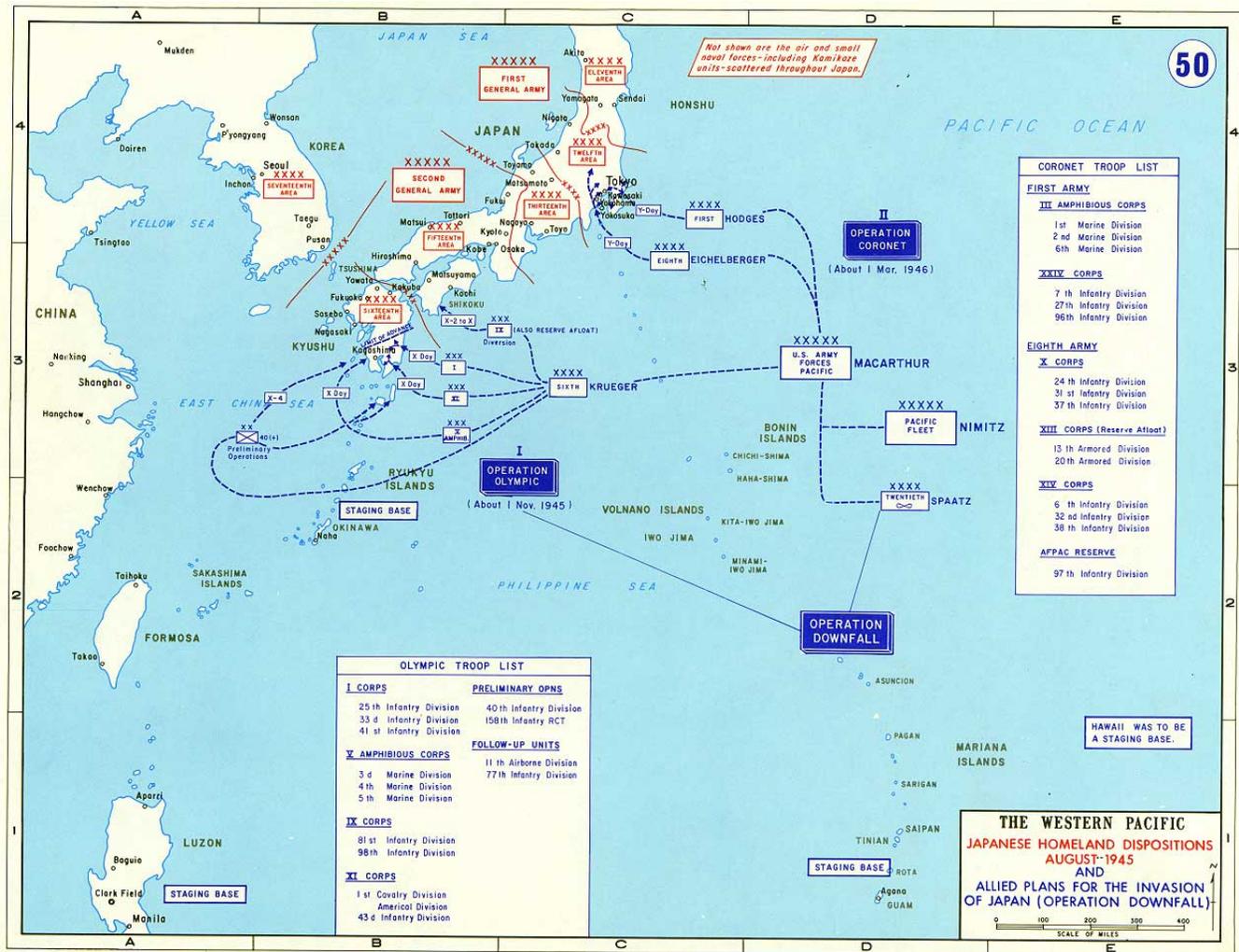


Operation Downfall: Planned Invasion of the Islands of Japan in World War II



A map outlining the Japanese and U.S. (but not other Allied) ground forces scheduled to take part in the battle for Japan. Two landings were planned: (1) Olympic—the invasion of the southern island, Kyūshū, and (2) Coronet—the invasion of the main island, Honshū.

Operation Downfall was the overall Allied plan for the invasion of Japan near the end of World War II. The operation was cancelled when Japan surrendered after the atomic bombing of Hiroshima and Nagasaki, and the Soviet Union's declaration of war against Japan.

Operation *Downfall* had two parts: Operation Olympic and Operation Coronet. Set to begin in October 1945, Operation Olympic was intended to capture the southern third of the southernmost main Japanese island, Kyūshū, with the recently captured island of Okinawa to be used as a staging area.

Later, in spring 1946, Operation Coronet was the planned invasion of the Kantō plain, near Tokyo, on the Japanese island of Honshū. Airbases on Kyūshū captured in Operation Olympic would allow land-based air support for Operation Coronet.

Japan's geography made this invasion plan obvious to the Japanese as well; they were able to predict accurately the Allied invasion plans and accordingly adjust their defensive plan, Operation Ketsugō. The Japanese planned an all-out defense of Kyūshū, with little left in reserve for any subsequent defense operations.

Casualty predictions varied widely but were extremely high for both sides: depending on the degree to which Japanese civilians resisted the invasion, estimates ran into the millions for Allied casualties^[1] and tens of millions for Japanese casualties.

Planning

Responsibility for planning Operation *Downfall* fell to the U.S. commanders: Fleet Admiral Chester Nimitz, General of the Army Douglas MacArthur and the Joint Chiefs of Staff—Fleet Admirals Ernest King and William D. Leahy, and Generals of the Army George Marshall and Hap Arnold (the latter was commander of the U.S. Army Air Forces). At the time, the development of the atomic bomb was a very closely guarded secret known only to a few top officials outside the Manhattan Project, and planning for the invasion of Japan did not take its existence into consideration.

The primary considerations that the planners had to deal with were time and casualties—how they could force Japan's surrender as quickly as possible, with as few Allied casualties as possible. The U.S. Navy urged the use of blockade and airpower to bring about Japan's capitulation. They proposed operations to capture airbases in nearby Shanghai, China, and Korea, which would give the U.S. Army Air Forces a series of forward airbases from which to bombard Japan into submission. The U.S. Army, on the other hand, argued that such a strategy could "prolong the war indefinitely" and expend lives needlessly, and therefore that an invasion was necessary. They supported mounting a large-scale thrust directly against the Japanese homeland. Ultimately, the Army's viewpoint won.

Physically, Japan made an imposing target. Only Kyūshū (the southernmost island of Japan) and the beaches of the Kantō plain (both southwest and southeast of Tokyo) made suitable invasion zones. The Allies decided to launch a two-stage invasion. Operation *Olympic* would attack southern Kyūshū. Airbases would be established, and those would give cover for Operation *Coronet*, the attack on Tokyo Bay.

While the geography of Japan was fixed, the U.S. military planners could only estimate the defending forces they would face. Based on intelligence available early in 1945, their assumptions included the following:

- "That operations in this area will be opposed not only by the available organized military forces of the Empire, but also by a fanatically hostile population."
- "That approximately three (3) hostile divisions will be disposed in Southern KYUSHU and an additional three (3) in Northern KYUSHU at initiation of the OLYMPIC operation."
- "That total hostile forces committed against KYUSHU operations will not exceed eight (8) to ten (10) divisions and that this level will be speedily attained."

- "That approximately twenty-one (21) hostile divisions, including depot divisions, will be on HONSHU at initiation of [*Coronet*] and that fourteen (14) of these divisions may be employed in the KANTO PLAIN area."
- "That the enemy may withdraw his land-based air forces to the Asiatic Mainland for protection from our neutralizing attacks. That under such circumstances he can possibly amass from 2,000 to 2,500 planes in that area by exercise of rigid economy, and that this force can operate against KYUSHU landings by staging through homeland fields."

Olympic

Operation *Olympic*, the invasion of Kyūshū, was to begin on "X-Day", which was scheduled for November 1, 1945. The combined Allied naval armada would have been the largest ever assembled. Fourteen U.S. divisions were scheduled to take part in the initial landings. Using Okinawa as a staging base, the objective would have been to seize the southern portion of Kyūshū. This area would then be used as a further staging point to attack Honshū in Operation *Coronet*.

Olympic was also to include a deception plan, known as Operation *Pastel*. *Pastel* was designed to convince the Japanese that the Joint Chiefs had rejected the notion of a direct invasion and instead were going to attempt to encircle and bombard Japan. This would require capturing bases in Formosa, along the Chinese coast, and in the Yellow Sea area.

Before the main invasion, the offshore islands of Tanegashima, Yakushima, and the Koshikijima Islands were to be taken, starting on X-5. The invasion of Okinawa had demonstrated the value of establishing secure anchorages close at hand, for ships not needed off the landing beaches and for ships damaged by air attack. The 35 landing beaches chosen were all named for automobiles: Austin, Buick, Cadillac through Stutz, Winton, and Zephyr. With one corps assigned to each landing, the invasion planners assumed that the Americans would outnumber the Japanese by roughly three to one. In early 1945 Miyazaki was virtually undefended, while Ariake with its nearby good harbor was heavily defended. The invasion was not supposed to conquer the entire island, just the southernmost third of it. Southern Kyūshū would offer a staging ground and a valuable airbase for Operation *Coronet*.

Coronet

Operation *Coronet*, the invasion of Honshū at the Kantō Plain south of the capital, was to begin on "Y-Day", which was scheduled for March 1, 1946. *Coronet* would have been the largest amphibious operation of all time, with 25 divisions, including the floating reserve, earmarked for the initial operations. (The Overlord invasion of Normandy, by comparison, had 12 divisions in the initial landings) The U.S. First Army would have invaded at Kujūkuri Beach, on the Bōsō Peninsula, while U.S. Eighth Army invaded at Hiratsuka, on Sagami Bay. Both armies would then drive north and inland, meeting at Tokyo.

According to U.S. historian John Ray Skates:

American planners took no note [initially] of the possibility that [non-U.S.] Allied ground troops might participate in the invasion of the Kanto Plain. They published plans indicating that assault, follow-up, and reserve units would all come from U.S. forces. [However, as] the Coronet plans were being refined during the summer of 1945, all the major Allied countries offered ground forces, and a debate developed at the highest levels of command over the size, mission, equipment, and support of these contingents.

Operation *Ketsugō*

Meanwhile, the Japanese had their own plans. Initially, they were concerned about an invasion during the summer of 1945. However, the Battle of Okinawa went on so long that they concluded the Allies would not be able to launch another operation before the typhoon season, during which the weather would be too risky for amphibious operations. Japanese intelligence predicted fairly closely where the invasion would take place: southern Kyūshū at Miyazaki, Ariake Bay, and/or the Satsuma Peninsula.

While Japan no longer had a realistic prospect of winning the war, Japan's leaders believed they could make the cost of conquering Japan too high for the Allies to accept, leading to some sort of armistice rather than total defeat. The Japanese plan for defeating the invasion was called Operation *Ketsugō* (決号作戦 *ketsugō sakusen* "Operation Codename *Decision*"). The Japanese had secretly constructed an underground headquarters which could be used in the event of Allied invasion to shelter the Emperor and Imperial General staff.

Kamikaze

Admiral Matome Ugaki was recalled to Japan in February 1945 and given command of the Fifth Air Fleet on Kyūshū. The Fifth Air Fleet was assigned the task of *kamikaze* attacks against ships involved in the invasion of Okinawa, Operation *Ten-Go*, and began training pilots and assembling aircraft for the defense of Kyūshū where the Allies were likely to invade next.

The Japanese defense relied heavily on *kamikaze* planes. In addition to fighters and bombers, they reassigned almost all of their trainers for the mission, trying to make up in quantity what they lacked in quality. Their army and navy had more than 10,000 aircraft ready for use in July (and would have had somewhat more by October) and were planning to use almost all that could reach the invasion fleets.

Fewer than 2,000 *kamikaze* planes launched attacks during the Battle of Okinawa, achieving approximately one hit per nine attacks. At Kyūshū, given the more favorable circumstances (such as terrain that reduced the U.S.'s radar advantage), they hoped to get one for six and overwhelming the U.S. defenses. The Japanese estimated that the planes would sink more than 400 ships; since they were training the pilots to target transports rather than carriers and destroyers, the casualties would be disproportionately greater than at Okinawa. One staff study estimated that the *kamikazes* could destroy a third to a half of the invasion force before its landings.

Japanese Naval and Ground Forces

In any amphibious operation, the defender has two options for defensive strategy—strong defense of the beaches, or defense in depth. Early in the war (such as at Tarawa) the Japanese employed strong defenses on the beaches with little or no manpower in reserve. This tactic proved to be very vulnerable to pre-invasion shore bombardment. Later in the war, at Peleliu, Iwo Jima, and Okinawa, the Japanese switched strategy and dug in their forces in the most defensible terrain. Fighting evolved into long battles of attrition, with no hope of victory for the Japanese, but very high American and Allied casualties.

For the defense of Kyūshū, the Japanese took an intermediate posture, with the bulk of their defensive forces a few kilometers inland from the shore—back far enough to avoid complete exposure to naval gunnery, but close enough that the Americans could not establish a secure foothold before engaging

them. The counteroffensive forces were still further back, prepared to move against whichever landing seemed to be the main effort.

In March 1945, there was only one combat division in Kyūshū. Over the next four months the Imperial Japanese Army transferred forces from Manchuria, Korea, and northern Japan. By August, they had fourteen divisions and various smaller formations, including three tank brigades, for a total of 900,000 men. Although the Japanese were able to raise large numbers of new soldiers, equipping them was more difficult. By August, the Japanese Army had the equivalent of 65 divisions in the homeland but only enough equipment for 40 and only enough ammunition for 30.

In addition, the Japanese had organized the Patriotic Citizens Fighting Corps—which included all healthy men aged 15–60 and women 17–40—to perform combat support, and ultimately combat jobs. Weapons, training, and uniforms were generally lacking: some men were armed with nothing better than muzzle-loading muskets, longbows, or bamboo spears; nevertheless, they were expected to make do with what they had. One mobilized high school girl, Yukiko Kasai, found herself issued an awl and told, "Even killing one American soldier will do. ... You must aim for the abdomen."

Allied re-evaluation of *Olympic*

Air Threat

U.S. military intelligence initially estimated the number of Japanese aircraft to be around 2,500. The Okinawa experience was bad—almost two fatalities and a similar number wounded per sortie—and Kyūshū was likely to be worse. To attack the ships off Okinawa, Japanese planes had to fly long distances over open water; to attack the ships off Kyūshū, they could fly overland and then short distances out to the landing fleets. Gradually, intelligence learned that the Japanese were devoting all their aircraft to the *kamikaze* mission and taking effective measures to conserve them until the battle. An Army estimate in May was 3,391 planes; in June, 4,862; in August, 5,911. A Navy estimate, abandoning any distinction between training and combat aircraft, in July was 8,750; in August, 10,290.

The Allies made counter-Kamikaze preparations, known as the Big Blue Blanket. This involved adding more fighter squadrons to the carriers in place of torpedo- and dive-bombers, and converting B-17s into airborne radar pickets in manner similar to modern-day AWACS. Nimitz came up with a plan for a pre-invasion feint, sending a fleet to the invasion beaches a couple of weeks before the real invasion, to lure out the Japanese on their one-way flights, who would then find—instead of the valuable, vulnerable transports—ships loaded with anti-aircraft guns from bow to stern. The main defense against Japanese air attacks would have come from the massive fighter forces that were being assembled in the Ryukyu Islands. U.S. Army Fifth and Seventh Air Force and U.S. Marine air units had moved into the islands immediately after the invasion, and air strength had been increasing in preparation for the all-out assault on Japan.

Ground Threat

Through April, May, and June, Allied intelligence followed the build-up of Japanese ground forces, including five divisions added to Kyūshū, with great interest but some complacency, still projecting that in November the total for Kyūshū would be about 350,000 servicemen. That changed in July, with the discovery of four new divisions and indications of more to come. By August, the count was up to 600,000, and Magic cryptanalysis had identified *nine* divisions in southern Kyūshū—three times the

expected number: in fact, this was still a serious underestimate of Japanese strength. Estimated troop strength in early July was 350,000, rising to 545,000 in early August.

The intelligence revelations about Japanese preparations on Kyushu emerging in mid-July transmitted powerful shock waves both in the Pacific and in Washington. On 29 July, [MacArthur's intelligence chief, Major General Charles A.] Willoughby ... noted first that the April estimate allowed for the Japanese capability to deploy six divisions on Kyushu, with the potential to deploy ten. "These [six] divisions have since made their appearance, as predicted," he observed, "and the end is not in sight." If not checked, this threatened "to grow to [the] point where we attack on a ratio of one (1) to one (1) which is not the recipe for victory."

The build-up of Japanese troops on Kyūshū led American war planners, most importantly General George Marshall, to consider drastic changes to *Olympic*, or replacing it with a different plan for invasion.

Chemical Weapons

Because of its predictable wind patterns and several other factors, Japan was particularly vulnerable to gas attack. Such attacks would neutralize the Japanese tendency to fight from caves—caves would only increase the soldiers' exposure to gas. Although chemical warfare had been outlawed by the Geneva Protocol, neither the United States nor Japan were signatories at the time. While the United States had promised never to initiate gas warfare, Japan had used gas against the Chinese earlier in the war. "Fear of Japanese retaliation [to chemical weapon use] lessened because by the end of the war Japan's ability to deliver gas by air or long-range guns had all but disappeared. In 1944 Ultra revealed that the Japanese doubted their ability to retaliate against United States use of gas. 'Every precaution must be taken not to give the enemy cause for a pretext to use gas,' the commanders were warned. So fearful were the Japanese leaders that they planned to ignore isolated tactical use of gas in the home islands by the US forces because they feared escalation."

Nuclear Weapons

On Marshall's orders, Major-General John E. Hull looked into the tactical use of nuclear weapons for the invasion of the Japanese home islands. Colonel Lyle E. Seeman reported that at least seven bombs would be available by X-Day, which could be dropped on defending forces. Seeman advised that American troops not enter an area hit by a bomb for "at least 48 hours"; the risk of fallout was not well understood, and such a short amount of time after detonation would have resulted in substantial radiation exposure for the American troops.

Alternative Targets

The Joint Staff planners, taking note of the extent to which the Japanese had concentrated on Kyūshū at the expense of the rest of Japan, considered alternate places to invade, including the island of Shikoku, or northern Honshū at Sendai or Ominato—or skipping the preliminary invasion and going directly at Tokyo. Attacking northern Honshū would have the advantage of a much weaker defense but at the cost of giving up land based air support from Okinawa.

At this juncture, the key debate would likely have been between Marshall and Truman. There is strong evidence that Marshall remained committed to an invasion as late as 15 August. But tempering Marshall's personal commitment to invasion would have been his comprehension that civilian sanction in general, and Truman's in particular, was unlikely for a costly invasion that did not enjoy consensus support from the armed services. Also, unbeknownst to the Americans, the Soviets were preparing to follow up their invasions of Sakhalin and the Kuril Islands with an invasion of the weakly defended island of Hokkaidō by the end of August, which would have put pressure on the Allies to do something sooner than November. On August 15, the Japanese agreed to surrender, rendering the whole question of invasion moot.

Estimated Casualties

Because the U.S. military planners assumed "that operations in this area will be opposed not only by the available organized military forces of the Empire, but also by a fanatically hostile population," high casualties were thought to be inevitable, but nobody knew with certainty how high. Several people made estimates, but they varied widely in numbers, assumptions, and purposes—which included advocating for and against the invasion. Afterwards, they were reused in the debate over the atomic bombings of Hiroshima and Nagasaki.

Casualty estimates were based on the experience of the preceding campaigns, each one drawing upon different lessons:

- In a study done by the Joint Chiefs of Staff in April, the figures of 7.45 casualties/1,000 man-days and 1.78 fatalities/1,000 man-days were developed. This implied that a 90-day *Olympic* campaign would cost 456,000 casualties, including 109,000 dead or missing. If *Coronet* took another 90 days, the combined cost would be 1,200,000 casualties, with 267,000 fatalities.
- A study done by Adm. Nimitz's staff in May estimated 49,000 casualties in the first 30 days, including 5,000 at sea.
- A study done by General MacArthur's staff in June estimated 23,000 in the first 30 days and 125,000 after 120 days. When these figures were questioned by General Marshall, MacArthur submitted a revised estimate of 105,000, in part by deducting wounded men able to return to duty.
- In a conference with President Truman on June 18, Marshall, taking the Battle of Luzon as the best model for *Olympic*, thought the Americans would suffer 31,000 casualties in the first 30 days (and ultimately 20% of Japanese casualties, which implied a total of 70,000 casualties). Adm. Leahy, more impressed by the Battle of Okinawa, thought the American forces would suffer a 35% casualty rate (implying an ultimate toll of 268,000). Admiral King thought that casualties in the first 30 days would fall between Luzon and Okinawa, i.e., between 31,000 and 41,000.

Of these estimates, only Nimitz's included losses of the forces at sea, though kamikazes had inflicted 1.78 fatalities per kamikaze pilot in the Battle of Okinawa -- troop transports off Kyūshū would have been much more exposed.

- A study done for Secretary of War Henry Stimson's staff by William Shockley estimated that conquering Japan would cost 1.7 to 4 million American casualties, including 400,000 to 800,000

fatalities, and five to ten million Japanese fatalities. The key assumption was large-scale participation by civilians in the defense of Japan.

Outside the government, well-informed civilians were also making guesses. Kyle Palmer, war correspondent for the *Los Angeles Times*, said half a million to a million Americans would die by the end of the war. Herbert Hoover, in memorandums submitted to Truman and Stimson, also estimated 500,000 to 1,000,000 fatalities, and were believed to be conservative estimates; but it is not known if Hoover discussed these specific figures in his meetings with Truman. The chief of the Army Operations division thought them "entirely too high" under "our present plan of campaign."

The Battle of Okinawa, the very last pitched battle against Japan, ran up 72,000 casualties in 82 days, of whom 18,900 were killed or missing. This is conservative, because it excludes several thousand U.S. soldiers who died after the battle indirectly from their wounds. The entire island of Okinawa is 464 square miles; to take it, therefore, cost the United States 407 soldiers (killed or missing) for every 10 square miles of island. If the U.S. casualty rate during the invasion of Japan had only been 5 percent as high per square mile as it was at Okinawa, the United States would still have lost 297,000 soldiers (killed or missing).

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