



# H-Gram 032: Operation Forager and the Battle of the Philippine Sea

26 June 2019

## 75th Anniversary of World War II

### *The Invasion of the Marianas and Victory in the Philippine Sea*

*This H-gram covers Operation Forager, the invasion of the Marianas (initially Saipan on 15 June 1944) and the major components of the Battle of the Philippine Sea, specifically the "Great Marianas Turkey Shoot" and the sinking of two Japanese carriers by U.S. submarines on 19 June 1944, and the extreme-range "flight beyond darkness" on 20 June 1944.*

*Just after 0900 on 19 June 1944, in an action that typified the extreme bravery and utter operational futility of the Imperial Japanese Navy in the Battle of the Philippine Sea, Warrant Officer Sakio Komatsu deliberately crashed his Jill torpedo bomber into a torpedo heading for his ship, the aircraft carrier Taiho. Although Komatsu's courageous sacrifice destroyed the inbound torpedo, five others fired from submarine Albacore (SS-218) continued toward Taiho, the largest and newest carrier in the Japanese navy and flagship of Vice Admiral Jisaburo Ozawa's First Mobile Fleet. Four missed, but despite the failure of Albacore's target data computer, one torpedo hit the carrier, setting in motion a six-hour saga of struggle by her crew to save their ship even as she continued to operate, ultimately culminating in a massive explosion that doomed her and much of her crew despite yet another hour of valiant damage control.*



Saipan, 15 June 1944: Marines of the first invasion wave hug the beach and prepare to move inland. Note burning LVT in the background (USMC 81840).

*In the time it took for Taiho to die, the carrier Shokaku fought and lost her battle to live. Shokaku was hit by three or four torpedoes from submarine Cavalla (SS-244), which narrowly escaped destruction herself. The crew of Shokaku, the battle-scarred veteran of Pearl Harbor, Coral Sea, Eastern Solomons, and Santa Cruz, who had saved their ship twice before from devastating bomb damage, were this time no match for the torpedoes (which finally worked the way they were supposed to). They fought for over an hour to keep her from sinking, but, in the end, Shokaku took over 1,200 of her loyal crew to the bottom.*



A VF-1 "Top Hatters" F6F-3 Hellcat fighter is launched from USS Yorktown (CV-10) to intercept enemy forces during the "Great Marianas Turkey Shoot", 19 June 1944. Note the target information board being displayed in front of the carrier's island beyond the aircraft's propeller (80-G-248440).

Meanwhile, just as the Pacific Fleet intelligence officer Edwin Layton had predicted (although, unlike at the Battle of Midway, this time he was one day off in forecasting the start of the battle), the Japanese force of nine aircraft carriers with 440 embarked aircraft had sortied to give battle for the first time in almost two years, their hand forced by the arrival of 127,000 U.S. Marine and Army personnel and 535 ships off Saipan. A successful U.S. landing on Saipan would put the imperial palace in Tokyo in range of the new U.S. B-29 bomber. In an attempt to prevent that from happening, the Japanese launched Operation A-Go, intended to be the "decisive battle" to determine the fate of the empire. Actually it was, but not the way the Japanese intended, for with the loss of Saipan everyone at the highest level of Japanese government and military (and for the first time amongst the civilian population) knew that there was no way that Japan could win this war. It was only a question of how many would die on both sides to prolong the inevitable. The land battle would be a taste of things to come, as determined Japanese resistance, practically to the last man (and suicide of thousands of Japanese civilians) would cost the U.S. Marines and Army 3,400 dead and missing, making Saipan the deadliest campaign of the Allied Pacific offensive to date.

As the two Japanese carriers struggled to stay afloat, their aircraft were already airborne and heading for the U.S. Fifth Fleet covering the landings at Saipan. In four

raids from the nine carriers, 326 Japanese carrier aircraft threw themselves at the 15 carriers (seven fleet and eight light carriers) and seven fast battleships of Vice Admiral Marc Mitscher's Task Force 58, running into a buzz saw of 450 Hellcat fighters. With the aid of early tactical warning from radio intelligence detachments, and radar-directed intercepts controlled by fighter direction officers in new combat information centers (CIC), the overwhelming numbers of technologically superior Hellcats, flown by much better trained pilots, cut the Japanese formations to ribbons. About 224 of the 326 inbound strikers (the largest Japanese carrier raid of the war since Pearl Harbor) fell to the guns of fighter aces like David McCampbell and Alex Vraciu, along with others who became "ace-in-a-day."

The great majority of the enemy pilots were hastily and inadequately trained rookies, poor replacements for the extraordinarily capable, but irreplaceable, pilots of Japanese naval aviation lost in the battles earlier in the war. The relative ease with which the Japanese planes, especially the bombers, could be brought down, earned the action the name "Great Marianas Turkey Shoot," which, however, doesn't do justice to a few of the Japanese pilots who took some Hellcats with them.

However, also in a portent of things to come, and despite staggering losses, the Japanese aircraft that survived the fighter gauntlet kept coming. The inexperienced pilots expended themselves in futile attacks against the heavily armed and armored U.S. battleship force. For their sacrifice they achieved a few dents. Still, a handful of aircraft made it through to the U.S. carriers, but the aim of their bombs did not match their courage. These pilots still wanted to live, so damage was light. This would change in several months as desperation set in amongst the Japanese.

Late on the next day, the pilots and aircrews of TF 58 would prove their courage to be as great as the Japanese, as 226 planes launched on an extreme-range twilight strike at the remaining Japanese force. They knew that many would not have the fuel to make it a round trip and those that did would have to recover at night, for which almost none of them had trained. The results of the valiant strike were viewed as a disappointment for a number of reasons; one more Japanese carrier would be sunk (Hiyo) and four damaged. However, by the end of that day, Ozawa still had six carriers, but only 35 operational aircraft. The epic "flight beyond darkness" of the U.S. carrier aircraft culminated in Mitscher's bold action to risk his carriers

and “turn on the lights,” which saved many aviators from going into the water, although 86 planes still did. Fortunately, a massive search effort saved the great majority of those who didn’t make it back to their carriers.

The Battle of the Philippine Sea was a catastrophic defeat for the Japanese navy, with the loss of three fleet carriers and about 476 aircraft destroyed in the air and on the ground (including scouts and land-based naval aviation), and about 3,000 dead, in exchange for 42 U.S. Navy aircraft lost in combat (about 123 total from all causes) and 109 pilots, aircrew, and ship’s crew, an even more lopsided victory than the Battle of Midway. That didn’t stop the recriminations on the U.S. side regarding Fifth Fleet commander Admiral Raymond Spruance’s controversial decision to keep the carriers of TF 58 on a short tether to ensure the protection of the all-important landings on Saipan, rather than unleashing the carriers to roam in search of the enemy. Adherents of either position will find plenty of ammunition in attachment H-032-1.

I regret this H-gram came out a few days later than intended, but I was overwhelmed by the research for two massive amphibious invasions on opposite sides of the globe only a few days apart (Operation Neptune, the invasion of Normandy, and Operation Forager, the invasion of the Marianas). That the United States could pull off two such operations so close together, one of them across an expanse of thousands of miles, is a story in itself.

“Back issues” of H-grams, enhanced with photos and charts, can be found here [<https://www.history.navy.mil/about-us/leadership/director/directors-corner/h-grams.html>], along with other interesting history on the NHHHC website. As always, further dissemination is welcome, especially to the Fleet, so that our Sailors and commanders can better understand the legacy of valor that is their charge to uphold



Vice Admiral Marc A. Mitscher, commander of task Force 58, aboard USS Lexington (CV-16) during the Battle of the Philippine Sea, 19 June 1944 (80-G-236867)

## **H-032-1: Operation Forager and the Battle of the Philippine Sea**

*H-Gram 032, Attachment 1*

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***Intelligence***

On 14 June 1944, Commander Edwin Layton, the Pacific Fleet intelligence officer, briefed Pacific Fleet commander Admiral Chester Nimitz that the Japanese Navy was about to execute a modified version of the “Z-plan,” which had fallen into U.S. hands via Filipino guerillas several months earlier. There was some degree of skepticism among senior U.S. Navy commanders, as the Japanese carrier force had not sortied for battle since the Battle of Santa Cruz in October 1942. Nevertheless, Layton argued that the commander in chief of the Japanese Combined Fleet, Admiral Soemu Toyoda, correctly interpreted U.S. actions in the Marianas as a full-scale landing, not just a carrier raid, which would trigger Japanese navy plans for the “decisive battle,” upon which the fate of the empire depended. Loss of Saipan would put Tokyo, and the emperor, within

range of the new U.S. B-29 bomber, something the Imperial Japanese Navy could not allow to happen. So, it had no choice but to fight.

Layton stated the Japanese force would include nine aircraft carriers (correct), six battleships (there were five), and other escorts. Layton's prediction that the battle would commence on 17 June was off by a day (it commenced 18 June). Layton's assessment was based on extensive intelligence derived from Ultra cryptanalysis (code-breaking) intelligence, communications traffic analysis, and other intelligence over the previous several months that had been presented to senior commanders. Thus, it was not a surprise to either Nimitz or Chief of Naval Operations Ernest J. King; rather, it was just an accurate summation of what was about to happen, and would lead to the largest carrier battle in history. The bottom line would be that not even at Midway did the U.S. Navy have better intelligence support than Operation Forager and the Battle of the Philippine Sea.

### ***Japanese Strategy***

The Japanese recognized that Allied occupation of the Marianas, western Caroline Islands (Palau or Yap), or the Vogelkopf (Bird's Head) of New Guinea would penetrate what the Japanese defined as their inner defense perimeter. Throughout 1943 and into 1944, the simultaneous three-pronged Allied advances in New Guinea, the northern Solomon Islands, and the Gilberts/Marshalls repeatedly caught the Japanese off-balance. Although the Japanese put up a stiff fight wherever the Allies made a landing, the major elements of the Japanese fleet had not come out to fight since the Battle of Santa Cruz in October 1942 (for carriers) and Guadalcanal in November 1942 (for battleships). The outer islands were not deemed of sufficient value to risk the fleet in a major operation, or worth the immense amount of fuel it would take to conduct a major fleet action so far away. As a result, there had been almost no Japanese navy resistance (except for some submarine and land-based air attacks) to MacArthur's advance in New Guinea or to Nimitz in the Gilberts/Marshalls.

The Japanese understood that capture of the western end of New Guinea would put the critical oil fields in the occupied Dutch East Indies at risk. The capture of Palau/Yap would put the vital sea lane between southeast Asia and Japan at risk. The capture of the Marianas would bring Japan within range of the new B-29 bomber, which the Japanese were ill-prepared to handle. A potential breach of the inner defense perimeter was something that would require the Japanese fleet to engage in the long-awaited "decisive naval battle," called for in Japanese naval doctrine, and for which the fleet had been built and trained in the interwar period.

The Japanese Combined Fleet had several major weaknesses by this time in the war. One of the most critical was the extreme shortage of fuel (caused to a significant degree by U.S. submarine attacks). As a result, the major elements of the Combined Fleet were tied to anchorages at Borneo (where the oil was) and near Singapore, which significantly impacted training and readiness. A second major weakness was a shortage of destroyers. The Japanese had lost over 60 by this point in the war. The United States recognized this weakness, and submarines were ordered to sink Japanese destroyers as a priority target after capital warships, but before tankers and merchants (which would be taken to the extreme by Commander Sam Dealey's *Harder* [SS-257]—more in next H-gram).

Another key weakness was that the Japanese could not replace their losses of ships or aircraft, and especially of experienced pilots. After the Battle of Midway and Battle of Santa Cruz in 1942, the Japanese had lost about half of the aircrew who participated in the attack at Pearl Harbor. By the end of the Solomon Islands campaign, when Japan had put her carrier aircraft ashore at Rabaul and Bougainville, the losses of experienced aircrew continued to mount, particularly among senior pilots (squadron and flight leaders). The Japanese instituted a rapid training program, but there wasn't enough time or fuel to accomplish more than the basics. As a result, by mid-1944, the Japanese carriers had a small number of extremely good pilots, and a large number who were no match for U.S. pilots, despite having new types of aircraft.

## **Japanese Aircraft, 1944**

At the start of the war, the Japanese Nakajima B5N2 Kate carrier torpedo bomber was the best in the world (with a much better torpedo than the U.S. Navy). By 1944, the Nakajima B6N1 Jill had started to replace the Kates. Although the Jill was faster than the Kate, it was no match for U.S. fighters and still caught fire easily; developmental problems delayed production, so there were relatively few of them. At the start of the war, the Aichi D3A2 Val carrier dive bomber was roughly comparable to the U.S. Navy SBD Dauntless (except for also catching fire easily). By 1944, the Val had mostly been replaced by the Yokosuka D4Y1 Judy carrier dive bomber (Japanese name *Suisei*—Comet). The Judy was the fastest (just under 300 knots) and highest-flying carrier strike aircraft produced by either side during the war. In the hands of better pilots it might have been much more formidable.

By mid-1944, Japanese carriers were operating upgraded models (A6M5) of the famous Mitsubishi Zero (Code-name was "Zeke," but just as often referred to as "Zero"). The carriers were also operating older A6M2 Zekes (Model 21), modified to be fighter-bombers. Unless in the hands of an extremely good pilot, neither the A6M5 nor A6M2 was a match for U.S. Navy F6F-3 Hellcats or F4U Corsair fighters. One advantage that Japanese carrier aircraft had over U.S. carrier aircraft was longer range (but the penalty for longer range was inability to absorb damage).

## **Japanese Navy Organization and Leadership, 1944**

In the interim between Santa Cruz and mid-1944, the Japanese navy had undergone a major reorganization and change of leadership. After Admiral Isoroku Yamamoto was shot down and killed in April 1943, Admiral Mineichi Koga assumed the mantle of leadership until 31 March 1944, when his plane crashed off the Philippines in a typhoon. Before his death, Koga developed the "Z-plan" for the "decisive battle" in defense of the inner defense line, which with some variation would constitute the essential elements of how the Japanese would fight in the Battle of the Philippine Sea. After Koga's

death, Admiral Soemu Toyoda became commander in chief of the Combined Fleet, and developed Plan A-Go, a variation of Plan Z. Toyoda was considered by the United States to be highly intelligent, albeit with an abrasive personality like CNO Ernest J. King. (Like Yamamoto, Toyoda had been strongly opposed to going to war with the United States. Toyoda would have the distinction of being the only Japanese commander tried for war crimes after the war to be acquitted).

When Admiral Koga's Emily flying boat disappeared in a typhoon on 31 March 1944, a second Emily carrying Koga's chief of staff, Vice Admiral Shigeru Fukudome, crashed off Cebu, Philippines. (Koga had been shifting his headquarters from Palau after major U.S. Navy carrier airstrikes on the western Caroline Islands—Palau, Yap, and Wolei—between 22 March and 6 April that netted few Japanese ships, but destroyed over 200 Japanese aircraft). Fukudome survived the crash (after an eight-hour swim), but he and the briefcase he was carrying were rescued by Filipino fishermen and turned over to Filipino guerillas led by a "stay behind" U.S. Army lieutenant colonel (James M. Cushing). The guerillas traded Fukudome alive for a promise from the Japanese to stop killing civilians on Cebu (which the Japanese actually honored), but kept the briefcase that had the details of Plan Z. (The "Z" symbolism was quite deliberate. The "Z" flag was flown by Admiral Heihachiro Togo during his decisive defeat of the Imperial Russian navy at Tsushima in 1905. Vice Admiral Jisaburo Ozawa, commander of the First Mobile Fleet would hoist the Z flag at the start of Operation A-Go).

Fukudome had the distinction of being the only flag officer in Japanese history to be captured to that point. After his release by the guerillas, the Japanese tried him for "failure to commit suicide," but he was acquitted on the technicality that guerillas were not legal combatants, and therefore he had not been a prisoner of war. The more important point is that the contents of the briefcase were picked up by a submarine (some accounts say *Haddo*—SS-255). The plan in the briefcase quickly made its way back to MacArthur's headquarters in Brisbane, Australia, and copies thence to Pacific Fleet headquarters at Pearl Harbor,

where it was extensively studied by Commander Layton and Admiral Nimitz's intelligence team.

(Although Edwin Layton was still Nimitz's intelligence officer as he had been at Midway, the supporting intelligence infrastructure had grown immensely since Commander Joe Rochefort's band of code breakers in the basement of the 14th Naval District headquarters. By 1944, the Joint Intelligence Center Pacific Ocean Area (JICPOA), under the command of U.S. Army Brigadier General Joseph Twitty, conducted the full range of intelligence operations, to also include aerial reconnaissance photo interpretation, topographic and hydrographic mapping, captured document exploitation, human intelligence collection, and enemy prisoner-of-war interrogation, all supported by the closely-guarded and tightly held "Ultra" intelligence derived from breaking enemy codes and radio intelligence).

### ***The Japanese First Mobile Fleet***

The primary striking element of the Combined Fleet was the First Mobile Fleet (there was no Second or Third) under the command of Vice Admiral Ozawa, who was also considered by U.S. Navy intelligence to be a highly capable, combat-experienced commander. Nicknamed "Gargoyle" by his peers, Ozawa flew his flag on the new aircraft carrier *Taiho* ("Great Phoenix"), the only Japanese fleet carrier to be completed and become operational during the war, commissioned on 7 March 1944. *Taiho* was the second-largest carrier in the world at the time (after *Saratoga*—CV-3), with an innovative design that included the first armored flight deck in either the U.S. or Japanese navy (British carriers already had them). The penalty for the armor and her high speed was that she could carry fewer aircraft than the U.S. fleet carriers (65 aircraft compared to 90-100 for U.S. *Essex* class).

The First Mobile Fleet was the follow-on to the First Air Fleet (*Kido Butai*), which had achieved many victories, and a huge defeat, under Vice Admiral Chuichi Nagumo. Although Nagumo technically won his last battle (Santa Cruz), he was relieved of command of the Japanese carriers, and eventually relegated to command of the Central Pacific Area Fleet based on Saipan, which had only a few patrol

boats, transports, and mine warfare ships. Nagumo would end up as the senior Japanese officer on the island of Saipan, with blurred responsibility with the Imperial Army for its defense. He would end up committing suicide on 6 July 1944 as U.S. Marines and Soldiers overran Saipan.

### ***U.S. Strategy***

After many months of often contentious debate between the U.S. Army and Navy, the Joint Chiefs of Staff issued a directive on 12 March 1944 calling for the occupation of Saipan, Tinian, and Guam (the major islands in the Marianas chain) by 15 June and of the Palau Islands starting 15 September, under the command of Admiral Chester Nimitz, commander in chief of the Pacific Ocean Areas (CINCPAC). The directive also ordered that the Japanese stronghold of Truk and other islands in the Caroline Islands be neutralized, not captured (i.e., they would be beaten down by air bombardment, cut off from their supplies by aircraft and submarine, and bypassed).

General Douglas MacArthur, Commander-in-Chief of the Southwest Pacific Area, had vociferously argued that the main axis of advance should be westward along the northern coast of New Guinea to the Philippines (fulfilling his pledge, "I shall return"), and that Nimitz's forces should be in a supporting role for his advance—all under his command, of course. The Army generally supported MacArthur's concept, but the Navy emphatically did not. Under Admiral King, the Navy pushed for an advance across the central Pacific, through the Caroline Islands (with atoll lagoons suitable for massive fleet anchorages), with the intent of achieving a lodgment either on Formosa (now Taiwan) or the coast of China. From there, King hoped to take advantage of Chinese Nationalist manpower in bringing about the ultimate defeat of Japan without getting bogged down in a costly campaign in the Philippines. (The idea of using Chinese manpower would prove to be a non-starter, but that was not yet apparent in early 1944).

King's strategy did not initially envision capturing the Marianas, mostly because of the lack of a sizable port or anchorage and because the islands were considered to be heavily defended. Throughout

1943 and into 1944, the Joint Chiefs had avoided making a firm decision on either strategy, and both were allowed to proceed, albeit with constrained resources (since the invasion of Normandy was the priority). MacArthur's forces continued their advance westward along the northern New Guinea coast while Nimitz's forces captured key islands in the Gilbert (Tarawa, Makin) and Marshall (Majuro, Kwajalein, and Eniwetok) chains. The Navy even threw a bone to MacArthur with a series of air strikes by the Fast Carrier Task Force (TF 58) in support of his landings at Hollandia, New Guinea (21-24 April 1944).

The Army-Navy strategy impasse was broken when the U.S. Army Air Forces broke with the Army and sided with the Navy and the Central Pacific campaign, with the stipulation that the Marianas be taken. From there, the new long-range B-29 bomber could reach Japan (the attempt to bomb Japan from bases in China would prove to be a big bust as well). So, ultimately, the B-29 was the reason for Operation Forager, the plan to capture the Marianas.

### **The Marianas**

Guam was the southernmost and largest major island in the Marianas. It had been a U.S. possession since the Spanish-American War in 1898, until captured by the Japanese in the first days after Pearl Harbor. Guam had a native population of Chamorros who were friendly to the United States (many served with African Americans as stewards and cooks aboard U.S. ships in the segregated U.S. Navy). About 130 miles north-northeast of Guam are the islands of Saipan and Tinian, separated by a relatively narrow strait (artillery could reach across it), with Saipan (the larger of the two) to the north and Tinian to the south. Saipan and Tinian had been Spanish colonies until the Germans bought them in 1899. The Japanese took them from the Germans in 1914 and then retained them under a League of Nations mandate afterward. The Japanese colonized the islands, so both had a very large Japanese civilian population (over 25,000 on Saipan, mostly brought in from Okinawa). Since Saipan was closest to Japan (1,200 nautical miles from Tokyo), it was deemed the primary objective.

### **Operation Forager—Invasion of the Marianas**

The basic plan for Operation Forager called for Saipan to be taken first by a Northern Expeditionary Force, consisting of two Marine divisions (2nd and 4th) with the U.S. Army's 27th Infantry Division as a reserve. After Saipan was captured, those same forces would then land on Tinian. Meanwhile, the Southern Expeditionary Force, consisting of the 3rd Marine Division and a U.S. Army regimental combat team, would capture Guam. This plan would not survive contact with the enemy. Saipan was not as big as Guadalcanal or Bougainville, but unlike those two islands, which were mostly uninhabitable jungle, Saipan was much more developed and the whole island (about 12 miles by 6 miles) would need to be taken. The 30,000 or so Japanese defenders in the steep, hilly terrain would put up a very tough fight.

### **Major U.S. Forces for Operation Forager and the Battle of the Philippine Sea**

Admiral Chester Nimitz, commander in chief of the Pacific Ocean Areas and the U.S. Pacific Fleet, was in overall command from his headquarters at Pearl Harbor, Hawaii. The U.S. Fifth Fleet was commanded by Admiral Raymond Spruance, embarked on the heavy cruiser *Indianapolis* (CA-35). (With Spruance on *Indianapolis* was a mobile radio intelligence unit under Commander Gilven M. Slonim, which was cleared to receive Ultra intelligence). The joint expeditionary force (TF 51) was commanded by Vice Admiral Richmond K. "Kelly" Turner (a.k.a. "Terrible" Turner) embarked on the specially configured command ship *Rocky Mount* (AGC-3).

In addition to TF 51, Turner also commanded TF 52, the Northern Attack Force, which would assault Saipan. Turner's deputy commander was Rear Admiral Harry W. Hill (TG 52.2) embarked on the command-configured attack transport *Cambria* (APA-36) along with the commanding general of expeditionary troops and northern troops and landing force, Lieutenant General Holland M. "Howling Mad" Smith, USMC. This would be the first time in Marine Corps history that a Marine general would lead a corps-size (multi-division) force, in this case including a U.S. Army division. Transport Group Able (TG 52.3) embarked the 2nd Marine Division. Transport Group Baker (TG

52.4) embarked the 4th Marine Division. Both divisions would simultaneously assault the beaches at Saipan on D-day, set for 15 June. The joint expeditionary force reserve (TG 51.1) was commanded by Rear Admiral William H. P. Blandy, and embarked the U.S. Army's 27th Infantry Division, intended as a reserve force, but because of the intensity of fighting on the beachhead would be committed to battle by the second day.

Providing naval gunfire support to the landings were two fire support groups. Fire Support Group 1 (TG 52.17) was commanded Rear Admiral Jesse Oldendorf, embarked on heavy cruiser *Louisville* (CA-28) and included the Pearl Harbor-veteran battleships *Tennessee* (BB-43), *California* (BB-44), and *Maryland* (BB-46), as well as *Colorado* (BB-45), which had been absent from Pearl Harbor. *California* had been sunk at Pearl Harbor, raised, repaired and modernized. TG 52.17 also included numerous cruisers and destroyers. Since Spruance liked to watch naval gunfire, *Indianapolis*, with Spruance embarked, often operated with this group conducting close-in shore bombardment. Fire Support Group 2 (TG 52.10), was commanded by Rear Admiral Walden L. "Pug" Ainsworth and included Pearl Harbor-survivor battleship *Pennsylvania* (BB-38), in addition to *Idaho* (BB-42), *New Mexico* (BB-40), and numerous cruisers and destroyers.

Close air support for the Saipan landings was provided by seven escort carriers. Carrier Support Group 1 (TG 52.14) was commanded by Rear Admiral Gerald F. Bogan and included *Fanshaw Bay* (CVE-70), *Midway* (CVE-63—later renamed *St. Lo*), *White Plains* (CVE-66), and *Kalinin Bay* (CVE-68). Carrier Support Group 2 (TG 52.11) was commanded by Rear Admiral Harold B. Sallada, and included *Kitkun Bay* (CVE-71), *Gambier Bay* (CVE-73), and *Nehenta Bay* (CVE-74). Aircraft load out for escort carriers varied, but included FM-2 Wildcat fighter-bombers for close air support (up to 16 embarked) and TBM-1C Avenger torpedo bombers for anti-submarine warfare and close air support with bombs and rockets (up to 12 embarked).

The Southern Attack Force (TF 53) was commanded by Rear Admiral Richard L. Connolly, embarked on

command ship *Appalachian* (AGC-1) along with the commander of southern troops and landing force, Major General Roy S. Geiger, USMC. The initial plan was for the Southern Attack Force to assault Guam a few days after the initial landings on Saipan. TF 53 had separate transport and "tractor" groups (LSTs, etc.), but would share the bombardment and close air support assets. However, with the intense Japanese resistance on Saipan and the impending major fleet action, Spruance ordered the Guam landings postponed until 21 July, and the Southern Attack Force was ordered to transit back to Eniwetok and wait there. The exception was the Southern Force Carrier Support Group (TG 53.7) under Rear Admiral V. H. Ragsdale, consisting of escort carriers *Sangamon* (CVE-26), *Suwannee* (CVE-27), *Chenango* (CVE-22), *Corregidor* (CVE-58), and *Coral Sea* (CVE-57—later renamed *Anzio*). The older *Sangamon* class were larger and embarked 22 Hellcat fighters and about 8 Avenger torpedo bombers. TG 53.7 continued operations in the vicinity of Guam suppressing Japanese air activity.

### **Task Force 58**

Fast Carrier Task Force (TF 58) was commanded by Vice Admiral Marc A. "Pete" Mitscher, embarked on *Lexington* (CV-16). TF 58 included 15 carriers (7 fleet and 8 light carriers, embarking just over 900 aircraft) divided into four task groups. Initially, the fast battleships were divided among the carrier task groups to provide anti-aircraft protection, but with the prospect of an impending fleet action, Mitscher consolidated all seven battleships into one separate task group. Aircraft numbers in TF 58 would fluctuate with operational and combat losses, and replacements, but generally were about 930 carrier aircraft and 27 cruiser floatplanes (VOS squadrons).

Task Group 58.1 was commanded by Rear Admiral Joseph J. "Jocko" Clark, embarked on *Hornet* (CV-12), and included *Yorktown* (CV-10), *Belleau Wood* (CVL-24), *Bataan* (CVL-29), 3 heavy cruisers, 2 anti-aircraft light cruisers, and 14 destroyers (about 266 carrier aircraft). Of note, both *Hornet* and *Yorktown* had special Navy radio intelligence teams embarked.

Task Group 58.2 was commanded by Rear Admiral Alfred E. Montgomery embarked on *Bunker Hill* (CV-

17), with *Wasp* (CV-18), *Cabot* (CVL-28), *Monterey* (CVL-26), 3 light cruisers, and 12 destroyers (about 246 carrier aircraft). Future U.S. President Gerald R. Ford served as a surface warfare officer aboard *Monterey*.

Task Group 58.3 was commanded by Rear Admiral John W. Reeves, embarked on *Lexington* (CV-16) with Mitscher, along with *Enterprise* (CV-6), *San Jacinto* (CVL-30), *Princeton* (CVL 23), *Indianapolis* (CA-35) (with Spruance embarked), 3 light cruisers, 1 anti-aircraft light cruiser, and 13 destroyers (about 227 aircraft). Future U.S. President George H.W. Bush served as a pilot in Torpedo Squadron 51, embarked on *San Jacinto*.

Task Group 58.4 was commanded by Rear Admiral William K. Harrill, embarked on *Essex* (CV-9) along with *Langley* (CVL-27), *Cowpens* (CVL-25), 3 light cruisers, 1 anti-aircraft light cruiser, and 14 destroyers (about 161 carrier aircraft).

Task Group 58.7 was formed in anticipation of fleet action and was commanded by Vice Admiral Willis A. Lee. It included fast battleships *Washington* (BB-56), *North Carolina* (BB-55), *Iowa* (BB-61), *New Jersey* (BB-62), *Indiana* (BB-58), *South Dakota* (BB-57), *Alabama* (BB-60), 4 heavy cruisers, and 17 destroyers. The battleships embarked about 30 floatplane observation aircraft total. U.S. floatplanes were generally used for gunfire spotting and not for long-range reconnaissance, while the Japanese preferred to rely on battleship and cruiser-launched floatplanes for long-range reconnaissance rather than “waste” carrier aircraft on search. Ozawa, however, had absorbed the lessons of earlier battles and devoted significantly more carrier aircraft to long-range search than his predecessor Vice Admiral Nagumo ever had.

### **U.S. Pacific Fleet Submarines**

At the time of Operation Forager, about 40 U.S. submarines were operating in the Pacific, most under the command of Vice Admiral Charles A. Lockwood at Pearl Harbor. (The submarines operating out of Australia in General MacArthur’s area of operations, were not under Lockwood, but there was close coordination.) Submarine Task Force 17, under Lockwood’s immediate command,

contributed 19 submarines in support of Forager. All of the U.S. submarines were kept well clear of the Marianas operating area, so that any sub sighted near the landings could be safely presumed hostile and sunk. (Ironically, Lockwood’s counterpart, Vice Admiral Takeo Takagi, commander of the Japanese



Sixth Fleet –the submarine force–had issued the

*A Japanese bomb falls astern of USS Enterprise (CV-6) during the 19 June Japanese air attacks 80-G-238964.*

same orders, so neither side’s submarines operated in the primary U.S. operating area on the west side of Saipan and Guam during Operation Forager.) Five submarines operated in the vicinity of the Bonin Islands, three subs operated southeast of Formosa, five subs well west and southwest of the Marianas, and another six between Ulithi Atoll in the Carolines and the Philippines. When Ultra intelligence indicated that the Japanese carrier force would assemble at Tawi Tawi, off the northeast coast of Borneo (in MacArthur’s AOR), four Seventh Fleet subs were ordered to operate there and five others at various points in the Philippines.

### **U.S. Carriers**

Of the 15 carriers in TF 58, seven were fleet carriers and eight were light carriers. Six of the fleet carriers were of the new *Essex* class, completed after the outbreak of war: *Essex* (CV-9), *Yorktown* (CV-10), *Hornet* (CV-12), *Lexington* (CV-16), *Bunker Hill* (CV-17), and *Wasp* (CV-18). The *Essex* class embarked between 90 and 100 aircraft, including one fighter squadron (about 40 F6F-3 Hellcats fighters), one

bombing squadron (about 35 SB2C-1C Helldiver dive bombers, except *Lexington*, which still had 35 SBD-5 Dauntless dive bombers), one torpedo-plane squadron (about 18 TBF-1C or TBM-1C Avenger torpedo bombers, which could also drop bombs, depth charges, and some could fire rockets). The *Essex* class also all embarked a four-plane F6F-3N Hellcat night fighter detachment. The seventh fleet carrier was the pre-World War II *Enterprise* (CV-6), the last surviving *Yorktown*-class carrier. *Enterprise* embarked 69 aircraft: 31 Hellcats, 21 Dauntlesses, 14 Avengers and a three-plane F4U-2 Corsair night fighter detachment. The *Essex*-class *Intrepid* (CV-11) was still undergoing repair from a torpedo hit, and *Saratoga* (CV-3) was operating with a British task force in the Indian Ocean.

The eight light carriers in TF 58 were all in the *Independence* class, which had been built on light cruiser hulls as an expedient way to build more aircraft carriers: *Princeton* (CVL-23), *Belleau Wood* (CVL-24), *Cowpens* (CVL-25), *Monterey* (CVL-26), *Langley* (CVL-27), *Cabot* (CVL-28), *Bataan* (CVL-29), and *San Jacinto* (CVL-30). The light carriers embarked about 32 aircraft: 23 Hellcat fighters and 9 Avenger torpedo bombers. None of the light carriers operated dive bombers. (*Independence*—CVL-22—was still being repaired from previous torpedo damage).

The 15 carriers of TF 58 embarked about 452 Hellcat fighters, 24 Hellcat night fighters, 3 Corsair night fighters, 174 Helldiver dive bombers, 55 Dauntless dive bombers, and 193 Avenger torpedo bombers.

### **Japanese Forces**

For Operation A-Go, the “decisive battle” for the defense of the Marianas, the Japanese would commit 69 warships, most subordinate to Ozawa’s First Mobile Fleet. These included five fleet carriers (CV), four light carriers (CVL), five battleships (BB), eleven heavy cruisers (CA), two light cruisers (CL), 23 destroyers (DD), supported by 19 submarines. Ozawa wore three hats: First Mobile Fleet, “A-Force,” and Carrier Division 1 (CARDIV 1). A Force consisted of the new carrier *Taiho* (65 aircraft), the battle-scarred veteran *Shokaku* (“Flying Crane”—69 aircraft), and her lucky sister *Zuikaku* (“Auspicious

Crane”—75 aircraft). *Shokaku* had been badly damaged at both Coral Sea and Santa Cruz, but had survived, while *Zuikaku* had escaped significant damage both times, although her air group suffered heavy losses in both battles. *Shokaku* and *Zuikaku* were the last of the six carriers that executed the Pearl Harbor attack. Along with the carriers were two heavy cruisers, one light cruiser, and nine destroyers (two of the destroyers were sunk by submarines before the battle started). The A Force carriers embarked 80 A6M5 Zeke fighters, and *Zuikaku* also had 11 A6M2 Zeke fighter-bombers. In addition, there were 62 Judy dive bombers, nine older Val dive bombers, and 47 Jill torpedo bombers (209 carrier aircraft total).

B Force consisted of Carrier Division 2 (CARDIV 2), under the command of Rear Admiral Takajii Joshima, and included the medium carriers *Junyo* (“Wandering Falcon”—53 aircraft) and *Hiyo* (“Happy Falcon”—52 aircraft), and the light carrier *Ryuho* (“Dragon Phoenix”—32 aircraft). *Junyo* and *Hiyo* had both been laid down as luxury passenger liners before the war and converted to aircraft carriers during the conflict. *Junyo* had an excellent battle record, but *Hiyo* was prone to casualties, such as an engineering fire that kept her out of Santa Cruz. B Force embarked 137 aircraft: 54 Zeke fighters, 27 Zeke fighter-bombers, 11 Judy dive bombers, 23 Val dive bombers, and 11 Jill torpedo bombers. Escorting B Force was the battleship *Nagato* (eight 16-inch guns), one heavy cruiser, one light cruiser, and ten destroyers (two of which were sunk by bomb and collision before the battle).

Under Ozawa’s plan, A Force and B Force would operate in relative proximity, usually about 100 nautical miles behind a powerful van force that included three light carriers, four battleships, eight heavy cruisers, one light cruiser, and eight destroyers (one destroyer would be sunk by submarine before the battle started), under the overall command of Vice Admiral Takao Kurita. Carrier Division 3 (CARDIV 3), commanded by Rear Admiral Suetoshi Obayashi, included the light carriers *Chitose* and *Chiyoda* (both recently converted seaplane tenders carrying 31 and 29 aircraft), and the light carrier *Zuiho* (“Auspicious Phoenix”—30 aircraft). CARDIV 3 embarked 17 Zeke fighters, 46

Zeke fighter-bombers, nine Jill torpedo bombers, and 18 Kate torpedo bombers, for a total of 90 aircraft.

The van force also included the super-battleships *Musashi* and *Yamato*, the largest, most heavily gunned battleships in the world (nine 18-inch guns), and the elderly—but fast—battleships *Kongo* and *Haruna* (eight 14-inch guns). Additionally, there was a powerful contingent of the largest heavy cruisers in the world (armed with ten 8-inch guns except *Tone* and *Chikuma*, which had each sacrificed one twin 8-inch turret for additional float planes).

In theory, Ozawa could rely on a powerful land-based naval air force (the First Air Fleet, under the command of Vice Admiral Kakuji Kakuta, headquartered on Tinian). The First Air Fleet was very mobile, and could operate from a number of airfields in the Caroline Islands, such as Truk, Yap, and Palau. The number of aircraft varied widely depending on how many the U.S. Fast Carrier Force shot down and how many replacements the Japanese flew in. “Authorized” strength was 630 in the region including 500 in Marianas. Actual numbers varied from 250–540, and eventually down to almost nothing. Kakuta was prone to not telling anyone about how bad his losses were from repeated U.S. carrier raids in the spring of 1944. Had he done so accurately, Admiral Toyoda and Vice Admiral Ozawa would have had to seriously re-think their plan.

The essence of Ozawa’s plan was to rely on the range of Japanese aircraft, which was longer than that of their U.S. counterparts. Ozawa would launch his aircraft at maximum range while maneuvering A Force and B Force to remain out of range of U.S. carrier aircraft. Should the U.S. launch an air strike, Ozawa’s plan envisioned that the first Japanese ships they would encounter would be a powerful “flak trap” represented by the four battleships and eight heavy cruisers of the Van Force, with air cover provided by the three light carriers of CARDIV 3. In later battles, *Yamato* and *Musashi* would show that it would take prodigious amounts of ordnance to put them under. The lesson the U.S. Navy took away from Midway was “more dive bombers, less torpedo planes,” although Japanese major surface

combatants repeatedly proved themselves to be able to absorb considerable bomb damage and keep on ticking.

## **Battle Timeline, 1944**

### **21–23 February**

Carriers of TF 58 launched the first naval air strikes against Saipan, Tinian and Guam. Although sighted by a Japanese scout plane on 21 February still 300 nautical miles east of the Marianas, Vice Admiral Mitscher opted to press forward with the attack scheduled for the next day rather than turn away. That night, 20 G4M twin-engine Betty bombers in three waves attempted torpedo attacks on TF 58 without success. Between 22 and 23 February, TF 58 aviators claimed 51 Japanese planes shot down and another 72 destroyed on the ground. Six U.S. Navy aircraft were shot down. As important as the strikes was the extensive photographic reconnaissance by TBF Avenger torpedo bombers configured for photo intelligence collection, which was critical to the planning for amphibious assault scheduled for June.

### **6 March**

Submarine *Nautilus* (SS-168) torpedoed and sank the passenger ship *America Maru*, which was evacuating the more well-to-do Japanese civilian women and children from Saipan to safety in Japan. Of the 511 civilians, 4 military personnel, and 87 crewmen aboard, only 43 of the civilians were rescued by the Japanese escorts. Although some accounts claim *America Maru* was marked as a hospital ship, this does not appear to be true. Although she had previously served as a hospital ship for the Japanese army for many decades, she had been taken over by the navy some time in 1943, re-registered as a transport, painted gray and probably fitted with anti-aircraft guns. The destruction of this ship had a profound negative impact on the Japanese civilian population on Saipan, who became even more susceptible to Japanese military propaganda that the U.S. military would abuse them if they surrendered.

### 10 May

The Japanese set in motion Operation A-Go, still expecting that the most likely major U.S. operation would be in MacArthur's area at the western end of New Guinea, an assessment that had been reinforced by Mitscher's carrier strikes at Hollandia, New Guinea, in late April. The orders directed nine carriers to rendezvous at Tawi Tawi, off northeastern Bornea (also in MacArthur's area) close to Japan's main source of fuel oil, the Tarakan oilfields in Borneo. The carriers under VICE ADMIRAL Ozawa (TAIHO, SHOKAKU and ZUIKAKU) departed Lingga Roads near Singapore, while six other carriers departed Japanese home waters.

### 11 May

Captain Arthur McCollum, the intelligence officer for Admiral Thomas Kinkaid (commander, U.S. Seventh Fleet, MacArthur's naval component command) briefed Kinkaid that the Japanese navy would concentrate its force at Tawi Tawi by 15 May, to encompass most of its remaining strength, including a powerful carrier striking force. This assessment was based on Ultra code-breaking intelligence, which began detecting Japanese efforts to ready Tawi Tawi for major operations as early as 30 April.

### 13 May

A live-fire rehearsal for Operation Forager off Kahoolawe, Hawaii, turned deadly when the weather rapidly deteriorated. Shortly after 0200 (on 14 May), heavy seas caused a tank landing craft (LCT) lashed to the deck of tank landing ship *LST-485* to be swept over the side and lost. A platoon of Marines had been sleeping in the LCT and 19 drowned. Two other LCTs were also washed overboard from two other LSTs. The exercise had involved an experiment with fitting mortars onto the LCTs to provide additional fire support for an amphibious landing. The mortars proved to be wildly inaccurate (due to the motion of the LCTs) and the extra weight of the mortar ammunition was determined to be the reason the LCTs broke free during the storm. Vice Admiral Turner ordered the mortars and ammunition removed as a result.

### 14 May

In reaction to Ultra intelligence that indicated the Japanese would assemble at Tawi Tawi, several Seventh Fleet submarines begin to patrol the waters around the island. On 14 May, *Bonefish* (SS-223) badly damaged a tanker and sank the destroyer *Inazuma*, which went down with her skipper and 161 crewmen. Of note, *Inazuma* had given the coup de grace to the British heavy cruiser HMS *Exeter* with two torpedoes in the Java Sea on 1 March 1942. *Inazuma* had then rescued 379 crewmen from *Exeter* and another 151 from the U.S. destroyer *Pope* (DD-225), one of the last acts of "chivalry" in the Pacific War.

### 15 May

A temporary TF 58 task group, TG 58.6, under Rear Admiral Alfred E. Montgomery, including the fleet carriers *Essex*, *Wasp*, and light carrier *San Jacinto* departed Majuro to strike Marcus Island (1,000 nautical miles from Tokyo) on 19 May and then Wake Island on the way back to Majuro.

From mid- to late May, 17 Japanese submarines were sunk based on operational use of Ultra intelligence, including six sunk by the destroyer escort *England* (DE-635) (see H-Gram 030). The decimation of the Japanese submarine scouting line between Truk and New Guinea by *England* further convinced the Japanese that the western end of New Guinea would be the next Allied major objective. One of the submarines sunk (not by *England*) was en route Saipan carrying biological warfare agents (including bubonic plague) developed by Japan's Unit 731 in Manchuria. It is not known exactly which of the subs was carrying the agents.

### 21 May—West Loch Disaster

At 1508, an explosion occurred in Pearl Harbor's West Loch aboard *LST-353* as mortar ammunition was being off-loaded that triggered a chain reaction of explosions and mass conflagration amongst LSTs fully loaded with ammunition and fuel in preparation for Operation Forager. By the time the situation had been brought under control, six LSTs were destroyed, two LSTs badly damaged, three LCTs,

and 17 LVTs were lost, and a number of small yard craft were sunk, burned, or damaged. At least 163 were killed and more than 400 injured (there are conflicting accounts about how many Marines and Army stevedores were killed and whether those losses are included in the total. Some accounts claim that a much higher number of loss was suppressed—see H-Gram 029 for more detail).

### **22 May**

U.S. submarine *Puffer* (SS-268) fired torpedoes at the light carrier *Chitose*, which was attempting to conduct flight training off Tawi Tawi. Although the torpedoes exploded in *Chitose's* wake with no significant damage, this essentially curtailed further Japanese flight training (which was desperately needed) in the area.

### **24 May**

Rear Admiral Baron Matsuji Ijuin, commander of First Convoy Headquarters, was killed when his "flagship," the patrol boat *Iki*, was sunk by a U.S. submarine north of Saipan. Ijuin had been the victor at the Battle of Vella LaVella in the Central Solomons (see H-Gram 022), and had survived the sinking of his flagship *Sendai* at the Battle of Empress Augusta Bay (rescued by submarine *RO-104*, which was later sunk by *England*). He was considered one of the better Japanese admirals.

Intensive aerial reconnaissance of Saipan, ongoing since late April, revealed extensive Japanese reinforcement activity, with estimates of Japanese troop strength on the island rising to 15,000–18,000. (It was actually closer to 29,000, including all Army and Navy forces). Fortification activity was also increasing, although construction had been significantly hampered by submarines sinking cargo vessels with building materials, and many of the reinforcement troops that reached the island did so without their equipment, which also was at the bottom of the ocean. Much of the aerial reconnaissance was flown by Navy PB4Y (Navy version of B-24 bomber) aircraft flying from Eniwetok (escorted by U.S. Army Air Force B-24s), including low-altitude flights acquiring low angle oblique imagery of the beaches (i.e., a landing craft's eye view).

### **25 May**

The LST force for Operation Forager departed Pearl Harbor only one day late despite the West Loch disaster. An additional eight LSTs to replace those lost and damaged had been re-allocated on short notice (mostly at General MacArthur's area's expense), which was no easy feat.

### **27 May**

Allied forces under General MacArthur landed at Biak, New Guinea, further strengthening Japanese perception of the main Allied effort. This set in motion Operation *Kon*, the Japanese plan to oppose the landings at Biak with major Japanese Navy surface forces (I will cover the New Guinea campaign and the Operations of the U.S. Seventh Fleet in a future H-gram).

### **4 June**

Beginning 4 June, a wolf pack of U.S. submarines, "Blair's Blasters," with *Pintado* (SS-387) as flagship, repeatedly attacked a Japanese convoy attempting to bring reinforcements to Saipan, sinking several troop transports. Although the Japanese were able to rescue many of the 7,000 Japanese troops that ended up in the water, almost all the tanks, artillery, and other equipment went down with the ships. A similar convoy was attacked by *Trout* (SS-202) on 29 February 1944 in which *Trout* sank *Sakito Maru*, and 2,504 out of 4,124 troops and 105 crew perished. However, a depth-charge counterattack by convoy escort *Asashimo* sank *Trout* with all 81 hands.

Also on 4 June, a lone Nakajima C6N Myrt (a new type high-speed reconnaissance aircraft, as fast as a Hellcat), flown by Lieutenant Takehiko Chihaya, staged through Truk and Nauru, and flew a reconnaissance mission over Majuro Atoll, observing twelve U.S. aircraft carriers and many other ships. This mission was in preparation for Operation *Tan*, a plan by the Japanese to fly 27 torpedo bombers and 27 dive bombers from the home islands (to be led by Pearl Harbor strike leader Mitsuo Fuchida), staging through Marcus Island and Wake Island, to catch TF 58 by surprise in the "safe" forward operating anchorage at Majuro Atoll in the Marshalls.

## 6 June

TF 58 (111 warships) departed Majuro en route Operation Forager. TF 58 included 7 fleet carriers, 8 light carriers, 7 fast battleships, 8 heavy cruisers, 13 light cruisers, and 68 destroyers. Other elements of the 535-ship Fifth Fleet force, with 127,000 Marines and Army troops embarked, had begun departing Pearl Harbor, Guadalcanal, and Eniwetok as early as 14 May.

U.S. submarine *Harder* (SS-257), on her fifth war patrol, commanded by the already legendary Commander Samuel D. Dealey, was detected in the moonlight off Tawi Tawi while attempting to attack an oiler. The escorting destroyer, *Minazuki*, attacked. Dealey turned *Harder's* stern to *Minazuki* and fired three torpedoes "down the throat," with devastating result, sinking the destroyer. Only 45 of her crew were rescued.

## 7 June

*Harder* hit the Japanese destroyer *Hayanami* off Tawi Tawi with another "down the throat" shot, causing the destroyer to blow up and sink, taking 208 crewmen, the captain, and the commander of Destroyer Division 32 with her. Only 45 were rescued.

## 8 June

Japanese destroyer *Harusame* was detached from Ozawa's force to provide cover for a troop transport run to Biak, New Guinea, and was sunk by U.S. Army Air Force B-25 medium bombers with two direct bomb hits, killing 74, including the commander of Destroyer Division 27. Destroyer *Shigure* escaped damage and rescued 110. (I'll have to do an H-gram on *Shigure* as that ship really did have nine lives).

## 9 June

Another mission by Chihaya in the Myrt high-speed reconnaissance aircraft over Majuro discovered that TF 58 was gone, resulting in the cancellation of the *Tan* operation and warning that TF 58 was on the move. Chihaya's contact report was intercepted and broken by U.S. Navy radio intelligence.

Submarine *Harder* fired on an overlapping target of two Japanese destroyers near Tawi Tawi. *Tanikaze* was definitely hit by two torpedoes and suffered a massive boiler explosion and quickly sank, taking 114 with her; the commanding officer died later of wounds. *Harder* claimed to have hit and sunk the other destroyer, too, but there does not appear to be corroboration in Japanese records, so whatever the ship was remains a mystery.

## 10 June

A four-engine PB2Y Coronado flying boat from Eniwetok was scouting ahead of TF 58 as it approached the Marianas and encountered a Japanese twin-engine Betty bomber that was scouting for the U.S. forces. The Coronado pilot, Lieutenant John Wheatley maneuvered the large plane (named "Good Body") and was able to shoot down the Betty. This was the first Japanese "snooper" shot down in Operation Forager. Wheatley had previously shot down a Betty some months before. Over the next days, PB4Y Liberators of VPB-108 and 109 flying from Eniwetok shot down three Bettys. "Dogfights" between flying boats and bombers are something that I don't think has received enough study or credit. Also on 10 June, Hellcat fighters from light carrier *Bata* downed a Frances twin-engine bomber.

Despite the success of keeping snoopers at bay, the Japanese were well aware that TF 58 was on the move again. A Japanese snooper finally succeeded in sighting the force. Mitscher's intelligence officer (radio intelligence and Japanese linguist), Lieutenant (j.g.) Charles A. Sims, reported that based on Ultra intelligence, TF 58 had been definitely sighted. In the early days of the war, this would have been cause for the carriers to turn away as surprise was lost. Instead, Mitscher's response was to speed up and get to the target a day early.

## 11 June

TF 58 commenced air attacks on Saipan, Tinian, and Guam, beginning with a fighter sweep by 208 Hellcat fighters guided by radar-equipped Avenger torpedo bombers. All four TF 58 carrier task groups contributed aircraft. Initial U.S. claims were for 100 Japanese aircraft shot down, which was significantly

higher than the actual total, for a loss of 11 Hellcats, many to ground fire. Nevertheless, by D-day on 15 June, something in the order of 200 land-based Japanese aircraft had been destroyed in the air or on the ground, gravely weakening Japanese air power in the Marianas, a fact of which Ozawa had not been kept accurately apprised. The pilot of one of the downed Hellcats wound up drifting in a raft for 11 days before he was safely rescued.

TF 58 aircraft caught a convoy departing Saipan consisting of a dozen merchant ships escorted by a torpedo boat and nine patrol craft. Ten of the merchant ships, a torpedo boat, and three submarine chasers were sunk in multiple air attacks over two days.

### **12 June**

TF 58 bombing aircraft began working over Japanese positions in the Marianas, with emphasis on Saipan. Avenger torpedo bombers dropped incendiary bombs on the cane fields on Saipan near the planned landing beaches to deprive Japanese troops of cover. Few Japanese planes got airborne and only 22 were claimed to have been shot down.

### **13 June**

Naval shore bombardment of Saipan commenced, initially by the seven fast battleships of Vice Admiral Lee's TG 58.7, but these ships were not trained for shore bombardment (like the older pre-World War II battleships). The crews were unwilling to risk the new ships by coming in too close, so the bombardment was not very effective (although 63 16-inch guns firing 2,400 shells must have been an intimidating spectacle). The bombardment would be continued by the older battleships, along with cruisers and destroyers, which did come in very close to the shore in attempts to pinpoint and destroy Japanese strongpoints and gun positions. For the next two days, the bombardment ships expended prodigious amounts of ammunition working over the island, attempting to incorporate the lessons of Tarawa that called for longer bombardments. Nevertheless, the number of Japanese soldiers and guns that somehow managed to survive this deluge of shells would come as a shock on D-day, 15 June.

Six Japanese snoopers were shot down, and U.S. airstrikes continued ashore. Essex Air Group commander David McCampbell, who had survived the sinking of the carrier *Wasp* (CV-7) in September 1942, led a 46 plane strike against a Japanese convoy reported northwest of Saipan, but was unable to find it (because there wasn't anything left of it). McCampbell had shot down his first plane, a Zeke, the day before, and would go on to be the Navy's all-time leading ace with 34 kills. During a long-range search, four *Hornet* Helldiver dive bombers ran low on fuel and had to make an emergency landing on the light carrier *Bataan*. (The light carriers did not operate Helldivers as they were too big.) The first three Helldivers got aboard, but the fourth bounced over the barrier and smashed the other three; all four were then pushed over the side.

Late in the day, TG-58.1 (Clark) launched a 700-mile round trip strike against six Japanese ships reported west of Saipan. Radar-equipped night fighters guided the 21 *Yorktown* and *Hornet* Hellcats configured as fighter-bombers. The aviators claimed that two destroyers and a freighter were hit, but only one Japanese vessel was damaged.

The commander in chief of the Japanese Combined Fleet, Admiral Toyoda, issued the order, "Prepare for A-Godecisive operations." Ozawa's carrier forces raised anchor at Tawi Tawi. The *Kon* Operation by the super-battleships *Yamato* and *Musashi* in response to Mac Arthur's landings at Biak, New Guinea, was cancelled. The two battleships with three cruisers and five destroyers were ordered to rendezvous with Ozawa east of the Philippines after Ozawa came through San Bernardino Strait. The submarine *Redfin* (SS-272) twice attempted to attack Japanese ships as they left Tawi Tawi, but was unsuccessful. *Redfin's* contact report, however, was one of the most important of the battle. In a bad omen for the Japanese, an inadequately trained pilot crashed on board carrier *Taiho*, destroying six planes.

## 14 June

Intense U.S. shore bombardment and airstrikes on Guam and Saipan continued. A *Hornet* Hellcat pilot was shot down and parachuted into the water just off Guam. As the submarine *Stingray* (SS-161) attempted a rescue she came under heavy shore battery fires. *Stingray* backed off and then attempted a technique that had been briefed but never before attempted, the periscope rescue procedure. The submarine approached the downed aviator while submerged (risky in the shallow water) with only the periscope above water (which still gave the shore batteries a target) and the pilot would grab onto the periscope and hang on until the submarine could get out of range of the shore batteries. It took three hours and four attempts before the pilot was able to grab and hold on to the periscope for almost an hour, before being successfully rescued. Meanwhile two more Betty bombers were shot down attempting to snoop the carrier force.

The shore bombardment of Saipan, which commenced 13 June, expended a great quantity of ammunition, to the tune of 6,400 14-/16-inch, 19,000 6-/8-inch, and 140,000 rounds of 5-inch in just the first few days alone. The ships also expended 40 percent more fuel than anticipated, yet never ran short. An unsung hero of the Pacific campaign was Vice Admiral William L. Calhoun, commander of the Pacific Fleet Service Force, who kept the ships supplied with fuel, ammunition, and everything else they needed over an expanse of thousands of miles. (Saipan was over 1,000 miles from Eniwetok, which was just a staging area, and over 3,000 from Hawaii—which makes the 90 miles across the English Channel to Normandy look like a piece of cake).

Also on 14 June, Mitscher's intelligence officer, LTJG Charles A. Sims, briefed him on Japanese movements and that the Japanese were intending to send major air reinforcements via the Bonin Islands (Iwo Jima and Chichi Jima). Captain Arleigh Burke, Mitscher's new chief of staff, wondered who the heck this JG was who had access to Mitscher any time of day or night. Sims refused to say, until Mitscher intervened and had Burke read in to Ultra

intelligence. Mitscher's and Burke's relationship started out a bit rocky, as Mitscher was not keen on CNO King's new policy that all aviation commanders would have a surface warfare officer as chief of staff, and vice versa for surface warfare officer commanders. However, the relationship quickly blossomed as Burke was a uniquely talented officer and leader.

The upshot of Sims's intelligence briefing that day was that Mitscher decided he had enough time to send two of his four carrier task groups 1,000 miles to the northwest and work over the Bonin Islands (the Jimas). Rear Admiral Joseph J. "Jocko" Clark (CTG-58.1) was not initially keen on the task, mostly because he was worried he might miss the major fleet engagement that was shaping up. Rear Admiral William "Keen" Harrill (CTF-58.4) was not keen on the idea either, especially since the weather (and threat) forecast for the target area was pretty grim. However, once it was obvious that Mitscher's mind was made up, Clark accepted the task with his usual gusto. The two task group commanders were a study in contrasts. Clark had a deserved reputation for being a highly aggressive commander, while Harrill was by far the most cautious of any of Mitscher's task group commanders. Clark was a Cherokee Indian, and the first Native American to graduate from the U.S. Naval Academy (Class of 1917), where he acquired his nickname, "Jocko," which he never particularly liked. (Clark would go on to command U.S. carrier forces and the Seventh Fleet during the Korean War). Clark and Harrill would have a contentious relationship on the Bonin mission with their diametrically opposed leadership styles.

In another bad omen for the Japanese, late on 14 June, the Japanese destroyer *Shiratsuyu* was escorting one of Ozawa's two oiler groups past Surigao Strait in the Philippines, when a false torpedo warning caused the *Shiratsuyu* to maneuver across the bow of the 10,000-ton oiler *Seiyo Maru*. The resulting collision sliced *Shiratsuyu* in half, which sank so quickly the Japanese could not "safe" the depth charges, which detonated and took a terrible toll of the survivors in the water. *Shiratsuyu* took 104 crewmen and her skipper to the bottom.

## 15 June, D-day on Saipan

At 0542, 300 amphibious tractors (LVT) were in the water, forming up for the assault on beaches at the southwest side of Saipan, with Aslito airfield as a principle objective. Close naval gunfire support was provided by old battleships *Tennessee* and *California*, the heavy cruiser *Indianapolis* (with Admiral Spruance embarked), the light cruiser *Birmingham* (CL-62) with her rapid-fire six-inch guns, and seven destroyers, plus a number of LCI gunboats for very close-in support. Seventy-two FM-2 Wildcats from the escort carriers strafed and rocketed the beach area just before H-hour.

Extensive beach, lagoon, and reef reconnaissance had been conducted by Navy Underwater Demolition Team 5 (UDT 5) under the command of Lieutenant Commander Draper Kauffman (future USNA Superintendent and vice admiral) over the previous days and nights, often under heavy fire, for which Kauffman would be awarded a second Navy Cross (his first was for disarming bombs at Pearl Harbor). This reconnaissance, among other things, resulted in a change to the Marines' planned route for amphibious tanks, which prevented them from getting trapped before reaching the beach.

At 0845, the first wave hit the beach as scheduled, with the leading elements of the 2nd and 4th Marine Divisions. Within 28 minutes, 8,000 Marines were ashore, with another 12,000 on their heels, but meeting intense resistance. The Japanese had a surprise in store: numerous extremely well-concealed artillery and mortar positions on the reverse slopes of ridges and in ravines, where they could not be seen or hit by naval gunfire. Their camouflage was so good that they had eluded detection by the extensive pre-landing aerial reconnaissance effort, and they would continue to be extremely difficult targets for aircraft to find, let alone hit. The rain of accurate Japanese artillery and mortar fire on the beach inflicted heavy Marine casualties in personnel and vehicles, a lot more like Tarawa than Kwajalein. Artillery fire even hit battleship *California*, killing one and wounding nine, knocking out her search and forward fire control radars, and leaving her guns silent for 15 minutes.

Japanese gun positions and machine gun nests that had survived the bombardment were positioned to enfilade the beaches (fire lengthwise) and took a heavy toll. By nightfall, the Marines held a beachhead six miles wide but only a half mile (or less) deep, but a large Japanese counterattack that night failed to break through and suffered very heavy losses. The intensity of Japanese resistance caused Lieutenant General Smith to order that the reserve force, the Army's 27th Infantry Division, be landed the next day.

Japanese air reaction to the Saipan landings was minimal, although about 13 Japanese aircraft were shot down. A small air attack by Guam-based Japanese torpedo bombers developed in the morning against TG 53.8 (Reeves) with one torpedo close enough that the TF 58/TG 58.3 flagship, *Lexington* (CV-16), had to maneuver to avoid it. Captain Arleigh Burke observed the torpedo narrowly miss. The only casualties in the attack were three crewmen on escorting destroyers killed by "friendly" anti-aircraft fire. Despite the lack of result, the Japanese made extravagant claims about damage inflicted.

Also on 15 June, Rear Admiral Clark (CTG 58.1) and Rear Admiral Harrill (CTG 58.4) hit the Bonins with aircraft from three fleet carriers and four light carriers, despite the poor weather. In fact, Clark had insisted on an accelerated transit, despite Harrill's reluctance, to get there a day earlier than planned, in order to beat the worst weather. Japanese air defenses in the Bonins were actually well-developed with radar and a high concentration of anti-aircraft artillery. The carrier strike was detected about 60 miles out and Japanese fighters rose to meet it, but the average quality of the Japanese pilots and their aircraft could not compare. U.S. pilots claimed to have downed 40 Japanese aircraft (actual was 27) for the loss of two Hellcats, and claiming 86 destroyed on the ground. A half hour after the fighter sweep, carrier bombers hit a range of targets around the islands. Four were shot down over Iwo Jima and two more were lost at Chichi Jima and Haha Jima, although about 20 Japanese float planes were destroyed there. Four Hellcat fighters, one Helldiver dive bomber, and one Avenger torpedo

bomber crashed on recovery due to the heavy sea state.

In the late afternoon of 15 June, submarine *Flying Fish* (SS-229) sighted a large group of Japanese ships exiting San Bernardino Strait in the Philippines, further confirming that the Japanese carrier force was coming out to fight. *Flying Fish* was unable to attempt an attack because of low fuel state, but the contact report was critical.

Also on 15 June, submarine *Seahorse* (SS-304) sighted a Japanese force with large surface ships heading north from the New Guinea area, but due to a mechanical malfunction was unable to pursue. Although unknown at the time, this sighting was *Yamato*, *Musashi*, and escorts heading north to rendezvous with Ozawa after the cancellation of the *Kon* operation to relieve Biak, New Guinea. Between the Ultra intelligence and the submarine sightings (which were enabled by Ultra), Spruance now had no doubt the Japanese were coming out to fight. Spruance requested that General MacArthur extend the search range of B-24 Liberators based in his area to maximum range, which was granted, while Spruance ordered six of the large Martin PBM Mariner flying boats to deploy forward from Eniwetok and operate from the roadstead off Saipan. For the Japanese part, with major U.S. landings on Saipan confirmed, Admiral Toyoda issued the *A-Go* execute order, with Saipan as the focus of operations rather than New Guinea.

A full account of the battle for Saipan is beyond the scope of this H-gram as it was mostly a Marine and Army affair, albeit with continuing extensive Navy gunfire, air, and logistics support. However, instead of a week, it would take two months to fully secure the island, at a cost of over 3,400 Marines and Army soldiers killed or missing, making it the costliest campaign of the Pacific offensive to date. In a controversial decision, at Marine Lieutenant General Smith's insistence, Admiral Spruance relieved the commanding general of the 27th Infantry Division for being insufficiently aggressive. (A close look at the terrain over which the Army was fighting, "Death Valley," might make one more sympathetic to that service.)

Combat actions during the Battle for Saipan included the largest Japanese tank attack of the war (defeated by Marine bazookas and half-tracks with 75-mm guns) and, on 7 July, the largest suicidal *banzai* charge of the war. Over 3,000 able-bodied troops, followed by more than 1,500 walking wounded and often unarmed soldiers, overran the U.S. Army front lines, penetrating deep into the rear into command posts and hospital tents. Three U.S. Army personnel would be awarded posthumous Medals of Honor for their actions during the charge. Over 650 U.S. Army troops were killed or wounded, but over 4,300 Japanese died in the charge.

The same day as the *banzai* charge, the Japanese commander, Lieutenant General Saito, committed suicide, as Vice Admiral Nagumo had done the day before. Another senior Japanese casualty was Vice Admiral Takeo Takagi (who had commanded Japanese forces in the Battle of the Coral Sea) and was the commander of the Japanese Sixth Fleet (Japan's submarine force), which was headquartered on Saipan after evacuating from Kwajalein. Takagi's fate is actually unknown—he just disappeared.

General Saito had fought the battle with great skill against overwhelming odds and despite no hope of resupply or relief. Almost the entire Japanese force on the island, about 29,000, was killed. Although most resistance was over by 9 July, a band of Japanese continued a guerilla campaign all the way into September. However, most shocking to the Americans were the suicides of over 7,000 Japanese civilians, including over 1,000 men, women, and children who jumped off the cliffs at the north end of the island despite an intense American psychological campaign to convince them to surrender. This event had profound impact on many American commanders, like Nimitz and Spruance, who came to believe that in the face of that kind of fanaticism an actual invasion of Japan would be a really bad idea. On the flip side, however, if Japanese civilians were just going to kill themselves, other U.S. commanders reasoned that there need be no moral qualms about fire-bombing their cities, which B-29s from Saipan and Tinian commenced in March 1945, after the "daylight precision" raids beginning in November 1944 proved ineffective.

## 16 June

On the day that Clark (CTG 58.1) and Harrill (CTG 58.4) were originally scheduled to strike the Bonins, the weather was so bad that morning flight ops were cancelled (the bad weather was actually an approaching typhoon). There was a slight break in the weather just after noon, and Clark launched a 54-plane strike on Iwo Jima that caught the Japanese by surprise, since they assumed no one in their right mind would be flying. However, due to the weather, not much was accomplished by the strike, and only one *Yorktown* aircraft was lost. Harrill chose not to launch. In another surprise, Clark ordered his carriers to refuel his destroyers despite the heavy sea state in order to be ready for the impending fight (and resulting in some pretty dramatic “unrep” photos).

Japanese air resistance from Guam continued to decline, with one Emily flying boat and one Betty bomber shot down, and more ridiculous Japanese claims of damage. One *Enterprise* Hellcat was shot down by “friendly” shipboard fire, despite having IFF.

U.S. submarines continued to track Ozawa’s movements. *Cavalla* located Ozawa’s Second Supply Force of oilers. Initially breaking off to return to station, Vice Admiral Lockwood ordered *Cavalla* to trail the oilers in anticipation that they would lead to the carriers, which proved correct.

## 17 June

Throughout 17 June, Japanese reconnaissance flights kept trying to locate U.S. ships and kept meeting the same fate. Fighters from the escort carriers supporting the Saipan landings accounted for eight of ten shot down. However, an attack by five Jill dive bombers from Guam succeeded in planting a bomb through the aft elevator of the escort carrier *Fanshaw Bay* (CVE-70), killing 14 sailors and forcing her to return to Pearl Harbor for repairs.

At Saipan, the six VP-16 PBM Mariner flying boats arrived from Eniwetok, to be tended by *Ballard* (AVD-10), which would enable searches out to 600

miles. (Of note, *Ballard*’s presence at French Frigate Shoals had—quite deliberately—foiled a Japanese attempt to conduct a flying-boat reconnaissance of Pearl Harbor just before the Battle of Midway, preventing the Japanese from discovering that the U.S. carriers had departed. *Ballard* also subsequently rescued 35 Japanese crewmen from the sunken carrier *Hiryu* several days after the Battle of Midway).

On the evening of 17 June, after trailing the oilers, *Cavalla* reported sighting a force of at least 15 ships. *Cavalla* passed up a chance to attack, figuring the contact report was more important—which it was—as this was Ozawa’s main body.

Also on the evening of 17 June, Ozawa held a strategy session on board carrier *Taiho* with his senior commanders. From Japanese intelligence, Ozawa knew that he was facing Mitscher and Spruance. Ozawa assessed, correctly, that Mitscher would want to come after him, but that Spruance would keep his carriers within 100–200 miles of Saipan in order to ensure the landings were not exposed to an attack. Ozawa planned to keep his forces outside the maximum range of U.S. carrier aircraft, assessing that the location of the U.S. carriers was relatively fixed. He would then use his range advantage to hit the U.S. carriers, hopefully in conjunction with land-based strikes coming from Guam in the opposite direction, and giving the option for his planes that couldn’t make it back to the carrier to land and re-arm on Guam and strike again before shuttling back to the carrier. It was a great plan on paper, but what Ozawa didn’t know was how badly Japanese air power on Guam had already been beaten down by U.S. carrier strikes.

Ozawa also decided to hedge his bet a bit, and initially hold back the planes from B Force, Carrier Division Two (*Junyo*, *Hiyo*, and *Ryujo*), to guard against Mitscher sending one or more carrier task groups to “flank” his position. Both Ozawa and Spruance would base much of their decisions during the battle on concern that the opposing force would split and send part on a flanking movement, an action that, ironically, neither Ozawa nor Spruance ever intended. Based on Japanese intelligence,

Ozawa thought he was up against a force of four carrier task groups (correct) consisting of 12 aircraft carriers (actual number 15). For the U.S. part, Spruance had the Pacific Fleet intelligence estimate that he would be opposed by nine aircraft carriers with 450 embarked aircraft, which was only about ten planes off (440).

### 18 June

At 0400 on 18 June, Captain Burke informed VICE ADMIRAL Mitscher of the CAVALLA sighting, concluding that Ozawa would be 660 miles west of Saipan at dawn. If Task Force 58 immediately began moving toward the Japanese force, Ozawa's First Mobile Fleet would be in range of U.S. carrier aircraft by late afternoon. Planning ahead, Mitscher asked Vice Admiral Lee (CTG 58.7) if he wanted to seek a night engagement with his seven new battleships. Lee was the Navy's foremost expert on radar-directed gunnery and had achieved the decisive victory of the Guadalcanal campaign in a night action on 14-15 November 1942, sinking the battleship *Kirishima* with radar-directed gunfire. Lee's response took everyone aback, "Do not, repeat do not, believe we should seek night engagement." Although Lee had won the battle off Guadalcanal, it was only after the battleship *South Dakota* had been put out of action, with three of his four destroyers sunk and the fourth crippled. It was his flagship *Washington* alone against about 14 Japanese ships and narrowly missed by scores of Japanese torpedoes. Lee was salivating for a surface action, in daylight. Spruance, however, refused to release either Mitscher or Lee, which made the discussion moot. Rear Admiral Clark (TG 58.1) and Rear Admiral Harrill (TG 58.4) also rejoined TF-58 following the Bonins mission.

At daybreak on 18 June, both U.S. and Japanese carriers began launching search missions. At 0600, the respective forces were about 420 miles apart. U.S. carrier aircraft flew out to 325 nautical miles and sighted no ships. The first Japanese search wave consisted of 14 Kate torpedo bombers and two Jake floatplanes from the Japanese van force. The Japanese sighted no U.S. ships but did encounter U.S. scout aircraft and three of the Japanese scout aircraft were shot down in engagements with U.S.

scouts. In addition, two Judy dive bombers, a Betty bomber, and a Jake floatplane, all from Guam, were shot down while searching for U.S. carriers.

At noon, Ozawa launched an additional wave of scouts: 13 Judy dive bombers and two Jake floatplanes, and then changed course to maintain distance. At 1500, Scout No. 15 sighted U.S. carriers, followed a few minutes later by Scout No. 13 sighting a force of U.S. ships without carriers (probably Lee's TG 58.7 battleship force).

Late in the afternoon of 18 June, Japanese aircraft on Guam showed they weren't quite dead yet, as Japanese dive bombers struck a group of U.S. oilers about 30 nautical miles southeast of Guam. Although U.S. destroyers shot down three aircraft, the oiler *Neshanic* (AO-71) was hit by a bomb, *Saugatuck* (AO-75) was sprayed with shrapnel from near-misses, and *Saranac* (AO-74) was hit by a bomb that killed nine and left her dead in the water. *Saranac* initially had to be towed, but eventually made it back to Pearl Harbor under her own power. Wildcat fighters from escort carrier *Coral Sea* shot down ten Japanese bombers.

In reaction to the 1500 contact reports, Rear Admiral Obayashi, commander of Carrier Division 3 (light carriers *Chitose*, *Chiyoda*, and *Zuiho*), operating with the van force, very aggressively and on his own initiative ordered the launch of a 67-plane strike, which would have reached the U.S. carriers after dark and probably would have been a big surprise. Whether or not the inexperienced Japanese pilots could have pulled it off is another matter. However, most of the strike was already airborne (which Ozawa didn't know), when he ordered a course change to the southwest to maintain his range advantage. As a result, Obayashi recalled the strike. Had Spruance permitted Mitscher to close the Japanese as he wanted, the late afternoon strike would have encountered the heavy anti-aircraft fire (flak trap) of the four Japanese battleships and eight heavy cruisers, no doubt expending much ordnance for significant losses, while Ozawa's big carriers remained safe 100 nautical miles to the rear.

On the evening of 18 June, submarine *Finback* (SS-230) sighted searchlights, but was too far to engage.

These lights were from Obayashi's CARDIV 3 recovering straggling scout planes in the dark (which demonstrated that Mitscher wasn't the only carrier commander willing to "turn on the lights" to bring aviators back on board in the night). CARDIV 3 only lost one plane in this aborted strike evolution.

Also on the evening of 18 June, Ozawa made one of his biggest mistakes, transmitting a radio message to Vice Admiral Kakuta (on Tinian as commander of the remaining Japanese land-based aircraft in the Marianas) to coordinate strikes the next day, with the idea that Ozawa's carriers would strike from the west and Kakuta's land-based aircraft would strike from the east. Kakuta got the message, and just about every land-based aircraft at Guam and Tinian (those that were left) would attempt to get airborne the next morning. However, the U.S. Pacific Fleet high frequency direction finding (HFDF) network got an accurate fix on Ozawa's position, which was quickly disseminated to Spruance.

Despite the recommendation of his Japanese linguist intelligence officer, Commander Gilven Slonim, Spruance distrusted the HFDF fix, believing it was possible deception to cover an end-around move. Spruance's concern was partly based on the fact that the original captured Japanese Z-plan discussed the possibility of splitting the force (which the Japanese had repeatedly shown they were prone to do throughout the war), and conduct an end-around. However, the A-Go plan that Ozawa was executing had dropped that aspect.

Spruance was initially reluctant to believe that the Japanese carrier force would come out and fight, after almost two years of inactivity. However, by now it was clearly apparent to him that the Japanese intended to force a carrier action. Spruance also accurately assessed that Ozawa would keep his forces at a distance, knowing the U.S. would need to protect the landings at Saipan, which were in a very vulnerable stage. Spruance decided that his higher mission was to protect the landings from Japanese surprise attack, and the carriers would assume a defensive posture with maximum fighter protection (there were about 450 Hellcats in the Force).

During the night of 18-19 June, Mitscher repeatedly implored Spruance to release the carriers to pursue the HFDF position report, and Spruance repeatedly refused. The aviators in the carrier groups were incensed, believing that the best defense was a good offense and tying carriers to a land operation was an inappropriate use of carrier airpower. Carrier staffs wrote flaming messages that weren't sent. At least one carrier skipper threw his cover on the deck and stomped on it in frustration. Clark (TG 58.1) was particularly apoplectic and Mitscher spent time brooding in his cabin. Even Arleigh Burke took the side of the aviators. However, Spruance wouldn't budge. His overriding mission was to capture Saipan, not chase after the Japanese fleet, and he could not possibly risk failure of the Saipan landings. Those who would accuse Spruance of being overly cautious would note that the Saipan landings were still protected by seven pre-war battleships and twelve escort carriers (with 200 aircraft), even without the carriers and 900 aircraft of TF 58.

### ***19 June, the "Great Marianas Turkey Shoot"***

At 0100 on 19 June, a Japanese plane, probably from Guam, dropped float flares in the vicinity of the carriers of TG 58.1 (Clark), usually a harbinger of a night torpedo bomber attack. The destroyer *Burns* (DD-588) attempted the novel approach of dropping depth charges on the flares to douse them. It didn't work, but neither did any attack materialize.



*Lieutenant (j.g.) Alexander Vraciu, USNR, VF-16 ace, holds up six fingers to signify his "kills" during the "Great Marianas Turkey Shoot," 19 June 1944. Taken on the flight deck of the USS Lexington (CV-16), the TF 58 flagship (80-G-236841).*

At 0200, Spruance was informed of the *Finback* sighting the evening before. What Spruance didn't know was that one of the PBM Mariners searching near the HFDF contact reported radar contact on over 40 ships within 70 nautical miles of the HFDF position, which confirmed the validity of the HFDF hit. However, for unknown reasons, but later attributed to "atmospherics," the PBM's radio contact report was not received by anybody. Failing to get any acknowledgment, the PBM pilot broke off the search and flew directly back to make a report in person. By the time it reached Spruance, many hours had gone by. Spruance instantly recognized it as a great missed opportunity, and later described it as one of the greatest missed opportunities of the battle. Had the report been received in a timely manner, Mitscher's carriers could have hit the Japanese at dawn.

Also at 0200, 14 radar-equipped Avenger torpedo bombers from *Enterprise* launched a nighttime search for Ozawa's carriers that fell short by 60 miles.

At 0300, Ozawa ordered his force onto an attack course to the northeast.

At 0430, the Japanese van force, under Vice Admiral Kurita, commenced the first of a two-phase search, launching 16 Aichi E13A Jake floatplanes from his battleships and cruisers. The Jakes would fly 350 miles and commence their cross legs at 0700. Only six of the 13 would return. Eight were shot down by TF 58 fighters, another was shot down trying to reach Guam, and one was just never heard from again.

At 0515, Rear Admiral Obayashi's CARDIV 3 with the van force launched 14 Kate torpedo bombers as scouts. Of these aircraft, none would find anything except American fighters, and half would be lost.

At 0530, a third Japanese search wave was launched from CARDIV 1 (*Taiho*, *Shokaku*, and *Zuikaku*), consisting of eight Judy dive bombers and two Jake floatplanes, looking for an American end-around that wasn't there. By 0600, Ozawa had 43 scout aircraft airborne. At that time, TF 58 was roughly 230 nautical miles west southwest of Guam and Ozawa another 300 or more miles beyond that. From Tinian, Vice Admiral Kakuta issued a call from reinforcement from Japanese Islands in the Carolines. A measly 17 planes, including 13 Zeke fighters and two night fighters, would show up, most to be quickly shot down.

At 0547, Hellcats from *Cabot* downed one of two Judy dive bombers scouting the TF 58.2 (Montgomery). Although located to the west of the task group, these Judys were probably from Guam.

At 0550 a dozen Zeke fighter-bombers from Guam or Tinian attacked the screen of TG 58.7 (Lee's battleships), but scored no hits. Mitscher also received reports of heavier-than-anticipated Japanese air activity over Guam. Apparently Vice Admiral Kakuta was launching everything that could fly, bringing a number out of hiding.

By 0600, TF 58 fighter aircraft arrived over Guam in significant numbers to keep those airfields suppressed during the impending carrier battle. TF 58 fighters would claim to shoot down 160 Japanese aircraft over Guam during the day, which was exaggerated, but still a very large number were downed. Scout teams were also launched from TF 58 carriers, five from *Lexington* and three from *Essex*, but none found any Japanese ships. By 0600, TF 58 fighter combat air patrol (CAP), guided by shipboard radar and fighter direction officers, had downed at least ten of the first wave of Japanese scouts from CARDIV 3, including five Jake floatplanes. Hellcats also accidentally shot up one of the PBM Mariner flying boats, killing one aircrewman.

At 0730, one of the Jakes from Kurita's van force sighted U.S. ships, including two carriers, 160 nautical miles due west of Saipan, which wasn't an accurate position, causing Ozawa some consternation as it suggested multiple U.S. carrier

task groups operating across a 200-nautical mile swath of ocean. However, at 0734, Japanese Scout No. 9 sighted a force with no carriers (probably Lee's TF 58.7 battleships), then sighted Harrill's TF 58.4 carriers, which were operating just to the north of Lee's battleships. Japanese Scout No. 7 then sighted the carriers of TG 58.1 (Clark). This position report "71" would be the most accurate Ozawa would receive all day. Ozawa turned south to preserve distance and ordered strikes to commence launching. (Of note, Ozawa had the "weather gage" for the entire battle. The wind was from the east, so the Japanese could close the distance, if they chose, to the U.S. while launching and recovering aircraft, while U.S. aircraft had to keep turning away from the Japanese in order to conduct flight operations.)

By the morning of 19 June, Mitscher had arrayed his five task groups in two north-south lines. To the east in the middle was TG 58.3 (Reeves) centered on *Lexington*) with both Mitscher and Reeves embarked as the TF 58/TG 58.3 flagship. Operating about 12 nautical miles to the north was TG 58.1 (Clark) and 12 nautical miles to the south was TG 58.4 (Montgomery), the distance being close enough to give mutual fighter support without each task group interfering in the flight operations of the others. About 12 nautical miles west of TG 58.1 (Clark) was TG 58.4 (Harrill).

To the south of TG-58.4 and southwest of the other task groups was TG 58.7, Lee's seven fast battleships. Expecting that Japanese carrier strikes would come from the west-southwest, Mitscher intended for the battleships to be the first thing the Japanese aircraft found. Mitscher was setting up exactly the same kind of flak trap as Ozawa was with his van force battleships. The battleships could put up intense amounts of anti-aircraft fire and absorb a lot more punishment than the carriers could. As it turned out, the battleships could put up so much anti-aircraft fire that they absorbed almost no punishment. (The Japanese battleship anti-aircraft fire wasn't nearly as good as the U.S. Navy's by that point of the war, but it wouldn't be tested in this battle.)

Between 0830 and 1130, Ozawa's nine carriers would launch 326 aircraft in four raids, almost as

many as the attack on Pearl Harbor on 7 December 1941. Given the number of aircraft devoted to scouting and held back for fleet defense (neither of which were an issue at Pearl Harbor), this was indeed a maximum strike effort. However, very few of these Japanese aviators were anywhere near as good as the handful of *Hiryu* pilots who had crippled *Yorktown* (CV-5) at Midway only two years before. However, faced by an overwhelming number of superior Hellcat fighters, better-trained U.S. pilots, guided by a massive proliferation of shipboard air, surface and fire control radars, equipped with IFF transponders and new four-channel VHF radios (some), all enabling fighter direction officers operating from new combat information centers, gave the Japanese pilots little chance.

Those few Japanese pilots that would make it through the fighter gauntlet then faced the U.S. Navy's massively improved shipboard anti-aircraft capability, particularly the 5-inch radar proximity shells. (One of the great "secret weapons" of the war, the "VT-Variable Time" nomenclature was just the cover for how the shell really worked. Ships carpeted by Bofors 40mm and Oerlikon 20mm anti-aircraft guns, made it almost certain that any aircraft that did get through and obtain a hit would not return for a second attempt. The only thing the Japanese pilots had going for them was unbelievable raw courage. None of them would quit. But, valor would be insufficient.

Another key weakness of the inexperienced Japanese pilots was very poor communications discipline, which made for a field day for U.S. radio intelligence personnel in TF 58, whose extensive role in providing early warning and Japanese intentions is not mentioned in most histories of the battle. However, at one point, Mitscher declined a recommendation to vector fighters to shoot down a Japanese strike coordinator (so prolific he was known as "Jo") because Mitscher was getting too much valuable information from him.

### ***Raid One***

0800: Carrier Division 3 (light carriers *Chitose*, *Chiyoda*, and *Zuiho*), operating with the battleship/cruiser van force, commenced launching

a 69-plane strike. The strike was led by two Kate torpedo bombers with experienced navigators acting as pathfinders, along with 44 Zeke fighter-bombers, eight Jill torpedo bombers, and 16 escorting Zeke fighters, which by 0845 were en route TF 58. Raid One was instructed to act independently after the strike, with the option to recover on Guam or return to the carriers. Mitscher had warning of this and other raids before they even launched, because Lieutenant (j.g.) Sims's radio intelligence teams were able to intercept Japanese radio operators making pre-flight checks, which were then confirmed by additional in-flight checks. The radio intelligence team could even make rough estimates of the rate of closure based on signal strength.

### **Raid Two**

0900: Japanese Carrier Division 1 (fleet carriers *Taiho*, *Shokaku*, and *Zuikaku*), commenced launching 128 aircraft, Ozawa's main effort. This strike included 53 Judy dive bombers, 27 Jill torpedo bombers, 48 escorting Zeke fighters, and one special mission Judy equipped to drop chaff (a new tactic for the Japanese that met with minimal success—too little, too late).

As Ozawa's flagship *Taiho* was in the midst of launching Raid Two, the U.S. submarine *Albacore* (SS-218), commanded by Commander James W. Blanchard, penetrated A Force's weak screen of only six destroyers. *Albacore* was on her ninth war patrol; this was her first with Blanchard in command. *Albacore* was in a patrol area determined by Vice Admiral Lockwood's assessment of Ultra intelligence, so it was not a fluke she was there. Blanchard passed up a shot at either *Shokaku* or *Zuikaku* for a better one at *Taiho*, but at the critical point the target data computer failed, and Blanchard eye-balled the shot, firing all six bow tubes. He immediately took the sub down as three Japanese destroyers converged on his position and began dropping depth charges, some dangerously close. At the time of the expected impact of the sixth torpedo, *Albacore* heard a loud explosion, indicating one hit out of the six torpedoes. There would have been a second hit except that Warrant Officer Sakio Komatsu, who had just launched in a

Jill torpedo bomber, sighted the torpedo and deliberately flew his plane into the water and detonated the torpedo, sacrificing his and his gunner's lives to save his ship.

The torpedo from *Albacore* hit *Taiho* on the starboard side just ahead of the forward aircraft elevator, cracking an aviation fuel tank and flooding the lower well with fuel oil, aviation fuel and seawater, and jamming the elevator six feet below the flight deck. Damage control teams quickly planked over the elevator and launches resumed in under 30 minutes as the ship continued to make 26 knots. After the depth charging ceased, Blanchard reported the contact and attack (on what he later said was a *Shokaku*-class carrier), but did not believe he had sunk *Taiho*.

As Japanese aircraft from Raid Two en route TF 58 passed over the Japanese Van Force, operating about 100 nautical miles ahead of Ozawa's main carrier forces, trigger-happy Japanese battleship and cruiser gunners opened fire, knocking down two Japanese aircraft and forcing eight other damaged aircraft to abort. Obviously Ozawa's intent for this "flak trap" of four battleships and eight heavy cruisers was for American aircraft, not his own.

0957: Battleship *Alabama*, operating with Vice Admiral Lee's battleship group (TF 58.7) southwest of the carrier groups, detected the incoming Japanese Raid One, at a range of 150 nautical miles and altitude of 18-20,000 feet. The Japanese flight had become disorganized and took precious time to regroup for a coordinated attack. At this time, Mitscher ordered transmittal of the "Hey Rube" code word, signaling all the U.S. fighters airborne over Guam to return to the area of the carriers and prepare to defend. The U.S. carriers all commenced launching Hellcat fighters. The U.S. fleet carriers had a deck-load strike ready, consisting of 28 dive bombers and four torpedo bombers each. These were launched after the fighters to get them off the deck and ordered to orbit to the east out of the way for the duration of the air battle.

Hellcats from *Essex* were the first to intercept Raid One at about 60 miles from the battleship group, guided by radar and the shipboard fighter direction

officers. Within minutes, Hellcats from six more squadrons piled in (while others took high cover position), and 50-60 Hellcats lit into the 69 Japanese aircraft. A handful of Japanese pilots were experienced enough to put up a fight, the rest were slaughtered. U.S. fighters claimed over 100 kills (which was more than the Japanese had in the strike). The actual number was 42 lost in exchange for three Hellcats.

Those few Japanese aircraft that survived the fighter gauntlet had the misfortune of attacking the U.S. battleship flak trap. Only one Zeke fighter-bomber managed a hit on the battleship *South Dakota* (BB-57) (already by far the most battle-scarred of the new generation of fast battleships), which killed 23 sailors and wounded 27, but had no significant impact on the ship. The heavy cruisers *Minneapolis* (CA-36) and *Wichita* (CA-45) suffered shrapnel damage from near-miss bombs, while two sailors on the destroyer *Hudson* (DD-475) were killed by misdirected "friendly" anti-aircraft fire from other ships. The few surviving Japanese aircraft (that had radio) reported very inflated claims of damage.

### **Raid Three**

At 1000, Carrier Division 2 (*Junyo*, *Hiyo*, and *Ryuho*) commenced launching a 47-plane strike, consisting of 7 Jill torpedo bombers, 25 Zeke fighter-bombers, and 15 Zeke fighters as escort.

1107: *Lexington* radar detected the incoming Raid Two, which by this time had been reduced to 119 aircraft by aborts and casualties. Like the first raid, this one wasted precious time trying to get reorganized. And, also like the first raid, *Essex* Hellcats got there first (about 40 nautical miles west of the battleship group), this time led by Air Group Commander David McCampbell, who shot down five aircraft on this flight (and two more over Guam on a second flight later in the day).

Despite heavy losses, the surviving Japanese aircraft kept on coming, until 43 more Hellcats piled in, including one flown by Lieutenant (j.g.) Alex Vraciu, the Navy's leading ace at the time. Vraciu would shoot down six aircraft, increasing his total tally to 18. A photo of Vraciu holding up six fingers after recovery would become one of the most famous of

the war. Vraciu was nominated for a Medal of Honor for the six kills, but it was downgraded to a Navy Cross. (Vraciu would finish the war as the fourth-leading Navy ace with 19 kills in the air and 21 on the ground, before he would be shot down over the Philippines and wind up leading a band of Filipino guerillas.) Even more Hellcats from multiple carriers began to engage. And still the Japanese pressed on until only about 30 had survived the massacre.

Several of the surviving Japanese planes of Raid Two made the mistake of going after Lee's battleships, and most were shot down. One Jill torpedo bomber crashed into battleship *Indiana*, but the torpedo did not explode, resulting in only minor damage to the ship. Another Judy dive bomber managed a near-miss on battleship *Alabama*.

One group of six Judy dive bombers smartly passed up the battleships and continued toward the carriers, which were initially erroneously assessed as "friendly" by *Wasp*, until one planted a phosphorus bomb (a new wrinkle) on *Wasp's* flight deck that killed one and wounded a dozen, but otherwise did not seriously damage the ship. Two Judy dive bombers went after *Bunker Hill* with near-misses that killed three and wounded 73, knocked a Hellcat overboard, and started fires that were quickly extinguished. Another six Judy dive bombers and several Jill torpedo bombers went after *Enterprise* and *Princeton*, although the Jills concentrated on *Enterprise*. Only one of the Jills succeeded in dropping a torpedo, which exploded in *Enterprise's* wake. *Princeton* successfully dodged bombs from three Judys. Meanwhile, the solo special mission Judy with the chaff package did succeed in drawing off 14 Hellcats from the inbound raid, and then actually got away.

The 119 Japanese aircraft of Raid TWO that reached the target area were engaged by 162 Hellcats that claimed 80 shot down, which was actually pretty close, plus another six to eight downed by anti-aircraft fire. Only 23 made it back to a carrier and eight to Guam. The Japanese bombers suffered the most: 23 of 27 Jill torpedo planes and 42 of 53 Judy dive bombers were lost. Four Hellcats and three pilots were lost.

## **Raid Four**

At 1100, Carrier Division 2 commenced launching a second strike (Raid Four) consisting of 64 aircraft: 27 Val dive bombers, 9 Judy dive bombers, 10 Zeke fighter-bombers, and 18 Zeke fighter escorts. *Zuikaku* also launched 14 Zeke fighters and six of *Taiho's* Jill dive bombers (that had recovered on *Zuikaku* when *Taiho* was hit by the torpedo), which joined to make it an 84-plane strike. This raid was ordered to attack the American carriers, land on Guam, re-arm, refuel, and strike again on the way back to their carriers. However, like Raid Three, Raid Four would have trouble finding the U.S. carriers. After searching unsuccessfully, the strike would split up, with *Zuikaku's* planes heading back to the carrier and the rest heading for Guam.

Around noon, the submarine *Cavalla*, under the command of Lieutenant Commander Herman Kossler on her first war patrol, sighted the Japanese carrier *Shokaku* in the midst of recovering fighters. After some initial hesitation regarding the identity of the carrier (Kossler had not been informed where the U.S. carriers were), Kossler took *Cavalla* in close enough to positively identify a Japanese flag. He fired all six bow tubes at eight-second intervals: three standard Mk 14 torpedos and three Mk 23s (which were basically a modified version of the Mk 14 with the rarely used—at that time of the war—slow-speed, long range setting removed). The geometry of the attack was such that the target data computer expected four hits. However, either just before or just after the first torpedo was fired, an alert Japanese destroyer, *Urukaze*, immediately came charging toward *Cavalla*. Kossler had to take her down as the fifth torpedo was being fired, and the sixth was fired at a down angle, and momentarily hung up. The first depth charge from *Urukaze* exploded simultaneously with the first torpedo impact on *Shokaku*.

*Shokaku* sighted the torpedoes, but did not have enough time to out-maneuver them. Two torpedoes hit her starboard side forward and one amidships (some accounts say four hit), igniting large fuel fires in the hangar bay and knocking out the No. 1. boiler room, and one screw was taken offline. Only nine aircraft were in the hanger bay, unlike at Midway

where the hanger bays were chock full of armed and fueled aircraft, so there was hope that the fires could be controlled as her crew had successfully done at Coral Sea and Santa Cruz.

*Shokaku* continued to steam as her crew fought the fires, but she began to take on a starboard list. Counter-flooding overcompensated and she took on a port list. The fires in the hangar bay got worse as oxygen bottles in aircraft began to explode and machine gun ammunition began to cook off. The "fire-proof" shutter screens between hangar bays failed to work and the fire continued to spread. After about an hour, an aircraft bomb in the hangar bay exploded, setting off fuel vapor that had been leaking from a cracked tank, resulting in several large induced explosions.

After about another hour of trying to save the ship, Captain Matsubaru issued the order to prepare to abandon ship. As the crew assembled on the flight deck for an abandon ship ceremony (it's a Japanese custom—see *Hiryu* at Midway), the captain tied himself to the ship (not tight enough, apparently, as he would be washed overboard and forcibly rescued). However, with most of the crew still on deck, the ship suddenly lurched and rolled over resulting in heavy loss of life: 1,272 (including 58 officers, 830 ship's crewmen, 367 from the air group, and eight civilians). Only 570 were rescued. Nine bombers went down with the ship. Other returning strike aircraft were diverted to *Zuikaku* and *Taiho* (which was still operational despite her torpedo hit). After *Shokaku* went under, she was wracked by four massive explosions heard by *Cavalla*.

Meanwhile, *Cavalla* was being hammered by over 106 depth charges from three Japanese destroyers over a three-hour period, several causing serious damage. In her emergency dive, the sub actually exceeded her test depth by 100 feet before recovering, at which point the main air induction trunk flooded, adding about 15 tons of water to the boat, along with additional flooding in her forward torpedo room bilges, making her difficult to control. Three of her four sonar sets were flooded, leaving her with limited ability to track the destroyers. Kossler had to risk increasing speed (and increasing the chance of detection) in order to maintain depth,

since operating pumps would make too much noise. Nevertheless, *Cavalla* survived, reported the attack, earning a Presidential Unit Citation and a Navy Cross for Kossler.

At 1225, radar in TG 58.4 (Harrill) detected the 47 planes of Raid Three at a range of 110 nautical miles far to the north, appearing to be meandering in search of the U.S. carriers but pretty far off track. Concerned that it might be a diversion, fighter direction officers held off vectoring fighters. Eventually eight *Hornet* Hellcats and four *Yorktown* Hellcats from TG 58.1 (Clark) were sent to check it out. Despite being outnumbered, the Hellcats attacked, shooting down nine and losing one. A few of the Zeke fighter-bombers finally made it to TG 58.4's screen, and one succeeded in dropping a bomb, which missed *Essex* by 600 yards. Hellcats continued to pick off stragglers from the raid, claiming 15 downed (actual seven) for the loss of one Hellcat, whose pilot was recovered.

At 1320, *Monterey* radar gained contact on the part of Raid Four that was heading to Guam after failing to find any U.S. ships. However, problems with IFF and radios resulted in a delay in response. Unable to reach his own squadron, *Monterey's* FDO tried to reach *Wasp's* fighter squadron, also to no avail. *Wasp's* FDO had to take over the intercept. Raid Four was not confirmed as hostile until it was within 50 nautical miles. This time, the Japanese sighted U.S. carriers and commenced an attack before being intercepted, which didn't occur until 1420. *Wasp* Hellcats downed two Zekes and a Jill torpedo bomber, but by then the Judys were diving on TG 58.2, with wildly maneuvering ships disrupting emergency scrambles. Fortunately, the aim of the inexperienced Japanese was not good. Three bombs impacted in the general vicinity of *Bunker Hill* causing no damage, but the heel of the carrier in a high-speed turn slid a Hellcat over the side with the plane captain in it, who was rescued. Anti-aircraft fire knocked down five or six of the Judys, but *Wasp* suffered several near-misses, including another phosphorus bomb that detonated well above the flight deck.

At 1350, *Lexington* launched five search teams (Hellcats and Avengers) to look for the Japanese

carriers. They found no ships, but did encounter Japanese scout aircraft, downing three of them, before being jumped by *Zuikaku* Zekes that were returning to their carrier after turning back from Raid Four. The *Lexington* Avengers managed to shoot down two Zekes and damaged two others, and the Hellcat escort downed one Zeke, and, a little later, three more Zekes and a Jake floatplane. Three of the aircraft were shot down by one Hellcat pilot. In another search sector, a Hellcat escort shot down two of three Jill torpedo bombers trying to make their way back to their carrier. However, a Helldiver-Hellcat search team from *Bunker Hill* disappeared and was probably lost to the *Zuikaku* Zekes.

By 1430, Ozawa could only assume that most of his aircraft had made it to Guam, since very few had come back. With *Shokaku* in deep trouble and *Taiho* damaged as well, and with few planes to protect him, Ozawa knew that now was the time to open the distance to the Americans.

1510-1645. Most of Raid Four missed the U.S. carriers and were heading for Guam, when once again *Essex* Hellcats, led by McCampbell, intercepted them, catching 13 Zekes arriving from Truk at the same time. These Zekes had more experienced pilots and put up a good fight, but McCampbell downed two, making seven for the day (and nine total, on his way to 34). One of this group of downed Zekes was flown by a pilot with 18 kills, who had survived Coral Sea, Eastern Solomons, Santa Cruz, and Rabaul, and managed to survive this crash as well. Two *Hornet* Hellcat pilots became "instant aces" in this dogfight, with five kills each. Hellcats from six squadrons engaged Raid Four before it could land at Guam, claiming 60 shot down (actual 30), and 19 more that landed and were too badly damaged to fly again. However, the skipper of *Essex's* fighter squadron (VF-15), Commander Charles Brewer, got his fifth kill of the day just before being shot down and killed by a Zeke over Guam at about 1830. A Hellcat from *San Jacinto* also went down.

1530: A massive explosion wracked the *Taiho*, buckling the armored flight deck lengthwise, blowing holes out the side of the hangar deck, and blowing a hole in the ship's bottom. Since

*Albacore's* torpedo hit in the morning, the *Taiho* had continued operations. However, the damage control teams understood that they had a serious problem with fuel vapor. Attempts to punch holes in the side of the hangar deck (Japanese carriers did not have the rolling "curtains" to ventilate the hangar deck that U.S. carriers did), and other efforts had only succeeded in permeating the entire ship with vapor. Exactly what triggered the explosion is unknown. The few aircraft returning from the strikes generally opted to recover on the other carriers because of the fuel vapor concern. Despite catastrophic damage, the ship remained on an even keel throughout and took over an hour to go down. Fire-fighting parties, even with no power, managed to hold the conflagration in the bow area at bay, and a destroyer was even maneuvering to take her in tow, when additional flames broke out aft, and it then became apparent the ship could not be saved.

Ozawa initially wanted to go down with the ship, but his chief of staff convinced him there was still a chance to win the battle (thanks to wildly inflated Japanese damage reports and the possibility that many of his aircraft had reached Guam, which wasn't the case as most had been shot down). Different accounts give widely differing numbers for *Taiho's* casualties, but the most authoritative appear to be 28 officers and 628 men, with over 1,000 (including the captain) rescued by three Japanese destroyers (a widely cited number is 1,650 lost out of 2,150). The first confirmation that the Americans had that *Taiho* had gone down was from a Japanese POW about two months later, and Blanchard's award was then upgraded to a Navy Cross.

At 1630, after receiving reports of massive Japanese air losses, Spruance decided to keep TG 58.4 (Harrill) "tethered" to Saipan, and allow the rest of TF 58 to commence pursuit of Ozawa in the hopes of being able to execute a long-range strike the next day.

At 1700, after being reluctantly taken off *Taiho*, Ozawa shifted his flag to the heavy cruiser *Haguro* because *Zuikaku* was already over the horizon. This was a problem, as *Haguro* did not have the secure communications capability of *Zuikaku*, and could not

decode communications coming from higher headquarters.

By the end of 19 June, TF 58 had survived the most concentrated attacks against U.S. carriers in the entire war. Only two carriers, *Bunker Hill* and *Wasp*, and two battleships, *Indiana* and *South Dakota*, suffered damage, but all were fully operational. Thirty-one U.S. aircraft were lost in the course of the day, of which 17 Hellcats were lost in combat and four Hellcats were lost to operational causes. Fourteen Hellcat pilots and 13 other aviators were dead or missing.

Japanese aircraft losses in what became known as the "Great Marianas Turkey Shoot," were devastating. U.S. pilots claimed 299 Japanese aircraft shot down in the four carrier raids, although the actual number was about 220-224. (The only air engagement comparable to this was in the Battle of Britain on 15 September 1940, when the RAF claimed 185 German aircraft shot down, although the actual number was 61). However, these losses included 22 of 35 Japanese squadron commanders and many of the most senior fighter pilots. Including land-based aircraft in the total makes the tally about 261, including 224 carrier aircraft and 18 land-based aircraft shot down by Hellcats and another 19 by shipboard gunners. *Taiho* went down with 18 aircraft, and *Shokaku* took 9. Approximately another 60 Japanese aircraft were destroyed on the ground on Guam. Including planes destroyed on the ground and lost on the carriers, the number of destroyed Japanese aircraft was about 314. Late that night, orders came from the commander in chief of the Combined Fleet, Admiral Toyoda, to conduct "mopping-up" operations off Saipan. However, Ozawa knew better (once he could decode the message).

### ***20 June, the "Flight Beyond Darkness"***

The day after the Turkey Shoot was a tail chase to the northwest, with TF 58 starting about 320 miles behind Ozawa and hampered by the prevailing easterly wind. Before dawn, two *Essex* Hellcat night fighters surprised and shot down two Val dive bombers over Guam. After daybreak, not surprisingly, enemy air activity was very scarce, and



Japanese aircraft carrier *Zuikaku* (center) and two destroyers maneuvering, while under attack by U.S. Navy carrier aircraft during the late afternoon of 20 June 1944. *Zuikaku* was hit by several bombs during these attacks, but survived (80-G-238025).

only two “snoopers” were shot down. U.S. search aircraft scouting ahead of TF 58 encountered Japanese aircraft scouting behind Ozawa’s force, and about seven more Japanese aircraft were shot down as a result.

During the day, Ozawa consolidated the A Force (what was left of it) with the B Force intending to link up with his oilers to refuel. At 1300, Ozawa transferred his flag to *Zuikaku*. Meanwhile, fuel consumption was now a major factor for TF 58, limiting how long the task force could pursue.

At 1539, a search team (two Avengers and a Hellcat escort) from *Enterprise* sighted the Japanese carriers. Japanese radio intelligence on the heavy cruiser *Atago* monitored the contact reports. As a result, Ozawa cancelled the underway replenishment and boosted his speed from 20 to 24 knots. At 1715, a Jake floatplane from heavy cruiser *Maya* sighted and reported TF 58, so Ozawa had no doubt he was being pursued. Whether the Jake reported that the U.S. carriers were already launching is not known.

Aboard the U.S. carriers, planners determined that the distance to Ozawa was about 230 miles, about the outer limit for U.S. Navy strike aircraft, and an immediate launch would result in a night recovery,

for which only a handful of pilots had training. With his decreasing fuel state constraining his options, Mitscher gave the “Launch ‘em” order. “Get the carriers,” became the mantra of the aircrews preparing for the mission.

At 1610, TF 58 aircrew manned their aircraft and launches commenced at 1624, with all 12 carriers in Task Groups 58.1, 58.2, and 58.3 contributing, although for various reasons not all equally. *San Jacinto* contributed two Avenger torpedo bombers, but Lieutenant (j.g.) George H. W. Bush did not fly on this mission. The plan was for a 240-plane strike, but after various aborts, the final number was 226 aircraft with 411 aircrewmen. The strike included 95 Hellcats, 12 of them with a 500-pound bomb. There were 77 dive bombers, 51 Helldivers and 26 SBD Dauntlesses (that were still being flown by *Enterprise* and *Lexington* air groups). There were 54 Avengers, 33 carrying four 500-pound bombs and only 21 armed with torpedoes. The combination of the heavy losses in torpedo bombers at Midway and the unreliability of U.S. torpedoes into 1943 (and distrust into 1944) resulted in the U.S. Navy emphasizing dive bombers over torpedo planes. However, there were unique factors at Midway that made the dive bombers so successful. Absent those factors, Japanese ships were built tough, and, unlike Japanese aircraft, were very resistant to damage. This would be a factor in the outcome of this strike.

After the first strike was launched, a second strike was brought on deck, but Mitscher thought better of it as it probably wouldn’t reach the Japanese until dark, and cancelled it. There had also been confusion in the original contact report and a relay of those reports, and it was discovered that the actual position of the Japanese was 60 nautical miles farther west than originally planned. Some of the aircrews got this word before they launched and others in high priority radio messages after they launched, which was an unpleasant surprise. All aircraft proceeded to the target in a “max conserve” mode. There would be no time due to fading light and limited fuel for any maneuvering for strike coordination or much dogfighting.

The first Japanese group the TF 58 aircraft found was the oiler group. *Enterprise*’s slower SBDs, which

were bringing up the rear, passed it up, and apparently the other strike elements hadn't seen it. However, *Wasp's* faster Helldivers had been drawn off course by spurious radar contacts, and by the time they came back to base course and found the oiler group they were already in a critical fuel state. The *Wasp* bombing squadron skipper opted to attack the oilers. Twelve Helldivers bombed five tankers, with good results. *Seiyo Maru* and *Genyo Maru* were sunk (both had to be scuttled by the Japanese), and a third oiler survived only due to great damage control by the crew.

Meanwhile, the rest of the TF 58 strike found Ozawa about 35 nautical miles west of the oilers, under spectacularly lit towering cumulous clouds as the sun began to set. Ozawa knew the strike was coming, so his ships were in air defense formation, and he put every plane into the sky that he could, including 40 Zeke fighters and 28 Zeke fighter-bombers (without bombs) and another six Val dive bombers, probably intended for anti-torpedo bomber defense. Apparently, the survivors of the previous day's debacle were the better pilots, as these put up a determined defense. Japanese radar detected the incoming strike at 1803 about 20 minutes before U.S. aircraft sighted the Japanese ships.

Planes from *Hornet*, *Yorktown* and *Bataan* attacked *Zuikaku*. *Zuikaku's* evasive maneuvers were very effective as she was deluged by near-misses, and dodged at least two torpedoes, although several Hellcats strafed *Zuikaku's* bridge.

Amazingly, *Zuikaku* suffered only one direct hit (out of over eight claimed) but it was a good one, just aft of the bridge, fracturing the aviation fuel system and flooding the hangar deck with gasoline that quickly caught fire. The newly installed foam system proved to be a good idea, but insufficient. With the fires seemingly out of control, Captain Kaizuka gave the order to abandon ship. His men refused (or didn't hear) the order. Continuing to fight the fires, *Zuikaku's* valiant crew saved their ship.

Planes from *Lexington*, *Enterprise*, *San Jacinto*, and *Belleau Wood* attacked the three carriers of Carrier Division 2 (*Junyo*, *Hiyo*, and *Ryuho*) defended by 26

Zeke fighters that downed several Avengers. Lieutenant Charles Nelson of *Yorktown* led a torpedo attack against *Ryuho*. *Ryuho's* gunners shot him down (no survivors) and successfully dodged all five torpedoes from the group. Nevertheless, although the volume of Japanese anti-aircraft fire was impressive, its accuracy wasn't. Only six U.S. planes would be downed by shipboard anti-aircraft fire. The Japanese fighters would give a somewhat better account of themselves with ten victories, and nearly did in Vraciu, the high-scorer from the day before. Rear gunners in U.S. aircraft performed well. Aviation Machinists Mate First Class Jack W. Webb was awarded a Distinguished Flying Cross for his accurate gunnery.

*Lexington's* venerable Dauntlesses attacked both *Junyo* and *Hiyo* (which looked identical) claiming seven hits on one or the other, and three more by glide-bombing Avengers. In reality, *Hiyo* took one direct hit, which killed almost the entire bridge crew except the captain, and *Junyo* two. Zekes jumped the Dauntlesses as they pulled out. A burst from a Zeke killed the pilot of one Dauntless, while the gunner, ARM2C Leo O. LeMay, continued firing until the plane hit the water, bringing down the Zeke with his final act. *Enterprise* Dauntlesses, led by "Jig Dog" Ramage, then rolled in on *Junyo* and *Ryuho*, led by Hellcats strafing to suppress anti-aircraft guns. Ramage's bomb missed just astern of *Ryuho*, and three of the other five pilots obtained near-misses. *Enterprise* Avengers also attempted to glide-bomb *Ryuho*, claiming eight hits, all of which were near-misses. *Enterprise* dive bombers claimed a hit each on *Junyo* and *Hiyo*, of which the hit on *Hiyo* was accurate.

In the fading light, ship identification (always problematic to begin with) became even more difficult. Four *Belleau Wood* Avengers, led by Lieutenant (j.g.) George Brown, attempted a torpedo attack on either *Junyo* or *Ryuho* and *Hiyo*. Brown split his formation to attempt an anvil attack on *Hiyo*, when he was hit by flak, setting the plane on fire. Unable to raise Brown on the intercom, his two gunners bailed out, and would watch the rest of the strike from the ocean. Brown, however, was still alive, but apparently badly burned, yet still pressed his attack. The anvil attack worked and *Hiyo* was

unable to avoid torpedoes coming from different directions; at least one hit (either Brown's or his wingman's) which inflicted fatal damage. Japanese records indicate it was a burning plane that dropped the fatal torpedo, but also say the plane then crashed. Brown was observed by other U.S. pilots flying his battered plane on the return flight to the carrier, obviously wounded, but he disappeared in the darkness and was never seen again. He was awarded a posthumous Navy Cross. The Zekes defending Carrier Division Two shot down 5 U.S. planes, but at a cost of 11 shot down and 3 ditched.

Planes from *Bunker Hill*, *Cabot*, and *Monterey* conducted a multi-axis attack on Carrier Division 3, defended by 14 Zekes and two Jills. Rear Admiral Obayashi had recalled a 16-plane strike package launched several hours earlier, which were recovering as the U.S. attack came in. Seven Japanese aircraft were shot down in the landing pattern, probably by Japanese "friendly fire." The four battleships escorting Carrier Division 3 put up an astonishing volume of flak, which no doubt disrupted aim, but shot down nothing.

Twelve *Bunker Hill* Helldivers bombed *Chiyoda*, claiming eight hits, although all were near-misses. Eight Avengers from *Monterey* and *Cabot* dropped 32 glide bombs on *Chiyoda*, with probably two hits that destroyed two aircraft and killed 20, but did not put the carrier out of action. Some of *Cabot*'s Avengers, thinking *Chiyoda* was more badly hit than she was, broke off and dropped on battleship *Haruna*. Three bombs hit *Haruna*, killing 15 and causing an aft magazine to be flooded as a precaution, but otherwise not affecting the operation of the ship. *Bunker Hill*'s eight Avengers executed a torpedo attack on *Chiyoda*, but *Chiyoda*'s captain adroitly maneuvered to put the Avengers in a stern chase, for which none had the time or fuel. Unable to obtain favorable geometry, all the torpedoes missed, although several exploded in *Chiyoda*'s wake.

As the American attack ended, four Japanese carriers had been hit by bombs, but all would survive. *Hiyo*, however, was in extremis. One torpedo from VT-24 (*Belleau Wood*), possibly from Brown's Avenger, exploded in the starboard engine

room, and possibly a second torpedo had hit on the port side. Her crew fought to save her for two hours from spreading fires, but a massive internal explosion (by the usual culprit, aviation fuel vapor) doomed the ship. Additional explosions followed. *Hiyo* took about 250 men the bottom following an orderly abandon ship evolution complete with ceremony (speeches, cheers for the emperor, songs); destroyers rescued over 1,400. At this point, Ozawa was down to 35 operational carrier aircraft. Although he briefly pondered trying to bring about a night surface action, he correctly assumed that Spruance would avoid doing so, as he had at Midway.

Over the last several days, as the prospect of a long-range strike seemed increasingly likely, Mitscher and his staff worked on a plan for "what if" such a large strike had to return after dark, which involved turning on the task force lights to aid the aviators. When Mitscher was commanding officer of *Hornet* (CV-8) at the Battle of Midway, he had turned on the carrier's lights to get the pilots of a futile long-range search/strike effort on 5 June 1942 back on board. Although the plan was not briefed to the aviators, Mitscher had every intention of turning on the lights at the right moment. It was not a spur-of-the-moment decision, and it was also informed by Ultra intelligence that gave Mitscher a reasonable assurance that no Japanese submarines were in the area. Rear Admiral Clark, would actually jump the gun and turn on TG 58.1's lights before Mitscher gave the order, which Mitscher did shortly afterward.

The return flight by the strike group was epic. Not only was it night, it was as black as it could get with a new moon and an overcast, a situation ripe for vertigo. Some pilots were flying damaged planes, some were also wounded, all were critically low on fuel, and all were tired, on a long flight home. The YE-ZB homing beacon on the carriers was good out to 70 nautical miles when working properly, but that still left over 150 nautical miles navigating in the blind, although TF 58 had been able to close 90 nautical miles during the time of flight.

Radio discipline broke down as pilots chattered, desperate to remain in contact with anyone in the

dark. As planes ran low on fuel, pilots had to make a decision whether to ditch on purpose while they had fuel to make a controlled approach, or gamble that they had enough to reach a carrier. There would be multiple cases of planes recovering on board with only a gallon of gasoline, as well as a number that didn't quite make the last few yards. The Helldivers were the worst off. Of 51 Helldivers that launched, eight were lost over the target, and 32 others ditched or crashed. Bombing Squadron 8 (VB-8) lost 11 of 12 Helldivers—2 were shot down and 9 ditched after running out of gas.

Sunset was just before 1900. TF 58 ships began making radar contact on the returning strike at 2015, with most contacts to the west, but a number far off track to the north and south. While monitoring the increasingly desperate radio transmissions, Rear Admiral Clark (TG 58.1) was increasingly concerned that a debacle was in the making. Mitscher's plan (which may or may not have been known to Clark), was that on signal, carriers would show running lights, masthead truck lights, and deck-edge glow lights, and each task group flagship would point the largest searchlight vertically into the sky.

At 2030, without word from Mitscher, Clark ordered all of TG 58.1 carriers to light up and aim searchlights upward, and for the cruisers to fire star shells. Things quickly got out of hand as destroyers then aimed their searchlights at the carriers, and every ship in the task group turned on every light it had. The same phenomena occurred when Mitscher gave the order to the entire task force: Every light on every ship came on. The leading returning pilots were astonished, but exceedingly grateful, to see the entire task force lit up like a Chinese New Year, fireworks and all. However, excessive lights actually added to what became the most chaotic recovery in the history of the U.S. Navy, with some aircraft shooting approaches on what turned out to be destroyers.

One of the more effective means to get planes back to the task force was launching night fighters as shepherds. The commander of *Enterprise's* night fighter detachment (which was unique in that it consisted of radar-equipped F4U Corsairs, which ironically were not cleared to operate off carriers in

daylight) went up, and using his radar, would intercept groups and singles in danger of missing the task force and escort them onto the right path. The skipper of *Bunker Hill's* Hellcat night fighter detachment was also up doing the same thing.

The recovery went on for over two hours from 2045–2052 and became increasingly dangerous as pilots became increasingly desperate to get aboard before fuel exhaustion, which resulted in numerous ignored wave-offs (despite fluorescent paddles) and multiple flight deck crashes, some of them fatal. There were even cases of two aircraft trapping at the same time on different wires, some successfully, some ending in a crash. In some cases, wounded pilots in damaged aircraft weren't able to maintain enough control to obey a wave-off. Only about half the aircraft that recovered did so on their own carrier, but no one from Mitscher on down cared; getting aboard a carrier, any carrier, was what mattered. As an example, *Yorktown* recovered 10 of her own aircraft and 15 others from 6 different carriers.

The danger was extreme. The first aircraft recovered by *Bataan* was a *Yorktown* Hellcat. The next was a second *Yorktown* Hellcat that crashed into the barrier, mangled so badly it couldn't be extracted, leaving *Bataan* unable to recover any more aircraft for the rest of the night (*Bataan* then doused her lights so no one would try). On *Bunker Hill*, a *Hornet* Helldiver crashed on deck. As the flight deck crew attempted to extract the aircrew, a damaged *Cabot* Avenger ignored a wave-off and crashed into the Helldiver, killing three *Bunker Hill* crewmen including the air officer, Commander Wayne O. Smith. On *Lexington*, a damaged *Hornet* Helldiver with a wounded pilot was unable to comply with a wave-off, suffered a hook-skip, bounced over the barrier, and crashed into his wingman who had just recovered, killing the wingman's gunner.

In one of the more unusual events that night, four different aircraft carriers and one aviator in flight reported seeing a Japanese Val dive bomber making approaches to carriers over a 25-minute period, with a common thread being the landing signal officer (LSO) becoming suspicious when the plane wouldn't put its hook down. There are no

surviving Japanese records to corroborate the event, but it is interesting that all observers said it was a Val, with its distinctive fixed landing gear.

Over the next several days, extensive air and surface searches were conducted for downed airmen, and many were actually recovered. The search effort was marred by a tragedy when a U.S. destroyer mistook a Martin PBM Mariner flying boat for a Japanese Emily flying boat, despite IFF, and shot it down, killing all 11 aboard, on 21 June. The search also found Lieutenant Commander Bob Price, *Cowpens's* air group commander, who had been adrift in a raft since being shot down on 11 June. Sadly, Price was lost overboard during Typhoon Cobra in December 1944.

In a last hurrah for the Japanese, several Japanese G4M Betty bombers from Truk skimmed over Saipan and caught the battleships *Colorado*, *Pennsylvania*, and *Maryland* at anchor off the landing beaches lofting star shells in support of ground operations. One of the Bettys succeeded in hitting *Maryland* with a torpedo, blowing a large hole in the bow and killing two sailors. *Maryland* was able to steam under her own power, backward, all the way to Pearl Harbor for 34 days of repair.

### ***"Flight Beyond Darkness" Summary***

Of 226 TF 58 carrier aircraft launched against Ozawa's carrier force on 20 June, 140 recovered aboard a U.S. aircraft carrier, not necessarily their own, and 86 were lost; 172 pilots and aircrew went into the water. Ninety pilots and aircrew were rescued the first night in the vicinity of the carriers. Eventually all but 16 pilots and 33 aircrewmen would be rescued. Combined with 14 Hellcat pilots killed during the "Turkey Shoot" and 13 other pilots and aircrew lost during searches and over Guam on 19 June, 76 pilots and aircrewmen were killed and 42 aircraft lost in combat in the two-day Battle of the Philippine Sea. Aboard ship, 33 sailors were killed by Japanese bombs or "friendly" anti-aircraft fire. On the eve of the battle, Vice Admiral Ozawa had nine carriers with 430 carrier aircraft and 43 floatplanes. At the end, he had six carriers with 35 operational carrier aircraft and 12 floatplanes. Including Guam based-aircraft, the Japanese had lost 476 planes and 445 pilots and aircrewmen. How

many Japanese sailors died is unknown, but is probably close to 3,000, roughly the same as the Battle of Midway. The largest carrier battle in history was also one of the most lopsided naval defeats in history. Ozawa probably played his bad hand as well as anyone could, but the code of *bushido* was no match for U.S. Navy Hellcats.

Sources include: *Clash of the Carriers: The True Story of the Marianas Turkey Shoot of World War II*, by Barrett Tillman, New American Library, 2005 (this is an excellently researched book from which I derive most of the numbers); *The Fleet at Flood Tide: America at Total War in the Pacific, 1944-1945*, by James Hornfischer, Bantam Books, 2016; *Combined Fleet Decoded: The Secret History of American Intelligence and the Japanese Navy in World War II*, by John Prados, Random House, 1995; *The Admirals: Nimitz, Halsey, Leahy and King—The Five-Star Admirals Who Won the War at Sea*, by Walter R. Borneman, Back Bay Books, 2012; *Information at Sea: Shipboard Command and Control in the U.S. Navy from Mobile Bay to Okinawa*, by Captain Timothy S. Wolters, USNR, Johns Hopkins University Press, 2012; *History of U.S. Naval Operations in World War II, Vol. VIII: New Guinea and the Marianas*, by Rear Admiral Samuel Eliot Morison, USNR, Little, Brown and Co., 1953; Naval History and Heritage Command's *Dictionary of American Fighting Ships* (DANFS) for U.S. ships and [combinedfleet.com](http://combinedfleet.com) for Japanese ships.