

Naval Aviation in WW II

Victory at

By John C. Reilly

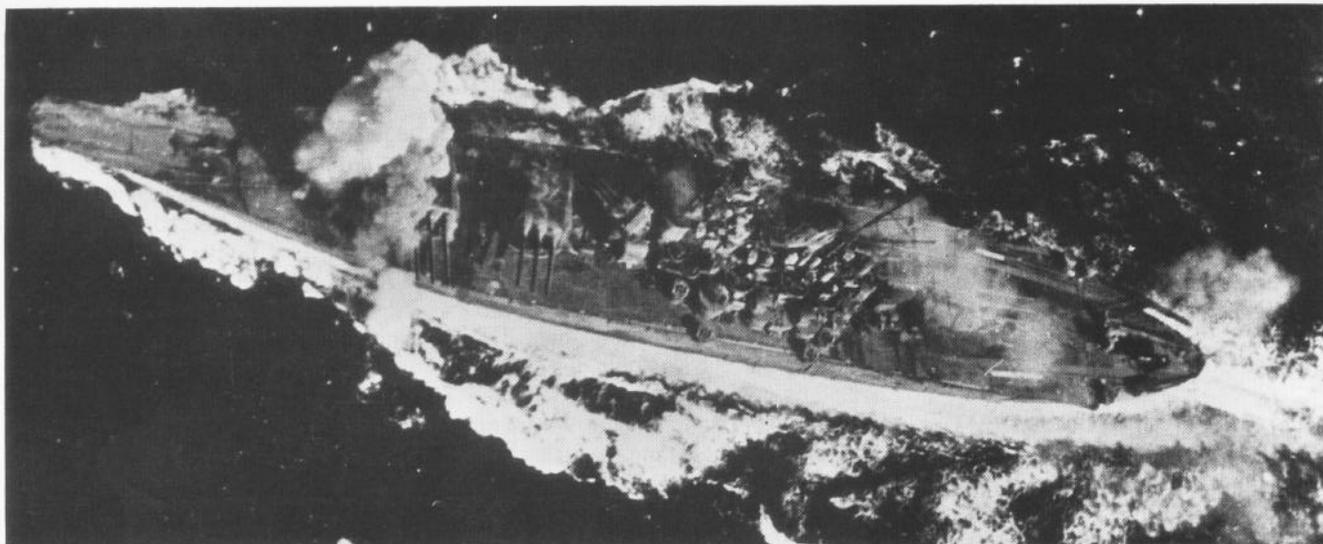
The lack of air power, I feel, was the weakest point. I knew in advance that lack of air power was the main drawback to the operation.

Vadm. Jisaburo Ozawa, 1945

The Allied offensive now began to close on the Philippines. By mid-1944, the plan called for the Central Pacific striking force to capture Peleliu, Angaur, Ulithi and Yap in the western Carolines. At the same time, it would support General Douglas MacArthur as he leap-frogged through Morotai into Mindanao. The two forces would then combine to land on Leyte shortly before Christmas 1944.

In the meanwhile, the Joint Chiefs of Staff proposed that MacArthur merely establish airfields on Mindanao to obtain air superiority in the Philippines, then join the Central Pacific force to land on Formosa and China. These, the chiefs reckoned, would provide excellent bases for cutting Japanese air and sea communications with the East Indies and for the projected invasion of Japan. MacArthur took strong issue with this,





Far left, TF 38 hits military targets on the Manila waterfront in preparation for the landing on Leyte (USN 46799). Left, Curtiss SB2C-1C Helldivers of VB-1 from Yorktown (CV 10), 1944 (USN 238021). Above, the Japanese battleship Yamato under attack during the battle of the Sibuyan Sea. A carrier dive-bomber has just scored a hit forward of Turret I (USN 281699).

Leyte Gulf



arguing that liberation of the Philippines deserved priority.

On 26 August 1944, Admiral William Halsey took command of the Central Pacific force, which now became the Third Fleet. The Fast Carrier Force became Task Force (TF) 38, with Admiral Marc Mitscher remaining in command. In mid-September, Halsey took TF 38 to hit the central Philippines to prepare the way for landings in the Carolines and on Morotai. At relatively small cost, carrier planes knocked out some 200 Japanese planes and sank 13 logistics ships. Halsey was convinced that the central Philippines were a poorly defended "hollow shell" and urged Nimitz to bypass the Palaus in favor of an early landing on Leyte.

MacArthur, naturally, liked this idea. Nimitz still wanted the Palaus in hand before attacking the Philippines. The

Task Group 38.2 at sea. At Leyte, as in the Marianas, the fast carrier striking force paved the way for invasion and stood ready to repel any counterattack.

USN 301754

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Joint Chiefs agreed with Nimitz about the Palaus, but decided to begin liberation of the Philippines with a landing on Leyte in October 1944.

Capture of Morotai, Peleliu and Angaur put Army bombers within supporting range of the Philippines, and Ulithi became an essential advanced fleet base. Planes from bases in China and the South and Central Pacific now hit Japanese airfields within interference range of Leyte. On 10 October 1944, TF 38 began to attack Okinawa, Luzon and Formosa. On 20 October, the Seventh Fleet, under Vice Admiral Thomas Kinkaid, put the Sixth Army ashore and Tacloban airfield was quickly seized.

When the Marianas fell, the Japanese high command drew a new plan, called Operation *Sho* (Victory), to defeat the next American attack. In its essentials, landplanes would mount a massive opening strike as naval forces converged to crush the invaders in a go-for-broke counterattack.

Admiral Soemu Toyoda, commanding the Combined Fleet, read the first preliminary air attacks as the invasion itself and rushed every available airplane to the Philippines. Task Force 38 dropped a large wrench into his plan when it destroyed some 500 of these planes on the ground in preinvasion attacks.

As the Seventh Fleet approached Leyte Gulf, TF 38 was in position east of the Philippines to support Kinkaid and be ready for any Japanese counterattack. Japanese carriers, under Admiral Jisaburo Ozawa, were training new air squadrons in the Inland Sea in an effort to replace their Philippine Sea losses. Vice Admiral Kiyohide Shima had some surface warships in the Ryukyus. The submarine war against Japanese sealift had cut off most of the flow of oil from the East Indies to Japan, and the bulk of the Japanese surface fleet was now at Lingga Roads, near Singapore, close to the source of fuel. Here, Vice Admiral Takeo Kurita had the main force of battleships and cruisers, including the 18.1-inch gunned battleships *Yamato* and *Musashi*.

Kinkaid's invasion force arrived at the entrance to Leyte Gulf on 17 October to capture outlying islands and begin assault minesweeping. When Toyoda learned of this, he ordered his fleet to sea. The *Sho* plan called for

Ozawa's carrier force to approach from the north in the hope of drawing TF 38 to meet it. The surface ships from Lingga Roads would then form two battle groups and converge on Leyte Gulf, Kurita coming around the northern end of Samar with most of his ships and Vice Admiral Shoji Nishimura passing through Surigao Strait with the rest. Between them, if all went well, Kinkaid's amphibious ships would be destroyed.

For easier understanding, American accounts call the Japanese task forces the Northern Force (Ozawa's carriers), Center Force (Kurita's surface striking group) and Southern Force (Nishimura, followed by Shima). The converging forces fought four widely separated engagements called the battle of the Sibuyan Sea, the battle of Surigao Strait, the battle off Samar and the battle of Cape Engano—all going to make up what has been called the last major naval action.

Kurita sailed from Lingga Roads on 18 October. Two days later, as the landing forces went ashore on Leyte, he arrived at Brunei to refuel. In the morning of 22 October, he put to sea with 5 battleships, including *Yamato* and *Musashi*, and 12 cruisers. Later that day, Nishimura departed Brunei for Surigao Strait with 2 battleships and 1 cruiser. Shima's three cruisers were underway from the Ryukyus with orders to form part of the Southern Force and cooperate with Nishimura in his attack.

Ozawa sailed from the Inland Sea on the afternoon of 22 October with large carrier (CV) *Zuikaku*, veteran of Pearl Harbor and the Solomons, 3 smaller carriers (CVLs) and 3 cruisers. He also had the battleships *Ise* and *Hyuga*, their after turrets replaced by an aircraft deck and catapults, referred to by American intelligence as "BB/CV." Ozawa commanded a paper tiger; his 4 carriers had 116 planes—80 fighters and fighter-bombers, 36 torpedo bombers—among them. His BB/CV had no planes at all.

This was of little import to Ozawa. His job was not to strike but to be struck; he expected to be destroyed. His sole task was to get TF 38 out of the way of the Japanese surface forces, to hold out the tempting bait of aircraft carriers in the hope that Halsey would go for it.

In the evening of 24 October Halsey began to receive contact reports; Ozawa was northeast of Cape Engano, the northeastern tip of Luzon, and heading south toward him. He soon made up his mind.

At this time, TF 38 was made up of 4 task groups of 3 to 5 carriers apiece, with various mixes of screen ships:

TG 38.1 (VAdm. John McCain): CVs *Wasp*, *Hornet*, *Intrepid*, *Hancock*; CVLs *Monterey*, *Cowpens*; 5 cruisers, 15 destroyers.

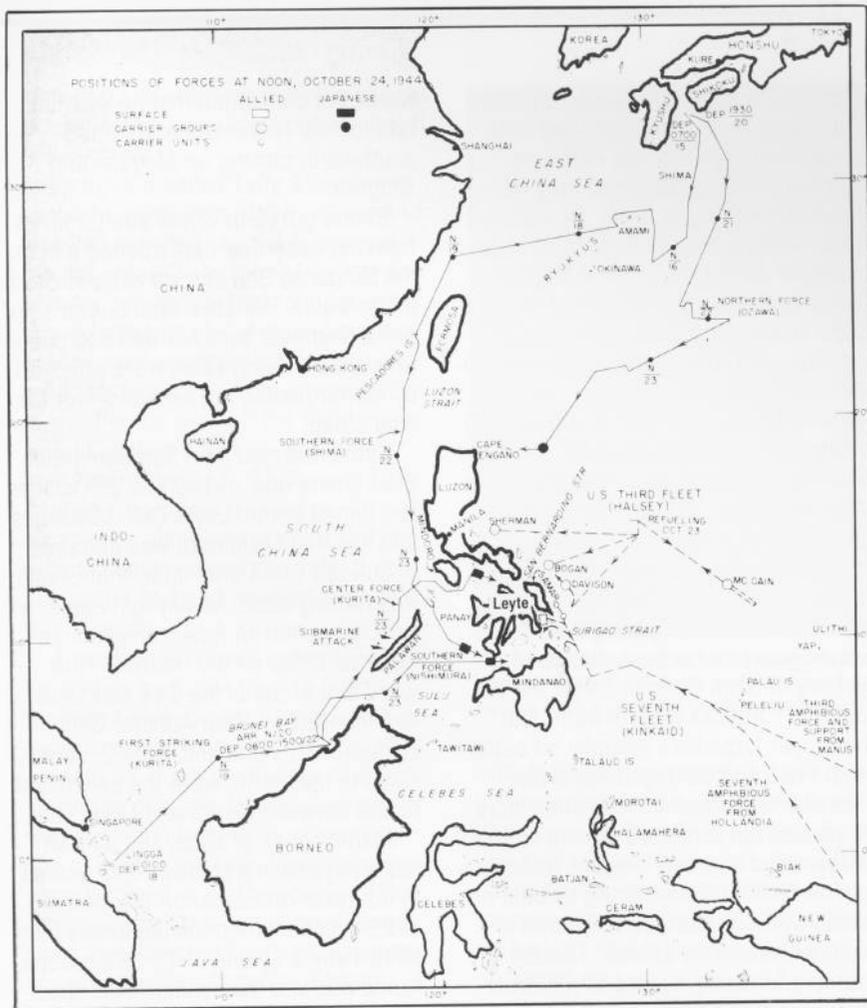
TG 38.2 (RAdm. Gerald Bogan): CV *Intrepid*; CVLs *Cabot*, *Independence*; 2 battleships, 3 cruisers, 18 destroyers.

TG 38.3 (RAdm. Frederick Sherman): CVs *Essex*, *Lexington*; CVLs *Princeton*, *Langle*; 1 battleship, 4 cruisers, 12 destroyers.

TG 38.4 (RAdm. Ralph Davison): CVs *Franklin*, *Enterprise*; CVLs *San Jacinto*, *Belleau Wood*; 3 battleships, 2 cruisers, 12 destroyers.

The large carriers had from 83 to 101 planes each, in varying combinations of F6F *Hellcat* fighters, SB2C *Helldiver* bombers and TBF/TBM *Avenger* torpedo bombers. By this time, the "old reliable" Douglas SBD *Dauntless* had been completely replaced in the fleet by the SB2C. CVL air groups numbered 26 to 35 F6Fs and TBMs. Halsey rode with Bogan's TG 38.2, his flag in *New Jersey* (BB 62). Kinkaid, in Leyte Gulf, had 6 older battleships with 12 cruisers and 90 destroyers and frigates. Close air support came from the Escort Carrier Group TG 77.4, under Rear Admiral Thomas Sprague—three task units with the radio call names of Taffy 1, 2 and 3. Each Taffy had 6 CVEs with 3 destroyers and 4 or 5 destroyer escorts. Four *Sangamon* (CVE 26)-class ships had miniature air groups of 26 to 33 planes. The *Sangamons*, bigger than other CVEs, could handle the "hotter" F6F and three of the class had been rearmed with them. *Santee* (CVE 29) still had General Motors FM-2s, an improved CVE version of the older Grumman F4F *Wildcat*. The remaining CVEs were of the *Casablanca* (CVE 55) class, each with a Composite Squadron of 23 to 30 FM-2s and TBF/TBM *Avengers*.

Three of TF 38's task groups were off the Philippines; McCain's TG 38.1 was on its way to Ulithi to replenish.



Approach of Allied and Japanese naval forces to Leyte Gulf
Unless otherwise indicated, the daily positions are as of noon.

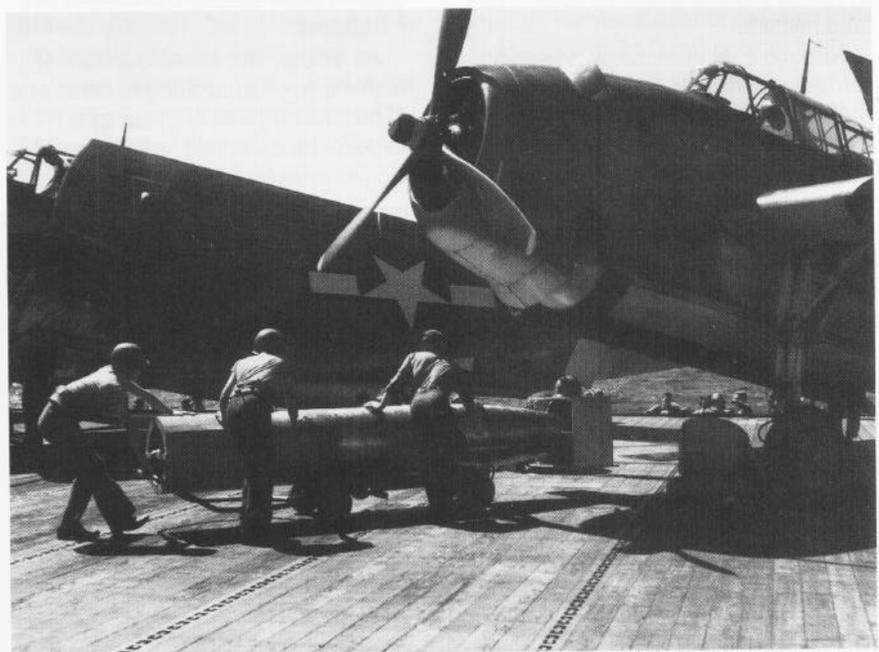
Fleet when the moment came, and ordered McCain's group back to the Philippines. As the strike on the Center Force was preparing, a Japanese search plane from Luzon spotted Sherman's TG 38.3. A heavy attack soon followed. As soon as this showed up on his radar, Sherman put off the strike he was about to launch, got all his fighters into the air and turned into a rain squall. The raid was repelled with losses, but one dive-bomber used cloud cover until he could drop his bomb on *Princeton* (CVL 23). The blast ignited the planes' fuel tanks on the hangar deck; this set off torpedo warheads.

Cruisers and destroyers closed the burning carrier to help her damage control parties. Six hours of grueling work, punctuated by an ineffectual air raid from Ozawa's Northern Force, seemed to be bringing *Princeton's* fires under control until flames set off a torpedo magazine, blowing off the carrier's stern. Cruiser *Birmingham*, alongside for some hours fighting fires, was sprayed with debris, killing or injuring some 600 men. Fires now threatened aviation gas tanks and other magazines, and *Princeton* had to be sunk by destroyer torpedoes.

While *Princeton* fought to survive, TF 38 opened the battle of the Sibuyan Sea. The Japanese air command on Luzon had decided its inexperienced flyers could be more useful attacking TF 38 than trying to fly cover, so Kurita

Halsey quickly ordered the three available groups to head north and rendezvous at midnight; Mitscher was then to continue with the united force and attack Ozawa as soon as he was within reach. The groups joined and Mitscher headed north. *Independence* (CVL 22), now a "night carrier," flew radar-equipped search planes. Submarines sighted Kurita early on 23 October and sent Halsey a contact report. The subs sank two cruisers, including Kurita's flagship, and crippled a third. Kurita shifted his flag to *Yamato*; early on 24 October, he entered the Sibuyan Sea.

At this time, carrier scouts discovered Kurita and Nishimura. Dive-bombers damaged a battleship and a destroyer of the Southern Force, but Halsey judged Kurita to be the more serious threat. He ordered all three available groups to concentrate on the Center Force, leaving Nishimura to the Seventh



Avenger torpedo bombers used their weapons to good effect off Samar.

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was practically without air support when the first air strike came in. Four Japanese planes were downed and no more were seen. During the next four hours, TF 38 made five strikes against heavy anti-aircraft fire, hammering 17 bombs and 19 torpedoes into *Musashi*; the battleship rolled over and sank that evening. A torpedo damaged cruiser *Myoko*'s propeller shafts and made her turn for home. Battleships *Yamato*, *Nagato* and *Haruna* took damage but continued on at speed. Even with *Musashi* and *Myoko* gone, the Center Force still carried a serious punch.

Kurita turned to stand by his damaged ships, then headed westward. Pilots reported this to Halsey, who read this as a retreat. Kurita, though, had not given up but was drawing back to avoid further air strikes. Shortly before sunset, he again reversed course and headed for San Bernardino Strait. From Tokyo, a general message from Toyoda came to the Japanese task forces: "All forces will advance to the attack, trusting in divine assistance." TF 38 had seriously delayed Kurita; he had originally planned to be through San Bernardino Strait by the evening of 24 October but now estimated that he would be through by about 0100 on the 25th and would reach Leyte Gulf by about 1100. He was spotted twice on radar by search planes from *Independence*, but Halsey was looking toward Ozawa's Northern Force and assumed Kinkaid would be able to defend himself.

Nishimura, at this time, was heading across the Mindanao Sea toward Surigao Strait followed, 40 miles behind, by Shima. Though they were supposed to cooperate, they did not communicate; each went his way in radio silence. In Leyte Gulf, Kinkaid thought that San Bernardino Strait was being watched by Halsey's fast battleships. Halsey had considered this when he ordered TF 38 northward but decided he needed all his anti-aircraft firepower to defend his carriers against overestimated Japanese air strength. Exaggerated reports of ship damage in the Sibuyan Sea led Halsey to believe Kurita was so battered that Kinkaid could fend him off if he tried to attack Leyte Gulf. Kinkaid, believing his northern flank secure, set about defending the southern entrance to Leyte Gulf. After Nishimura and Shima were sighted by search planes early on 24

October, and Nishimura was attacked with slight results, neither force was spotted through the rest of the day. Kinkaid correctly assumed they were headed for Surigao Strait. He ordered Rear Admiral Jesse Oldendorf to the northern end of the strait with all the Seventh Fleet's bombardment ships: 6 older battleships, 8 cruisers and 28 destroyers. Oldendorf deployed his battleships across the mouth of the strait, flanked by cruisers and destroyers. PT boats were stationed down the strait and into the Mindanao Sea. Nishimura was approaching a 35-mile corridor of torpedoes and gunfire.

When Nishimura learned of Kurita's delay in the Sibuyan Sea, he continued on course, assuming a night action would give him his best chance of getting through Surigao Strait. He endured PT attacks without harm, but destroyer torpedoes mortally hit battleship *Fuso* and damaged her sister *Yamashiro*. *Yamashiro* took three more torpedoes but continued on with cruiser *Mogami* and destroyer *Shigure*. Nishimura pushed boldly ahead, firing as best he could without radar, as Oldendorf's heavies repeatedly scored. *Yamashiro*, burning furiously, turned to withdraw but capsized and sank with her admiral and most of her crew. *Mogami*, battered and afire, headed southward and survived a collision with another Japanese cruiser, more cruiser gunfire and two PT attacks.

As Shima, still 40 miles astern of Nishimura, entered Surigao Strait one of his cruisers was crippled by a PT torpedo. He continued, with the remaining two cruisers, past *Fuso*'s flaming

wreck but concluded that he was too late to help Nishimura and turned southward, picking up *Mogami* and *Shigure*.

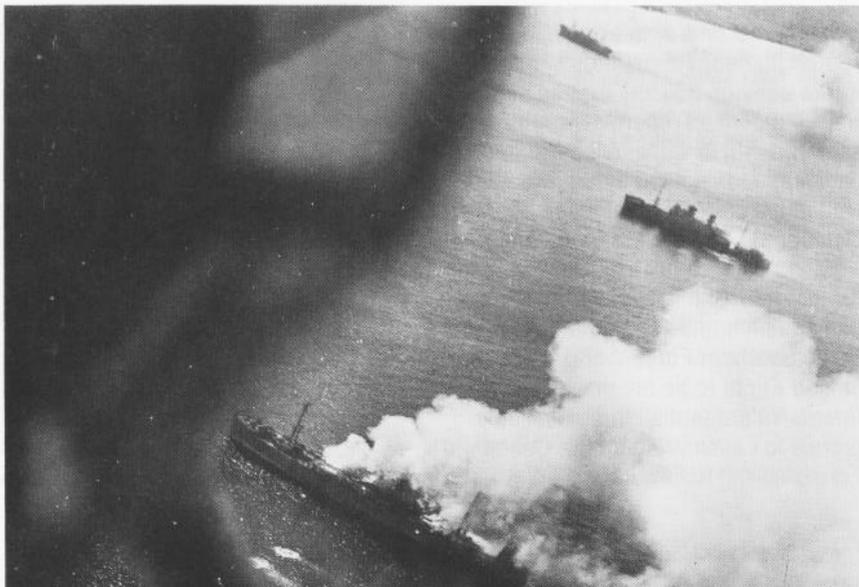
Shima got clear of the strait. Planes from the escort carriers spotted him in the Mindanao Sea and left *Mogami* dead in the water. Her crew abandoned ship and a destroyer sank her with a torpedo. Shima's surviving ships were attacked by carrier planes but escaped—for the time being.

Kurita emerged from San Bernardino Strait shortly after midnight on 25 October and turned toward Leyte Gulf. Messages told him that Nishimura was engaged in Surigao Strait and, later, that Shima was turning back. As daylight came, a lookout spotted an American plane and reported ships on the horizon. This was Taffy 3, one of the CVE task units, commanded by Rear Admiral Clifton Sprague. This unit and Taffy 2, some miles to the south, were the only naval forces between Kurita and Leyte Gulf.

Identification of ships and aircraft has always been a problem. This worked in our favor off Samar on the morning of 25 October when the Japanese identified Taffy 3 as one of TF 38's groups. Kurita was less than enthusiastic about tackling such a force without air cover, and after his experience in the Sibuyan Sea, he doubted the worth of his anti-aircraft fire. But the enemy was on the horizon and it was time to fight. Instead of forming for action, he ordered a gen-

Carrier planes strike Japanese shipping off Luzon, 17 October 1944, as seen by the tail gunner of an Avenger torpedo bomber.

USN 281674



eral attack; his ships made for the enemy independently, faster ships pulling ahead of the others.

Sprague ordered Taffy 3 to steam eastward, away from Kurita and more or less into the wind. As Kurita opened fire, he ordered all planes into the air with any ordnance at hand and told every ship to make smoke. A plain-language contact message gave the position and asked for assistance from anyone within reach. Planes went off the flight decks as fast as they could go, and others from Rear Admiral F. B. Stump's Taffy 2 joined in from over the horizon. Though many of its planes were already flying ground support missions, Taffy 2 sent out what it had and recalled everyone within reach.

A rain squall helped conceal Taffy 3 for a while as Kurita tried to pull to windward and compel Sprague to turn away from the wind. At 0716, Sprague ordered his three destroyers to attack. Making smoke, the destroyers engaged with guns and torpedoes, damaging one of Kurita's cruisers. Four destroyer escorts joined in. In the course of this confused duel, the "small boys" torpedoed one, and possibly three, Japanese cruisers. Kurita's flagship, *Yamato*, turned northward to evade torpedoes; by the time she could come about again, she was in the rear of the Japanese force, and this would hamper the admiral's control of the rest of the action.

Within two hours, cruisers and destroyers were edging up on Sprague's flanks as battleships and more cruisers drew up from astern. Taffy 3 had to come around to the southwest to stay between Kurita and Leyte Gulf and to keep from being surrounded, but this had the carriers launching planes before, rather than into, the wind. Sprague ordered his planes to concentrate on four cruisers that were pulling up on Taffy 3's port quarter. As the CVEs dodged salvos of shells, they popped away with the single 5-inch 38s on their fantails. Smoke and zigzagging helped, but three CVEs were hit.

Kinkaid's support aircraft commander ordered all planes not actually in combat elsewhere to go to Taffy 3's aid, and some of these arrived to help. The situation was just too chaotic for neat coordination, though this was tried. The carrier pilots bombed, strafed, attacked



The General Motors FM-2, an improved version of the Grumman F4F Wildcat, served in escort carriers through V-J Day. Wildcats and Avengers from Seventh Fleet escort carriers had a heroic share in turning back a powerful surface attack in the battle off Samar.

80-G-287594

with torpedoes and made dry runs when ammunition ran out—anything to give the "jeeps" a chance to survive. Steaming pell-mell with the wind, the CVEs could hardly worry about recovering planes. When a pilot needed munitions or fuel, he had to rely on Taffy 2 or fly to Tacloban.

Gambier Bay (CVE 73) was closest to the pursuers. At first, she dodged their fire, but as the range closed, she began to take hits. Flooding and aflame, she dropped out of formation. Destroyers bravely attacked, but *Gambier Bay*, hit repeatedly, capsized and sank.

Three Japanese cruisers were out of the fight, battered by gunfire and the heroic efforts of the CVE flyers; the rest of Center Force broke off action shortly after 0900. Kurita now knew that Nishimura had been crushed in Surigao Strait, and aggressive and repeated attacks by planes and ships convinced him that he faced major opposition. Before 0930, he turned back toward San Bernardino Strait. The attackers had turned back only 25 miles from their objective. Kurita's sudden disappearance, when things seemed to be going his way, seemed miraculous to Taffy 3.

Planes from the CVEs followed Kurita as the admiral weighed his next move. When the Center Force turned to withdraw, the planes attacked, damaging battleship *Nagato*. Planes from McCain's TG 38.1 attacked at a range

of more than 350 miles, claiming many hits but apparently doing little damage. Another strike went in that afternoon from Taffy 2 but without result. McCain continued to head for Samar as Halsey ordered Bogan's TG 38.2 to join him for a combined attack on 26 October. Three strikes hit Kurita as he retired through the Sibuyan Sea, sinking a cruiser and severely damaging another; Army bombers also claimed to have hit three Center Force ships. Much of Kurita's force survived but to little effect through the remainder of the war.

At 2022 on 24 October, Halsey turned TF 38 northward after Ozawa. His three task groups totaled 5 fleet carriers and 5 small carriers, with 6 fast battleships, 8 cruisers and 41 destroyers. Against this, Ozawa had 4 carriers (1 CV, 3 CVLs), the 2 hybrid *Ise*-class BB/CVs, 3 cruisers and 4 destroyers. By now, the Northern Force's air strength had been whittled down to 29 planes. Ozawa advanced to meet Halsey expecting, as he later said, "complete destruction."

Night flyers from *Independence* picked up the Northern Force on radar after 0200. Halsey now pulled out his Battle Line, TF 34, and took it ahead to engage anything left afloat by the air strikes planned for the morning. The carriers launched a first attack after dawn. A few fighters met them and were quickly splashed. Dive-bombers and

torpedo planes sank CVL *Chitose* and a destroyer, damaging CV *Zuikaku* and CVL *Zuiho*. A second attack crippled CVL *Chiyoda* and damaged a cruiser.

At this point, Halsey began to receive messages from Taffy 3 calling for support. He now knew that Nishimura had been turned back from Surigao Strait and still felt that Kinkaid's force was sufficient. A message went to McCain, still en route to the Philippines, to make "best possible speed" to Taffy 3's assistance. Adm. Nimitz now sent Halsey the famous "Where is Task Force 34?" message. Halsey's communications staff mistook random words, called "padding," at the end of the message for part of Nimitz's text and gave it to Halsey at 1000 with the additional phrase "the world wonders" added to it. This enraged Halsey, who took it as an insult. Feeling increasingly compelled to turn back from his pursuit of Ozawa, Halsey took TF 34 southward at 1115, picking up Bogan's task group for air cover.

Mitscher continued north with his two remaining task groups. At midday, they launched their third strike, sinking *Zuikaku* and badly damaging *Zuiho*. Two afternoon attacks sent *Zuiho* down and scored some near-misses on BB/CV *Ise*. In midafternoon, Mitscher turned eastward to avoid getting his carriers too near Ozawa's surface ships and sent warships to finish off *Chiyoda*.

A seeming footnote to the Battle of Leyte Gulf proved a harbinger of things to come. In the morning of 25 October,

6 Sep: As the scope of the aviation safety program was enlarged, a Flight Safety Section was established in the Office of the Deputy Chief of Naval Operations (Air) and was assigned the direction and supervision of the aviation safety program.

27 Sep: Guided missiles were used in the Pacific by Special Task Air Group 1 (from its base on Stirling in the Treasury Islands), which began a combat demonstration of the TDR assault drone. For combat against heavily defended targets, a control operator in an accompanying TBM guided the drone by radio and directed the final assault by means of a picture received from a television camera mounted in the drone. In the initial attack against antiaircraft emplacements in a beached merchant ship defending Kahili airstrip on South Bougainville, two out of four TDRs struck the target ship.

1 Oct: Patrol Squadrons (VP) and multi-engined bombing squadrons (VB) were renamed and redesignated

suicide planes found Thomas Sprague's Taffy 1 off Mindanao. Some of the attackers were put off by gunfire but two hit *Santee* and *Suwannee* (CVE 27); a Japanese submarine then eluded the screen and torpedoed *Santee*. Both carriers managed to stay in formation and make repairs and later resumed flight operations. Another group of suiciders struck Taffy 3, damaging

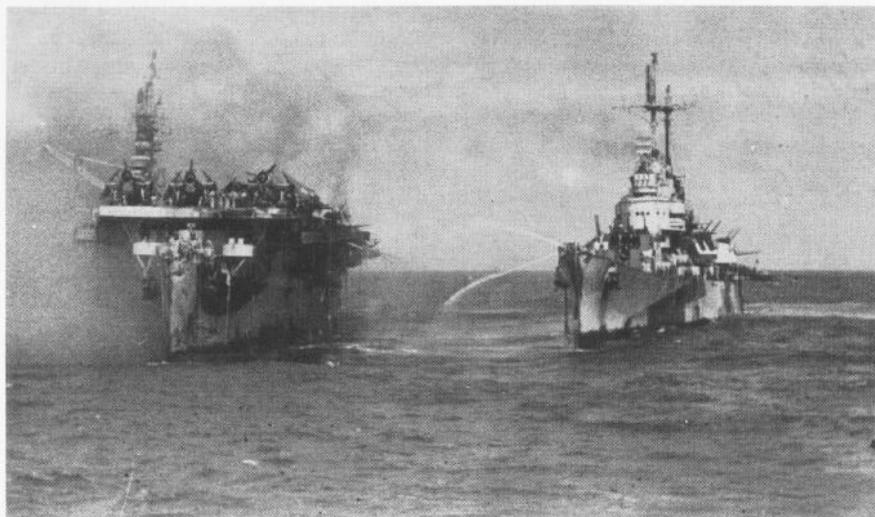
patrol bombing squadrons (VPB).

7 Oct: A new color specification went into effect, which provided seven different color schemes for aircraft depending upon design and use. The most basic change was the use of glossy sea blue all over on carrier-based aircraft and on seaplane transports, trainers and utility aircraft. The basic nonspecular camouflage color scheme, semigloss blue above and nonspecular white below, was to be applied to patrol and patrol bombing types and to helicopters. For antisubmarine warfare, two special camouflage schemes—gray on top and sides and white on bottom or white all over—were prescribed with the selection dependent upon prevailing weather conditions. All aluminum was to be used on landplane transports and trainers and landplane and amphibian utility aircraft. Orange-yellow was to be used on target-towing aircraft and primary trainers. Another new scheme, glossy red, was specified for target drones.

Kitkun Bay (CVE 71) and *Kalinin Bay* (CVE 68) and mortally wounding *St. Lo* (CVE 63).

The mobile power of the fleet and escort carrier forces was essential to the success of the Leyte landing. Experience at Leyte pointed to a need for flexibility in carrier plane complements and ordnance loads, with proportions of fighters to attack types and types of weapons carried varying to suit the operation at hand.

Leyte Gulf has been called the greatest and most complex naval battle in history and was the "last hurrah" of the Imperial Navy as an organized striking force. Both fleets fought well; both fleets made mistakes that affected the outcome of the action. The Japanese weakness and American strength in aviation underlined the extent to which carrier air power had become a primary element of naval warfare. Though Kurita, bereft of air cover, was able to fight his way across the Sibuyan Sea, the defense of Taffy 3 showed what trained, determined carrier flyers could do when the proverbial chips were down. ■



Cruiser Birmingham helps Princeton fight fires off Leyte. Though a number of fleet carriers were hard hit in the later years of the war, Princeton was the only one lost in action.

USN 281660

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