by the division historian. Colloquial in tone. Contains numerous photos and useful appendixes.