

World War II

1940–1945

The fleet faced the supreme test of war only 30 years after acquiring its first airplane and just 19 years after commissioning its first aircraft carrier. Naval aviation carried the fight to the enemy and forged ahead to become the backbone of fleet striking power.

In one swift, skillfully executed stroke at Pearl Harbor, Japanese carrier planes temporarily crippled the Navy's battle line. The handful of carriers in the Pacific filled the ensuing void and demonstrated the potency of naval airpower when they struck a retaliatory blow against the Japanese home islands in 1942.

Although the geographic position of the United States provided the strategic advantage of the ability to move ships between the Atlantic and Pacific fleets via the Panama Canal, it also placed the nation squarely between two wars with few commonalities.

Air operations in the Atlantic consisted of a blockade and campaign to protect convoys of ships that delivered raw materials, munitions, and reinforcements to the Allies. The convoys' safe arrivals enabled a series of amphibious operations that liberated the European continent from Axis hegemony.

In the Pacific, Allied strategy focused first on stopping Japan's alarmingly rapid advance, and then on the bitterly contested task of driving the enemy forces back over a broad expanse.

The United States entered World War II unprepared to execute either Allied strategy—Atlantic or Pacific. The Navy and Marine Corps air arms mustered only one small and seven large commissioned aircraft carriers, five patrol wings, and two Marine aircraft wings, about 5,900 pilots and 21,678 enlisted men, 5,233 aircraft of all types, including trainers, and a few advanced air bases.

Distance from the enemy and tremendous industrial power, however, enabled the United States to build the ships, planes, and equipment necessary for

victory. American armed forces drove the Axis from strategically located bases, cut off its raw materials, and placed the Allies in position to launch the final air and amphibious offensives. These late efforts would be rendered unnecessary by the destructive power of the atom unleashed upon the Japanese cities of Hiroshima and Nagasaki, but the fleet's liberation of Japanese-held islands in the Central Pacific made the atomic attacks possible.

For the first time in naval history the opponents engaged each other entirely in the air without sighting enemy ships. Radar pierced the night, giving the fleet new eyes, as technological progress improved the defense and added power to the offense. Scientists contributed to the war effort by developing specialized equipment and applying scientific principles to operational tactics. Logistics assumed new importance, and advances in replenishment at sea increased naval mobility.

In the course of the war, Navy and Marine pilots claimed the destruction of more than 15,000 enemy aircraft in the air and on the ground; sank 174 Japanese warships, including 13 submarines totaling 746,000 tons; destroyed 447 Japanese merchant ships totaling 1,600,000 tons; and sank 63 U-boats in the Atlantic. In combination with other agents, Navy and Marine air forces helped sink another 157,000 tons of warships and 200,000 tons of merchant ships, and another 6 Japanese and 20 German submarines.

Although World War II contributed significantly to the development of aviation, experience proved some prewar theories on the role of airpower to naval operations to be misconceived. The bombing tests of the 1920s had persuaded some airpower proponents of the obsolescence of navies, but carrier task force operations in the war gave little credence to such conclusions. Those who questioned the importance of airplanes to navies were equally off the mark. Advocates of independent airpower had also doubted the possibility and usefulness of close air support for troops; battle experience

validated such support as indispensable. The disappointment of naval officers who visualized decisive fleet engagements in the tradition of Trafalgar and Jutland matched that of airpower theorists who saw their predictions go awry. By the test of war it became exceedingly clear that neither armies nor navies could achieve objectives in war without first achieving air superiority, and that neither could exert as much force alone as with the aid of air striking power.

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4 JANUARY • The establishment of Project Baker in Patrol Wing 1 expanded experiments with blind landing equipment.

15 FEBRUARY • Commander in Chief, U.S. Fleet, noting that reports on air operations in the European war stressed the problem of aircraft vulnerability, recommended equipping naval aircraft with leak-proof or self-sealing fuel tanks, and pilots and observers with armor. The Bureaus of Aeronautics and Ordnance had investigated these forms of protection for two years, but this formal statement of need accelerated procurement and installation of both.

24 FEBRUARY • The Bureau of Aeronautics issued a contract for television equipment, including a camera, transmitter, and receiver capable of airborne operation. Researchers used this equipment to transmit instrument readings obtained from radio-controlled structural flight tests and to provide target and guidance information for the conversion of radio-controlled aircraft to offensive weapons.

27 FEBRUARY • The Navy awarded a contract to Vought-Sikorsky Aircraft for the design of a full-scale flying model (as distinguished from a military prototype) of a “Flying Flapjack” fighter, designated VS-173, with an almost circular wing. This design, which produced a potential high speed of nearly 500 mph combined with a very low takeoff speed, originated in the research of former National Advisory Committee for Aeronautics engineer Charles H. Zimmerman.

29 FEBRUARY • The Bureau of Aeronautics initiated action that led to a contract with University of Iowa professor H. O. Croft to investigate the possibilities of a turbojet propulsion unit for aircraft.

19 MARCH • The Navy authorized fleet activities to apply additional national star insignia on the sides of the fuselages or hulls of Neutrality Patrol aircraft to assist in their identification.

22 MARCH • The Navy initiated guided missile development at the Naval Aircraft Factory, Philadelphia, Pa., with the establishment of a project for adapting radio controls to a torpedo-carrying TG-2 airplane.

APRIL • Fleet Problem XXI, consisting of two phases and lasting into May, involved coordination of commands, protection of a convoy, and seizure of advanced bases around the Hawaiian Islands and eastern Pacific. Observers noted the tendency of commanders to overlook carrier limitations and assign them excessive tasks, the need for reliefs for flight and carrier crews under simulated war conditions, the success of high-altitude tracking by patrol aircraft, and the ineffectiveness of low-level horizontal bombing attacks. The war compelled the cancellation of Fleet Problem XXII in 1941.

23 APRIL • Cmdr. Donald Royce was designated to represent the Navy on an Army Air Corps evaluation board for rotary-wing aircraft. The board was incidental to legislation directing the War Department to undertake rotary-wing aircraft development.

25 APRIL • *Wasp* (CV 7) was commissioned at Boston, Mass., Capt. John W. Reeves Jr. commanding.

7 MAY • President Franklin D. Roosevelt ordered fleet ships to remain in Hawaiian waters indefinitely as a signal of American resolve to deter Japanese aggression. Subsequently, Commander in Chief, U.S. Fleet Adm. James O. Richardson asserted that the facilities at Pearl Harbor were inadequate to support the fleet and protect against attack. Richardson’s stance contributed to his relief on 1 February 1941 by Adm. Husband E. Kimmel.

16 MAY • President Franklin D. Roosevelt requested a congressional appropriation of \$1.18 billion to strengthen national defense, including \$250 million for the Navy and Marine Corps.

27 MAY • Secretary of the Navy Charles Edison directed the equipment of six DD-445–class destroyers with planes,

catapults, and plane handling gear. *Halford* (DD 480), *Hutchins* (DD 476), *Leutze* (DD 481), *Pringle* (DD 477), *Stanly* (DD 478), and *Stevens* (DD 479) were subsequently selected. On 23 December 1942 *Pringle* received the first aircraft, an OS2U-3 Kingfisher, BuNo 5870. Just before the new year, BuNo 01505, an OS2N-1, was assigned to *Hutchins*. Before these two ships and *Stanly* joined the fleet in early 1943, however, shortcomings in the plane hoisting gear led to removal of the aviation equipment. *Halford* and *Stevens* performed limited aircraft operations, but in October 1943, the Navy ordered the equipment removed from both ships and cancelled its installation on *Leutze*.

14 JUNE • The Naval Expansion Act of 1940 was signed into law. The measure authorized an 11 percent increase in the size of the fleet, approved a 79,500-ton augmentation of aircraft carrier tonnage over the limits set by the 1938 expansion act, and sought to increase the number of naval aircraft by instituting a cap of 48 airships and 4,500 planes. The next day, President Franklin D. Roosevelt approved an Act of Congress to raise the total number of planes to 10,000, including 850 for the Naval Reserve.

17 JUNE • Chief of Naval Operations Adm. Harold R. Stark requested \$4 billion from Congress to increase the authorized strength of the Navy by 70 percent. This measure was subsequently known as “The Two Ocean Navy Act” and signed into law on 19 July.

20 JUNE • The Bureau of Construction and Repair merged with the Bureau of Engineering to form the Bureau of Ships. In addition, the Office of the Undersecretary of the Navy was established, with naval aviator James V. Forrestal of World War I service assuming the position on 22 August.

25 JUNE • The Navy abolished the aeronautical engineering duty only designation, resulting in the designation of all men subsequently appointed to that group as engineering duty only.

25 JUNE • Chief of Naval Operations Adm. Harold R. Stark promulgated plans to expand the flight training program. They called for the assignment of 150 students per month beginning on 1 July, and a regular increase to an entry rate of 300 per month within a year.

27 JUNE • President Franklin D. Roosevelt established a National Defense Research Committee to correlate and support scientific research on the mechanisms and devices of war. Among its members were officers of the War and Navy departments appointed by the respective secretaries. Although the committee’s functions specifically excluded research on the problems of flight, the organization made substantial contributions in various fields important to naval aviation, including airborne radar.

14 JULY • Scientists E. L. Bowles, Ralph Bowen, Alfred L. Loomis, and Hugh H. Willis attended the initial meeting of what became the National Defense Research Committee’s Division 14, or Radar Division. During this and subsequent meetings with other researchers, the group defined its mission: “to obtain the most effective military application of microwaves in minimum time.” In carrying out this mission, Division 14 developed airborne radar the Navy used for aircraft interception, airborne early warning, and other specialized applications.

19 JULY • Another expansion of the Navy authorized an increase of 200,000 tons over the aircraft carrier limits of the Two Ocean Navy Act and a new aircraft ceiling of 15,000 planes. This act also allowed further increases in aircraft strength upon presidential approval.

5 AUGUST • Chief of Naval Operations Adm. Harold R. Stark established ground rules for the exchange of scientific and technical information with the British Tizard Mission, named after its senior member, Sir Henry T. Tizard. In general, the rules provided for the expected free exchange of information on matters concerning aviation, including the field later known as radar. On 12 August, following reports of British progress, the Bureau of Ordnance requested that the National Defense Research Committee sponsor development of the proximity fuze, which had already been under consideration, on a priority basis and with emphasis on its antiaircraft use.

17 AUGUST • A team known as Section T after its chairman, Dr. Merle A. Tuve of Division A of the National Defense Research Committee, was established to examine the feasibility of various approaches to developing the proximity fuze. Eight days later, the Navy issued a contract to the Department of Terrestrial Magnetism at the Carnegie

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Institution, Washington, D.C., for research culminating in the radio VT fuze for anti-aircraft guns as well as radio and photoelectric VT fuzes for bombs and rockets.

22 AUGUST • Former naval aviator James V. Forrestal assumed his duties as the first Undersecretary of the Navy.

29 AUGUST • The exchange of radar development information with the British Tizard Mission began at a conference attended by Sir Henry T. Tizard, two of his associates, and representatives of the U.S. Army and Navy, including Lt. John A. Moreno of the Bureau of Aeronautics. The conference dealt primarily with British techniques for detecting German bombers, but also touched on means of identifying friendly aircraft. Later meetings focused on British development of shipboard and airborne radar. A British disclosure of particular importance for airborne radar application was the cavity magnetron, a tube capable of generating high-power radio waves of a few centimeters in length.

2 SEPTEMBER • The Americans and the British made an agreement in which the United States exchanged 50 overage World War I Emergency Program destroyers for 99-year leases of sites for naval and air bases in Antigua, the Bahamas, British Guiana (Guyana), Jamaica, St. Lucia, and Trinidad, and similar rights without consideration for bases in Bermuda and Newfoundland. The acquisition of these sites advanced the sea frontiers of the United States and provided bases from which ships and aircraft covered the strategically important sea approaches to the East Coast and Panama Canal. The British received 44 of the destroyers and the Canadians the remaining six. British Prime Minister Winston S. Churchill had appealed to President Franklin D. Roosevelt for the reinforcements as a matter of “life and death” during the Battle of the Atlantic.

3 OCTOBER • Chief of Naval Operations Adm. Harold R. Stark requested that the naval attaché in London obtain samples of British radio echo equipment (radar), including aircraft installations for interception (AI), surface vessel detection (ASV), and aircraft identification (IFF).

5 OCTOBER • Secretary of the Navy William F. Knox placed all organized reserve divisions and aviation squadrons on short notice for call to active duty and

granted authority to call fleet reservists as necessary—Naval Reserve sailors had hitherto been ordered to active duty on a voluntary basis. On 24 October, the Bureau of Navigation announced plans for mobilizing aviation squadrons that called for ordering to active duty one-third the number of squadrons by 7 November, and the remainder by 1 January 1941.

9 OCTOBER • Secretary of the Navy William F. Knox approved a recommendation by the General Board to equip 24 submarines authorized for construction with gasoline for delivery to seaplanes on the water. This move followed a demonstration in which submarine *Nautilus* (SS 168) refueled patrol planes and conducted a successful test dive to 300 feet with aviation gasoline on board; it also came after the Navy made plans to prepare *Argonaut* (SS 166) and *Narwhal* (SS 167) to carry 19,000 gallons of aviation gasoline.

11 OCTOBER • Rear Adm. Harold G. Bowen, the technical aide to the Secretary of the Navy, proposed a program for the development of radio ranging equipment (radar). This formed the basis for the Navy’s prewar radar development effort, which included an airborne radar for surface search in addition to identification equipment and shipbased radar.

12 OCTOBER • *Wasp* (CV 7) launched 24 Army Curtiss P-40 Warhawks of the 8th Pursuit Group and 9 North American O-47s of the 3rd Observation Squadron off the Virginia Capes, marking the first launches of Army aircraft from a U.S. carrier. The participants gathered data on the comparative takeoff runs of Army and Navy planes.

23 OCTOBER • The Navy set up an administrative command for carrier aviation within the Atlantic Squadron, entitling it Aircraft, Atlantic Squadron.

24 OCTOBER • An administrative command for patrol aviation in the Atlantic Squadron was established under the title Patrol Wings, Atlantic Squadron.

28 OCTOBER • The Chief of Naval Operations reported the entrance into service of planes with armor and fuel protection, and announced the addition of such protection to all fleet aircraft—except those assigned to Patrol Wing 2—within a year.

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1 NOVEMBER • A fleet reorganization divided aviation forces administratively between the Atlantic and Pacific oceans and marked the beginning of the independent development of forces according to strategic requirements. In the Atlantic, aviation was transferred from Scouting Force to Patrol Force, which replaced the Atlantic Squadron as a fleet command parallel to Scouting Force. The Pacific patrol wings remained attached to Scouting Force under the combined command Commander Patrol Wings, U.S. Fleet, and Commander Aircraft, Scouting Force.

11 NOVEMBER • The first general meeting of the Radiation Laboratory occurred at the Massachusetts Institute of Technology. The laboratory served as the principal scientific and developmental agency of Division 14 of the National Defense Research Committee and became instrumental in airborne radar development.

15 NOVEMBER • Seaplane tender *Curtiss* (AV 4), Cmdr. Samuel P. Ginder commanding, was commissioned in Philadelphia, Pa., as the first of two ships of her class.

15 NOVEMBER • PBV-2 Catalinas of VP-54 began the first U.S. naval air operations from Bermuda, supported by seaplane tender *George E. Badger* (AVD 3).

16 NOVEMBER • The Bureau of Aeronautics established a catapult procurement program for *Essex* (CV 9)-class carriers, providing for the installation of one flight deck catapult and one athwartships hangar deck catapult on each of the 11 projected ships of the class.

18 NOVEMBER • The Chief of Naval Operations authorized use of the abbreviation “RADAR” in unclassified correspondence and conversation, and directed the use of the phrase “radio detection and ranging equipment” in lieu of various terms used before, including radio ranging equipment, radio detection equipment, radio echo equipment, and pulse radio equipment.

30 DECEMBER • The Bureau of Aeronautics directed the painting of fleet aircraft in nonspecular colors. Ship-based aircraft were to be Light Gray all over. Patrol planes were to be Light Gray except for surfaces seen from above, which were to be Blue Gray.

9 JANUARY • The first group of contractors arrived on Wake Island to construct an air station.

1 FEBRUARY • The establishment of the Atlantic and Pacific Fleets completed the transition that began in November 1940 to divide aviation between the two oceans. The titles of the Atlantic Fleet aviation commands became Aircraft, Atlantic Fleet, and Patrol Wings, Atlantic Fleet. No change was made in the aviation organization of the Pacific Fleet.

10 FEBRUARY • A one-month instruction course began under Project Baker to train patrol plane pilots to make blind landings using radio instrument landing equipment, which the Navy was procuring for all patrol aircraft and their bases. One pilot from each of 13 squadrons, one radioman from each of five patrol wings, and two radiomen from each of five naval air stations attended the course.

26 FEBRUARY • An extensive modification of aircraft markings added the national star insignia to both sides of the fuselage or hull and eliminated those markings on the upper right and lower left wings; discontinued colored tail markings, fuselage bands, and cowl markings; mandated removal of red, white, and blue rudder stripes; and changed the color of all markings except the national star insignia to those of least contrast to the background.

1 MARCH • Support Force, Atlantic Fleet, Rear Adm. Arthur L. Bristol commanding, was established for operations on the convoy routes across the North Atlantic. The directive placed the component patrol squadrons under a patrol wing that was established at the same time.

11 MARCH • An act of Congress empowered President Franklin D. Roosevelt to provide goods and services to those nations whose defense he deemed vital to that of the United States. Isolationists criticized the Lend-Lease program for drawing the country close to war, but the act allowed the United States to provide the Allied belligerents with war material, food, and financial aid without joining in combat. The “cash and carry” provisions of the Neutrality Act of 1939 were also changed to permit the transfer of munitions, and on 17 November, *Archer*

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(BAVG 1) became the first of 38 aircraft escort vessels (escort carriers) transferred to the British under the program during World War II.

17 MARCH • The chief of the Bureau of Aeronautics approved a proposal for establishing a special subcommittee of the National Advisory Committee for Aeronautics to promptly review the status of jet propulsion and to recommend plans for its application to flight and assisted takeoff.

27 MARCH • The Americans, British, and Canadians signed the ABC-1 Staff Agreement in Washington, D.C. The accord established a Combined Chiefs of Staff, outlined a framework for strategic cooperation between the Allies, and directed the Atlantic Fleet to reinforce the British in convoying ships to Britain as soon as possible.

28 MARCH • Capt. Elliott Buckmaster, *Yorktown* (CV 5) commanding officer, reported that during five months of operational experience with the CXAM radar the ship had tracked planes at a distance of 100 miles. Buckmaster recommended equipping aircraft with electronic identification devices, and carriers with separate and complete facilities for tracking and plotting all radar targets.

19 APRIL • The development of a guided glider bomb (GLOMB) began at the Naval Aircraft Factory, Philadelphia, Pa. The prototype was designed to be towed long distances by a powered aircraft, released in the vicinity of a target, and guided by radio control in an attack. A television camera enabled the GLOMB to transmit a view of the target to a control plane.

20 APRIL • The first successful test of electronic components of radio-proximity fuzes occurred at a farm in Vienna, Va. A 37mm pack howitzer fired a radio oscillator, or sonde, that made radio transmissions during its flight, demonstrating that radio tubes and batteries could be constructed ruggedly enough to withstand firing from a gun. The presentation led Section T of the National Defense Research Committee to concentrate on the development of radio-proximity fuzes for anti-aircraft guns.

26 APRIL • The project officer of the Naval Aircraft Factory, Philadelphia, Pa., reported the successful flight test of an

unmanned Vought O3U-6 Corsair under radio control beyond the safe bounds of piloted flight. The information obtained proved valuable in overcoming flutter encountered at various speeds and accelerations.

30 APRIL • The Bureau of Aeronautics directed the preliminary design of a transport glider, an initial step toward a glider development program, at the Naval Aircraft Factory, Philadelphia, Pa. As the program progressed, requirements were clarified, leading to the construction of 12- and 24-place wooden or plastic amphibian gliders by firms not already engaged in building military aircraft.

30 APRIL • The commanding officer of NAS Lakehurst, N.J., ordered the salvage of metal-clad airship ZMC-2 and its assignment, complete with engines, instruments, and appurtenances, to the Lighter-Than-Air Ground School at Lakehurst. ZMC-2 had flown more than 2,250 hours since August 1929.

2 MAY • Fleet Air Photographic Unit, Pacific, was established under Commander Aircraft, Battle Force. The move preceded by one day the establishment of a similar unit in the Atlantic Fleet under Commander Patrol Wings, Atlantic.

3 MAY • Project Roger was established at the Naval Aircraft Factory, Philadelphia, Pa., to install and test airborne radar equipment. Its principal assignment was to support the Radiation Laboratory at the Massachusetts Institute of Technology and the Naval Research Laboratory in various radar applications, including search and blind bombing, and radio control of aircraft.

8 MAY • The Bureau of Aeronautics directed the establishment of Aviation Repair Units 1 and 2 to provide a nucleus of aircraft repair and maintenance people ready for overseas deployment as advanced bases were constructed.

10 MAY • The Naval Aircraft Factory, Philadelphia, Pa., reported to the Bureau of Aeronautics that it was in the midst of negotiations with the Radio Corporation of America for the development of a radio altimeter suitable for use in radio-controlled assault drones.

15 MAY • Seaplane tender *Albemarle* (AV 5) arrived at Argentia, Newfoundland, to establish a base for Patrol Wing,

Support Force operations and to prepare for the imminent arrival of the first squadron, VP-52, to fly patrols over the North Atlantic convoy routes.

19 MAY • German battleship *Bismarck* sailed from Gotenhafen (Gdynia) in German-occupied Poland for *Rheinübung* (Exercise Rhine)—a sortie into the North Atlantic to raid Allied convoys. The battleship rendezvoused with heavy cruiser *Prinz Eugen*, and the two ships broke into the shipping lanes and then detached to maraud independently. On 24 May, PBV-5 Catalinas from VP-52 battled strong gales during an unsuccessful search for *Bismarck* from Argentia, Newfoundland. On 26 May, British Pilot Officer Dennis A. Briggs, Royal Air Force, of Coastal Command's No. 209 Squadron, and U.S. Navy observer and copilot Ens. Leonard B. Smith in AH545A, an RAF PBV-5 Catalina from Lough Erne in Northern Ireland, spotted *Bismarck* as she made for Brest, France. Briggs transferred the controls to Smith while he sent a sighting report. The Catalina broke through the clouds on the port beam of the battleship and received minor damage from antiaircraft fire. American observer Lt. James E. Johnson served on board the British Catalina from No. 240 Squadron that subsequently relieved AH545A, maintained contact with the quarry, and assisted in directing the pursuers toward *Bismarck*. Ships of the British Home Fleet sank the German battleship on 27 May.

21 MAY • The Bureau of Aeronautics requested the Engineering Experiment Station at Annapolis, Md., to develop a liquid-fueled assisted takeoff unit for patrol planes. This marked the Navy's entry into the field of designated jet-assisted takeoff and its first program, outside of research into jet exhaust from reciprocating engines, directed toward utilizing jet reaction for aircraft propulsion.



A PBM Mariner launches using jet-assisted takeoff (JATO) rockets.

27 MAY • President Franklin D. Roosevelt proclaimed an unlimited national emergency and a need to ready military, naval, air, and civilian defenses to repel aggressive acts or threats directed toward any part of the Western Hemisphere.

2 JUNE • *Long Island* (AVG 1), Cmdr. Donald B. Duncan commanding, was commissioned as the first aircraft escort vessel of the U.S. Navy at Newport News, Va. The flush-deck carrier was converted in 67 working days from cargo ship *Mormacmail*.

4 JUNE • The Naval Aircraft Factory, Philadelphia, Pa., reported to the Bureau of Aeronautics that its development of airborne television had progressed to the point that signals thus transmitted could be used to direct the pilot of the transmitting plane to alter its course.

11 JUNE • An aircraft armament unit was formed at NAS Norfolk, Va., with Lt. Cmdr. William V. Davis as the officer-in-charge, to test and evaluate armament installations of increasing complexity.



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The first U.S. aircraft escort vessel, *Long Island* (AVG 1), steams at sea with two Brewster F2A fighters parked at the forward end of her flight deck, 8 July 1941.

28 JUNE • To strengthen the provisions for using science in war, President Franklin D. Roosevelt created the Office of Scientific Research and Development. He included in its organization both the National Defense Research Committee and the newly established Committee on Medical Research.

30 JUNE • Initiating an Army-Navy turboprop engine development project, the Navy awarded a contract to Northrop Aircraft for the design of an aircraft gas turbine developing 2,500 horsepower at a weight of less than 3,215 pounds.

1 JULY • VS-201 commanding officer Lt. Cmdr. William D. Anderson completed the first U.S. Navy landing, takeoff, and catapult launch from an aircraft escort vessel when he flew from *Long Island* (AVG 1).

1 JULY • Commander in Chief, Atlantic Fleet Adm. Ernest J. King organized ten task forces to support the defense of Iceland and to escort convoys between the island nation and the United States. The two countries had agreed for U.S. forces to occupy and defend Iceland.

1 JULY • The test, acceptance, and indoctrination units—which had been established in May in San Diego, Calif., and Norfolk, Va., to fit out new patrol aircraft and to indoctrinate new crews in their use—were expanded and set up as separate commands. The San Diego unit retained its description and was placed under Commander Aircraft, Scouting Force. The Norfolk unit was named the Operational Training Squadron and moved under Commander Patrol Wings, Atlantic.

1 JULY • Patrol Wing, Support Force, was redesignated Patrol Wing 7, Capt. Henry M. Mullinnix commanding.

3 JULY • Seaplane tender *Barnegat* (AVP 10) was commissioned at Puget Sound Navy Yard Bremerton, Wash., Cmdr. Felix L. Baker commanding. *Barnegat* became the first of 26 ships of her class.

4 JULY • PBY-5 Catalinas of VP-72 flew protective patrols until 17 July from Reykjavik, Iceland, to cover the arrival of a Marine garrison from the United States. Seaplane tender *Goldsborough* (AVD 5) supported the squadron.

7 JULY • The 1st Marine Aircraft Wing (MAW), consisting of a headquarters squadron and Marine Aircraft Group 1, was organized at Quantico, Va., Lt. Col. Louis E. Woods, USMC, commanding. The wing became the first of its type in the Marine Corps, and the first of five MAWs organized during World War II.

8 JULY • Patrol Wing 8 was established at Norfolk, Va., Cmdr. John D. Price commanding.

12 JULY • The Naval Research Laboratory was transferred to the Bureau of Ships from the Office of the Secretary of the Navy, where the Naval Research and Development Board was established. The board members, led by a civilian scientist with the title Coordinator of Research and Development, represented the Chief of Naval Operations

and the Bureaus of Aeronautics, Ordnance, Ships, and Yards and Docks. Dr. Jerome C. Hunsaker served as coordinator until his relief in December by Rear Adm. Julius A. Furer.

17 JULY • The realignment of Section T for proximity fuze development enabled the organization to devote its entire effort to radio-proximity fuzes for anti-aircraft projectiles. The responsibility for photoelectric and radio fuzes for bombs and rockets shifted to Section E of the National Defense Research Committee at the National Bureau of Standards.

18 JULY • Senior Support Force staff officer Cmdr. James V. Carney reported the installation of British-type ASV radar in one PBY-5 Catalina each of VP-71, -72, and -73, and in two PBM-1 Mariners of VP-74. Identification equipment was first installed at about the same time in various planes. In mid-September, the Navy issued radar to five additional PBM-1s of VP-74 and one PBY-5 of VP-71, and, shortly thereafter, other aircraft in Patrol Wing 7 squadrons, making that wing the first operational naval command to receive radar-equipped aircraft. Its squadrons operated from Norfolk, Va., Quonset Point, R.I., and advance bases on Greenland, Newfoundland, and Iceland during the final months of the Neutrality Patrol.

18 JULY • *Pocomoke* (AV 9), Cmdr. Lester T. Hundt commanding, was commissioned as the first of two seaplane tenders of her class at Portsmouth, Va.

18 JULY • The Joint Board membership was revised to include the Deputy Chief of Staff for Air and the chief of the Bureau of Aeronautics, giving aviation representation on the highest of the Army and Navy boards.

21 JULY • The Navy abolished the requirement that all students assigned to the carrier phase of flight training were to train in each of the three basic aircraft types, and it began the practice of assigning students to specialized training in either fighters, scout bombers, or torpedo planes.

25 JULY • *Wasp* (CV 7) loaded 30 Army Curtiss P-40C Warhawks and three Stearman PT-13 primary trainers of the 33rd Pursuit Squadron at Norfolk, Va., for transport to Reykjavik, Iceland. The carrier sailed with Task Force 16, Rear Adm. William R. Monroe commanding, for the 6 August delivery of Army reinforcements to Iceland's Allied garrison.

28 JULY • The Chief of Naval Operations directed additional gunnery and tactical training in the pilot training program. He also confirmed the establishment of advanced carrier training groups within both the Atlantic and Pacific Fleets, at Norfolk, Va., and San Diego, Calif., to teach newly designated naval aviators how to operate current-model carrier aircraft. Last, the CNO assigned a number of patrol squadrons in each fleet to provide familiarization, indoctrination, advanced gunnery, and tactical training for new flight crews.

28 JULY • The Navy redesignated the Operational Training Squadron of the Atlantic Fleet and the Test, Acceptance, and Indoctrination Unit of the Pacific Fleet as transition training squadrons.

29 JULY • The Secretary of the Navy approved the installation of a radar plot on board carriers.

1 AUGUST • A microwave radar (AI-10) developed by the Radiation Laboratory at the Massachusetts Institute of Technology, which featured a plan position indicator, underwent its initial test in the Lockheed XJO-3 twin-engine test plane, BuNo 1267, at Boston Airport, Mass. During the test flights, scientists operated the radar and devised modifications while Project Roger sailors (most frequently, Chief Aviation Pilot Cecil L. Kullberg) flew the aircraft. The operators detected ships up to 40 miles away and achieved radar-guided approaches to simulated enemy aircraft at ranges of up to 3.5 miles. Operational radars developed from this equipment, including the ASG for K-class airships and the AN/APS-2 for patrol planes, were capable of searching a circular area—a tactically important feature for search-and-rescue operations and finding submarines. The evaluations continued until 16 October.

1 AUGUST • The Bureau of Aeronautics requested the Naval Research Laboratory to develop radar guidance equipment for assault drones to relay target information to a control operator and to serve as automatic homing equipment, initiating radar application to guided missiles.

5 AUGUST • As President Franklin D. Roosevelt traveled to Placentia Bay, Newfoundland, for a conference with British Prime Minister Winston S. Churchill, the president's flag still flew from presidential yacht *Potomac* (AG 25) to conceal his departure with heavy cruisers *Augusta* (CA 31) and

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Tuscaloosa (CA 37) and five destroyers. *Augusta* embarked three SOC-1 Seagulls and one SOC-2 of her aviation unit, while *Tuscaloosa* operated one SOC-3 and three SON-1 Seagulls of VCS-7. On 7 August, the U.S. ships reached Placentia Bay, and on 9 August British battleship *Prince of Wales* arrived at nearby NAS Argentia with Prime Minister Churchill and senior leaders embarked. Also present were Chief of Naval Operations Adm. Harold R. Stark and the president's son, Ens. Franklin D. Roosevelt Jr., USNR, temporarily detached from destroyer *Mayrant* (DD 403). Discussion included a forthcoming joint declaration, subsequently known as the Atlantic Charter, which outlined the Allied obligation to the "final destruction of Nazi tyranny." The chief executive also offered planes and warships to escort British merchant ships between the United States and Iceland (Prime Minister Naval Plan 4). The conference concluded on 12 August. Prime Minister Churchill departed on board *Prince of Wales*, and the president sailed with *Augusta* to *Potomac* at Blue Hill Bay, Maine.

6 AUGUST • VP-73 and VP-74 initiated air patrols over North Atlantic convoy routes from Reykjavik, Iceland.

6 AUGUST • The Chief of Naval Operations issued *Tentative Doctrine for Fighter Direction from Aircraft Carriers*, recognizing the anticipated impact of radar on fighter operations, and directed the immediate organization of fighter direction centers on board radar-equipped carriers and other ships.

7 AUGUST • The Chief of the Bureau of Aeronautics issued a preliminary plan to install long-range search radar (British ASV or American ASA) in patrol planes, as well as short-range search radar (British Mk II ASV modified for Fleet Air Arm or American ASB) in one torpedo plane in each section—starting with TBF-1 Avengers. Space needed for search radar was to be reserved in new scout-dive-bombers and scout-observation planes. The plan also called for British AI Mk IV radar in an SBD Dauntless, with a view to the radar's use as an interim interceptor; interception equipment in some F4U Corsairs as available; appropriate radio altimeters in patrol and torpedo planes; and recognition equipment in all service airplanes.

1 SEPTEMBER • The Navy assumed responsibility for transatlantic merchant convoys from a point off Argentina,

Newfoundland, to the Mid-Ocean Meeting Point south of Iceland. Seventeen days later, U.S. destroyers rendezvoused with Canadian-escorted convoy HX-150 south of Newfoundland for the first such voyage.

5 SEPTEMBER • Artemus L. Gates (Naval Aviator No. 65), who was discharged from the Naval Reserve in 1928, took the oath of office as Assistant Secretary of the Navy for Aeronautics, the first person to hold the post since David S. Ingalls resigned on 1 June 1932.

9 SEPTEMBER • The Bureau of Aeronautics requested that the National Defense Research Committee and the Naval Research Laboratory develop an interceptor radar suitable for installation in single-engine, single-seat fighters, such as F4U Corsairs.

1 OCTOBER • Secretary of the Navy William F. Knox approved popular names for 17 projected or in-service naval aircraft: F2A Buffalo, F4F Wildcat, F4U Corsair, J2F Duck, OS2U/OS2N Kingfisher, PBB Sea Ranger, PBM Mariner, PBV Catalina, PB2Y Coronado, SB2A Buccaneer, SB2C Helldiver, SB2U Vindicator, SBD Dauntless, SO3C Seagull (subsequently renamed Seamew), SOC Seagull, TBD Devastator, and TBF Avenger.

1 OCTOBER • The Navy established the Aviation Supply Office in Philadelphia, Pa., under the joint cognizance of the Bureaus of Aeronautics and Supplies and Accounts. The office provided centralized control over the procurement and distribution of all aeronautical materials regularly maintained in the general stock.

8 OCTOBER • The Navy established Special Project Dog within VJ-5 to test radio-controlled offensive weapons and to train people in their use. VJ-5 was also directed to develop a radio-controlled fighter plane as an "aerial ram," or aerial torpedo, to be flown into enemy bomber formations and exploded.

13 OCTOBER • The Bureau of Aeronautics directed the painting of all fleet aircraft nonspecular Light Gray, except for surfaces seen from above, which were to be Blue Gray. Beginning in late December, this color scheme extended to shore-based airplanes, except trainers.

20 OCTOBER • *Hornet* (CV 8) was commissioned at Norfolk, Va., Capt. Marc A. Mitscher commanding.

21 OCTOBER • In tests with magnetic airborne detector (later magnetic anomaly detector) gear carried out in cooperation with the National Defense Research Committee, a PBY Catalina from NAS Quonset Point, R.I., located submarine S-48 (SS 159).

29 OCTOBER • VP-82 received the first Lockheed PBO-1 of a planned full complement of Hudsons at NAS Norfolk, Va., marking the beginning of patrol squadrons' extensive use of land planes during World War II. These aircraft were painted with British markings because they were originally destined for the Royal Air Force's Coastal Command.

1 NOVEMBER • President Franklin D. Roosevelt placed the Coast Guard under the operational control of the Navy for the duration of the national emergency.

4 NOVEMBER • British oiler *Olwen* reported a German raider in Atlantic equatorial waters. Two days later, SOC-1 and -3 Seagulls of VCS-2 operating from light cruiser *Omaha* (CL 4) en route to Recife, Brazil, screened *Omaha* and destroyer *Somers* (DD 381) during the capture of blockade runner *Odenwald*, disguised as U.S. freighter *Willmoto*. The Germans attempted to scuttle *Odenwald*, but a boarding party from *Omaha* saved the ship.

18 NOVEMBER • Dr. L. A. DuBridge of the Radiation Laboratory reported complete the initial design of a 3cm aircraft intercept radar.

26 NOVEMBER • *Kitty Hawk* (AVP 1) was commissioned at the New York Navy Yard, N.Y., Cmdr. E. C. Rogers commanding. She was converted from merchant ship *Seatrain New York* as the first of two aircraft ferries.

27 NOVEMBER • Chief of Naval Operations Adm. Harold R. Stark—persuaded by intercepted and decrypted Japanese messages; Allied intelligence information, including aerial reconnaissance that identified the movements of key Japanese ships; and the apparent failure of negotiations to find a diplomatic solution to Japanese expansionism—sent a “war warning” message to the commanders of the Atlantic and Pacific Fleets. The previous day, the *Dai-ichi Kidō Butai*

(1st Mobile Striking Force) had departed Japanese waters to attack Oahu in the Hawaiian Islands.

28 NOVEMBER • In response to the war warning message the Chief of Naval Operations issued the previous day, Task Force 8, Vice Adm. William F. Halsey Jr. commanding, formed around *Enterprise* (CV 6), sailed from Pearl Harbor, Territory of Hawaii, to deliver 12 F4F-3 Wildcats from VMF-211 to augment Wake Island's defenses. Halsey approved Battle Order No. 1 stating that *Enterprise* steamed “under war conditions.” The Wildcats launched during the morning of 4 December, and the carrier returned to Hawaiian waters. The ship's mission and heavy seas that delayed her return ensured *Enterprise* eluded the Japanese attack on 7 December.

1 DECEMBER • Patrol Wing 9 began to form at NAS Quonset Point, R.I., with the appointment of Lt. Cmdr. Thomas U. Sisson as the wing's acting commanding officer.

5 DECEMBER • In a response to the war warning message of 27 November, Task Force 12, Rear Adm. John H. Newton commanding, including *Lexington* (CV 2), sailed from Pearl Harbor in the Territory of Hawaii to deliver 18 SB2U-3 Vindicators from VMSB-231 to reinforce the defenders of Midway Atoll. *Lexington* thereby escaped Japan's 7 December attack.

6 DECEMBER • On the eve of the Japanese attack, the U.S. Navy possessed 790 vessels manned by approximately 380,000 sailors.

7 DECEMBER • The Japanese *Dai-ichi Kidō Butai* (1st Mobile Striking Force), Vice Adm. Nagumo Chūichi commanding, including carriers *Akagi*, *Kaga*, *Hiryū*, *Sōryū*, *Shōkaku*, and *Zuikaku*, launched a morning attack by 353 aircraft in two waves against military installations on Oahu in the Hawaiian Islands. Destroyer *Ward* (DD 139) sighted and sank—with assistance from pilot Ens. William P. Tanner of VP-14 in a PBY-5 Catalina designated 14-P-1—Japanese midget submarine *I-22tou* when the vessel attempted to infiltrate Pearl Harbor. The Japanese nonetheless attained surprise.

The ships struck included seaplane tenders *Curtiss* (AV 4) and *Tangier* (AV 8). An Aichi D3A1 Type 99 carrier bomber also crashed *Curtiss*. The attackers destroyed



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Two sailors, next to the wing and float of a destroyed PBY Catalina flying boat, watch as destroyer *Shaw* (DD 373) explodes in the center background during the Japanese 7 December 1941 attack on Pearl Harbor.

188 planes at NASs Ford Island and Kaneohe Bay, Ewa Mooring Mast Field (USMC), and the Army's Bellows, Hickam, and Wheeler Fields. Many planes were easily lost because they had been parked wingtip to wingtip as a security precaution. Despite his wounds, AOMC John W. Finn of VP-14 mounted a machine gun on an instruction stand and shot down one of the three Japanese planes downed at Kaneohe Bay. Finn subsequently received the Medal of Honor.

The attack killed 2,403 servicemembers, including 2,008 sailors and 109 Marines; it wounded 1,143, including 710 sailors and 69 Marines. In addition, 68 civilians died and 35 were wounded. The Japanese lost 29 planes,

5 midget submarines (U.S. forces recovered one), and fewer than 100 men. Concluding that he had inflicted a devastating victory and suffered minimal casualties, Nagumo turned back to Japan, sparing the fuel tank farms and ship repair facilities that later helped the counterattack of the Pacific Fleet's three carriers, which had been absent.

Task Force 8, Vice Adm. William F. Halsey Jr. commanding, formed around *Enterprise* (CV 6), sailed about 200 miles west of Pearl Harbor. A VS-6 search flight launched in two-plane sections of SBD-3 Dauntlesses and arrived off Oahu during the raid. The Japanese shot down some of them, and others succumbed to friendly fire. The first U.S. naval night recovery during World

War II occurred that evening when *Enterprise* turned on her searchlights to aid returning F4F-3 Wildcats of VF-6, SBD-2s and SBD-3s of VB-6 and VS-6, and TBD-1 Devastators of VT-6, that launched at dusk to locate Japanese ships erroneously reported off Oahu. Friendly fire downed four of the Wildcats that attempted to land at Ford Island. Some Dauntlesses landed at Kaneohe Bay in spite of automobiles and construction equipment parked on the ramp to prevent landings.

Lexington (CV 2), steaming with Task Force 12, 425 miles southeast of Midway Island, launched planes to search for the attackers and changed course with the SB2U-3 Vindicators she had set out to deliver to Midway still on board. Rendezvousing about 120 miles west of Kauai, *Lexington* and *Enterprise* joined Task Force 3, Vice Adm. Wilson Brown Jr. commanding, and searched southwest of Oahu before returning to Pearl Harbor on 13 December. *Saratoga* (CV 3) had completed overhaul and on 7 December reached San Diego, Calif.

7 DECEMBER • Japanese destroyers *Sazanami* and *Ushio* shelled Midway Island. The 6th Marine Defense Battalion returned fire and claimed damage to both ships, which retired. The Japanese carriers that attacked the Hawaiian Islands considered launching a raid against Midway during their return to Japan, but rough weather spared the bastion from an attack.

8 DECEMBER • The national emergency forced the Navy to dispatch reinforcements on board *Saratoga* (CV 3) during her voyage to the Hawaiian Islands, totaling 103 planes—4 additional F4F-3 and -3A Wildcats of VF-3, 14 F2A-3 Buffaloes of VMF-221, and 15 miscellaneous aircraft.

8 DECEMBER • Thirty-four Japanese Mitsubishi G3M2 Type 96 land-attack planes of the Chitose *Kōkūtai* (Air Group) from Roi, Kwajalein, reached Wake Island undetected because the island lacked radar, and a rain squall cloaked their approach. The attackers bombed the airfield and installations, knocked out eight F4F-3 Wildcats of VMF-211, and killed 25 servicemembers and wounded 30. They also killed five Pan American Airways employees and wounded one, and slightly damaged the airline's Martin 130 *Philippine Clipper* with bullets. The plane left the island with the company's 39 surviving Caucasian employees and passengers, abandoning the Chamorro staff. The enemy eluded patrolling Marine

Corps Wildcats, but ground fire slightly holed eight bombers and killed one crewman. The Japanese bombed the island almost daily during the ensuing two weeks.

9 DECEMBER • The Secretary of the Navy authorized the Bureau of Ships to contract with RCA Manufacturing Company for 25 sets of ASB airborne search radar. The Naval Research Laboratory had developed this radar (under the designation XAT) for dive bombers and torpedo planes.

10 DECEMBER • An SBD-3 Dauntless of VS-6, embarked on board *Enterprise* (CV 6), sank Japanese fleet submarine *I-70* north of the Hawaiian Islands. *I-70*, the first Japanese warship sunk by U.S. aircraft during World War II, had scouted the Hawaiian area during the attack on Oahu.

10 DECEMBER • Japanese aircraft bombed the Cavite Navy Yard in the Philippines. As American planes raced to escape, three Japanese Mitsubishi A6M Type 0 carrier fighters of the 3rd *Kōkūtai* (Air Group) pounced on a PB4Y-4, Aircraft No. P-5, piloted by Lt. Harmon T. Utter of VP-101. Bow gunner ABMC Earl D. Payne shot down one of the fighters with his .30-caliber machine gun to claim the Navy's first verifiable air-to-air kill of World War II. Despite extensive damage, the Catalina survived because the Japanese apparently believed that they shot down the flying boat. On 7 April 1945, Utter coordinated carrier air strikes that led to the destruction of Japanese battleship *Yamato*.

10 DECEMBER • PB4Y-5 Catalinas of VP-52 initiated antisubmarine patrols over the South Atlantic from Natal, Brazil.

11 DECEMBER • The garrison of Wake Island repulsed a Japanese attack. Marine Corps 5-inch coast-defense guns sank or damaged several Japanese ships, and four F4F-3 Wildcats from VMF-211 bombed and strafed the invaders. Capt. Henry T. Elrod, USMC, flew Wildcat 211-F-11, BuNo 4019, and bombed and strafed Japanese destroyer *Kisaragi*, touching off a catastrophic explosion on board, probably attributed to her depth charges. The ship sank with all hands. Elrod returned to Wake, but antiaircraft fire had perforated an oil line so Marines cannibalized his plane. Strafing runs also damaged light cruiser *Tenryū* and armed merchant cruiser *Kongo Maru*. Wildcat pilot 2d Lt. David D. Kliewer, USMCR, spotted Japanese submarine *RO-66* on the surface

south of the island. He strafed and bombed the boat three times before she submerged. On 17 December, RO-66 sank in a collision with RO-62.

12 DECEMBER • The Naval Air Transport Service was established under the Chief of Naval Operations to provide rapid air delivery of equipment, spare parts, and specialists to the fleet.

14 DECEMBER • Patrol Wing 10 began its withdrawal from the Philippines when it departed Cavite Island. Before reaching Australia, the wing's two patrol squadrons and four seaplane tenders operated from various bases, including Balikpapan, Soerabaja and Ambon, Netherlands East Indies (Indonesia).

15 DECEMBER • Patrol Wing 8 transferred from Norfolk, Va., to NAS Alameda, Calif.

16 DECEMBER • Task Force 14, Rear Adm. Frank J. Fletcher commanding and formed around *Saratoga* (CV 3), sailed from Pearl Harbor, Hawaiian Islands, to relieve the garrison on Wake Island. Embarked reinforcements included 18 F2A-2 and -3 Buffaloes of VMF-221 on board *Saratoga* and Marines on board seaplane tender *Tangier* (AV 8). Task Force 11, Vice Adm. Wilson Brown Jr. commanding and formed around *Lexington* (CV 2), intended to launch a diversionary raid on Jaluit Island. Revised intelligence, however, persuaded Brown to first attack Makin Island in the Gilberts and then divert to Wake. *Enterprise* (CV 6) supported the other two carriers at a distance. Meanwhile, *Saratoga* and *Tangier* encountered delays owing to the slower speed of oiler *Neches* (AO 5), and doubt concerning the movements and number of Japanese carriers. Also, reports of the enemy landings on Wake Island persuaded Commander Battle Force Vice Adm. William S. Pye, temporarily in command of the Pacific Fleet, to avoid risking his carriers and order the retirement of the Task Force 14 relief expedition. Fletcher, who had been refueling some of his destroyers, continued to do so and returned to Hawaiian waters. The Japanese, despite heavy seas and determined resistance from the garrison, overran Wake Island on 23 December.

16 DECEMBER • The Secretary of the Navy approved an expansion of the pilot training program from 800 students to

2,500 per month. The action led to a production of 20,000 pilots annually by mid-1943.

17 DECEMBER • The Naval Research Laboratory reported satisfactory flight test results in a PBV Catalina of radar using a duplexing antenna switch, which made it possible to use a single antenna for both transmission of the radar pulse and reception of its echo. This development eliminated the cumbersome “yagi” antenna and contributed to the reliability and effectiveness of World War II airborne radar.

17 DECEMBER • A PBV-3 Catalina of VP-21 led the arrival of 17 SB2U-3 Vindicators of VMSB-231 at Midway Island from Oahu, Territory of Hawaii. The planes completed the longest mass flight by single-engine aircraft on record in 9 hours 45 minutes. VMSB-231 had been on board *Lexington* (CV 2) en route to Midway on 7 December when the carrier turned around.

18 DECEMBER • Two-plane detachments from Patrol Wings 1 and 2 based in the Territory of Hawaii began scouting patrols from Johnston Island.

18 DECEMBER • The operational loss of an American Volunteer Group Curtiss P-40B Tomahawk and a confrontation between its flight leader, Eriksen Shilling, and Chinese mountaineers, who mistook him for a Japanese pilot, marked the beginning of “blood chit” use. (Maj. Gen. Claire L. Chennault, USAAF, had formed the American Volunteer Group—nicknamed the Flying Tigers, some of the group had naval aviation experience—to battle the Japanese over the China-Burma-India Theater. He arranged for the diversion of 100 Tomahawk IIBs [P-40Bs] from a British order.) On this date, Chinese intelligence printed on silk the first blood chits to be stitched on the back of the Americans' flight jackets, displaying the Stars and Stripes and offering in several languages a reward for assisting the bearer. Blood chits in various forms continued in use into Operation Desert Storm in 1991.

20 DECEMBER • Ten Japanese Army Kawasaki Ki-48-Is of the 21st *Hikōsentai* (regiment) raided Kunming, China. During the first battle of the American Volunteer Group, Curtiss P-40Bs of the Flying Tigers' 1st Squadron downed three of the bombers and damaged three of the surviving Ki-48-Is—one of which may have fallen—without combat

loss. Ens. Edward F. Rector, USNR, who had resigned and transferred from VS-41 on board *Ranger* (CV 4) to the Flying Tigers, crash-landed his Tomahawk because of fuel exhaustion. Through the winter, Japanese aircraft indiscriminately bombed and strafed the British colonial capital of Rangoon. The Flying Tigers at times coordinated their efforts with British Brewster Buffalo Is (F2A-2s exported as B-339Es) of No. 221 Group of the Royal Air Force, shooting down a number of enemy planes. Following the Japanese capture of Rangoon, Allied aircraft desperately strove to stem the enemy advance in repeated aerial battles until May 1942, when the Japanese conquered Burma.

25 DECEMBER • Two-plane detachments from various squadrons at Pearl Harbor and Kaneohe in the Territory of Hawaii began patrols across the Central and South Pacific from Palmyra Island, a principal staging base to the South Pacific.

30 DECEMBER • Naval aviator Adm. Ernest J. King assumed duties as Commander in Chief, U.S. Fleet.

1942

2 JANUARY • The first organized naval lighter-than-air units of World War II, Airship Patrol Group 1, Cmdr. George H. Mills commanding, and ZP-12, Lt. Cmdr. Raymond F. Tyler commanding, were established at NAS Lakehurst, N.J.

3 JANUARY • Twelve PBV-5 Catalinas of VP-22, Lt. Cmdr. Frank O'Beirne commanding, in two groups of six planes joined Patrol Wing 10 as the first aviation reinforcements from the central Pacific to reach Southwest Pacific forces. O'Beirne led the first group from Pearl Harbor on this date and, on 8 January, reached Townsville, Australia. Two days later, the Catalinas landed at Darwin, Australia, and began to load on board seaplane tender *Langley* (AV 3). Squadron executive officer Lt. Doyle G. Donaho led the second group along the same route and, on 11 January, arrived at Darwin. The deteriorating situation, however, precluded VP-22's deployment as a concentrated squadron, and the planes operated in small detachments at Soerabaja, Java and Ambon, Netherlands East Indies (Indonesia).

5 JANUARY • A change in regulations covering the display of the national star insignia on aircraft returned the star to the upper right and lower left wing surfaces and revised rudder striping to thirteen red and white horizontal stripes.

7 JANUARY • President Franklin D. Roosevelt approved the expansion of naval aviation to 27,500 useful planes.

11 JANUARY • Japanese submarine *I-6* fired a deep-running torpedo into the port side amidships of *Saratoga* (CV 3) about 500 miles southwest of Oahu, Territory of Hawaii. Six men died, water poured into three firerooms, and the ship listed to port. *Saratoga* made for Oahu, where her 8-inch guns were removed, and then to Puget Sound Navy Yard at Bremerton, Wash. for repairs and modernization that included improved watertight integrity and antiaircraft armament. The departure of *Saratoga* temporarily reduced U.S. fleet carrier strength in the Pacific to three ships, and led to the distribution of her air group among the other carriers.

13 JANUARY • German submarines *U-66*, *U-123*, and *U-125* commenced Operation *Paukensschlag* (Drumbeat), an attack against Allied shipping off the East Coast of North America and in the West Indies. Through 31 August 1942, U-boats sank a staggering total of 609 ships of 3.1 million tons—one fourth of the Allied merchant ships lost to submarine attacks in the Battle of the Atlantic. The reasons for these casualties included: the delay of the introduction of a network of interlocking coastal and transatlantic convoys, the lack of planes and escorts following the transfer of 50 destroyers and ten *Lake*-class cutters to the British and Canadians, insufficient training and expertise in antisubmarine warfare, resistance to the deployment of planes from hunter-killer operations to convoys, diversion of reinforcements to the Pacific, opposition by the Army for doctrinal and political reasons to naval control of aircraft that operated from ashore, and Allied ULTRA signals intelligence failure to decipher the German Triton (Shark) Enigma naval key in February 1942, which obscured the extent of the enemy offensive. U.S. naval planes shepherded convoys, however, detected U-boats, and searched for survivors of attacks, and during this period, the Allies extended a coastal convoy system across American and Caribbean waters and convoyed about 157,000 U.S. troops to the British Isles.

14 JANUARY • The formation of four carrier aircraft service units from four small service units that had been previously established in the Hawaiian area, was approved.

15 JANUARY • The American-British-Dutch-Australian Command (ABDA) was established at Batavia, Java in the Netherlands East Indies (Indonesia). The command coordinated Allied defense across a huge area with limited forces. Adm. Thomas C. Hart initially commanded the ABDA naval forces in addition to the Asiatic Fleet.

16 JANUARY • To protect the advance of Task Force 8, Vice Adm. William F. Halsey Jr. commanding, including *Enterprise* (CV 6), for its strike against the Marshall and Gilbert Islands, PBY-5 Catalinas of VP-23 began daily searches of the waters between their temporary base at Canton Island and Suva in the Fiji Islands as the first combat patrols by aircraft in the South Pacific.

16 JANUARY • During a routine search from *Enterprise* (CV 6), pilot AMMC F. Dixon of VT-6 crashed at sea in a Douglas TBD-1 Devastator because of fuel starvation. Dixon and his two crewmen subsisted on occasional fish speared with a pocketknife, two birds, and rainwater during a 34-day journey in their raft to the Danger Islands on 19 February. The straight-line distance of their voyage measured 450 miles, but their estimated track was 1,200 miles. Dixon received the Navy Cross for this epic of survival.

23 JANUARY • OS2U-3 Kingfishers of VS-1 Detachment 14 arrived in Samoa with Marine reinforcements from San Diego, Calif., as the first naval aircraft to operate there during the war. *Yorktown* (CV 5) passed through the Panama Canal from the Atlantic Fleet and rendezvoused with and escorted the convoy during part of its voyage. *Enterprise* (CV 6) covered the ships during the final portion of their journey.

23 JANUARY • During the Battle of the Points, the Japanese made amphibious landings on the west coast of the Bataan Peninsula in the Philippines to outflank U.S. and Filipino troops. One assault deployed men of the 2nd Battalion, 20th Regiment to Longoskawayan Point on southwestern Bataan. Through 1 February, U.S. and Filipino soldiers defeated the invaders at Longoskawayan. In addition, a provisional naval battalion, Cmdr. Francis J. Bridget of Patrol Wing 10 commanding, consisting of

stranded naval aviation sailors of the wing and ships and of the 4th Marines, advanced from nearby Mariveles. Despite the lack of training in infantry tactics, the battalion sailors cleared the summit of Mt. Pucot of the enemy on the first day of action. The fighting for the observation post raged for days but the sailors and Marines regained the peak.

29 JANUARY • Five-inch projectiles containing radio-proximity fuzes were test fired at the Naval Proving Ground, Dahlgren, Va. Fifty-two percent of the fuzes functioned satisfactorily by proximity to water at the end of a five-mile trajectory. Researchers obtained this performance with samples selected to simulate a production lot and the results led to immediate small-scale production of the devices.

30 JANUARY • The Secretary of the Navy authorized a glider program for the Marine Corps consisting of small and large types in sufficient numbers for the training and transportation of two battalions of 900 men each.

1 FEBRUARY • The Secretary of the Navy announced that all prospective naval aviators were to begin their training with a three-month course emphasizing physical conditioning conducted by pre-flight schools to be established at universities. The training began at the Universities of North Carolina and Iowa in May; the University of Georgia and St. Mary's College, Calif., in June; and at Del Monte, Calif., in January 1943.

1 FEBRUARY • Task Forces 8, Vice Adm. William F. Halsey commanding, and 17, Rear Adm. Frank J. Fletcher commanding, including *Enterprise* (CV 6) and *Yorktown* (CV 5), respectively, launched the first carrier counterattack against the Japanese occupied Gilbert and Marshall Islands. Task Force 8 attacked Kwajalein and Wotje and Task Force 17 struck Jaluit, Makin, and Mili. Task Force 11, Vice Adm. Wilson Brown Jr. commanding, including *Lexington* (CV 2), supported the raid from the vicinity of Christmas Island. The attackers sank three vessels and damaged 11 more including light cruiser *Katori* and submarine *I-23*. A crashing land attack plane from the Japanese Chitose *Kōkūtai* (Air Group) narrowly missed *Enterprise*. A Mitsubishi ASM4 Type 96 carrier fighter damaged heavy cruiser *Chester* (CA 27) and killed eight men and wounded 38. A TBD-1 Devastator from VT-5 disappeared, and a Japanese reconnaissance flying boat of

the Yokohama *Kōkūtai* unsuccessfully attacked destroyer *Sims* (DD 409) as she searched for the missing aircrew. Two F4F-3 Wildcats of VF-42 shot down the intruder, but the searchers failed to locate the Devastator crew in the heavy seas.

10 FEBRUARY • Japanese submarine *I-69* shelled Midway Island, but Brewster F2A-3 Buffaloes of VMF-221 bombed and damaged the boat.

12 FEBRUARY • The Chief of Naval Operations promulgated an advanced base program using the code names “Lion” and “Cub” to designate major and minor bases, respectively, and in July added “Oaks” and “Acorns” for aviation facilities. The move marked the beginning of a concept of functional components that provided planners and commanders with a means of ordering standardized units of people, equipment, and material to meet special needs in any area.

16 FEBRUARY • The Germans began Operation *Neuland* (New Land) to cut the Allied flow of oil and bauxite from South America to North America by attacks on Dutch and Venezuelan oil ports. Despite supply problems, submarines *U-67*, *U-129*, *U-156*, *U-161*, and *U-502* wreaked havoc on poorly guarded ships and tankers sailing independently. Additional U-boats and Italian submarines subsequently reinforced these boats. Allied aircraft, including U.S. Navy PBY Catalinas, intelligence breakthroughs in ULTRA decryptations of Axis messages and high frequency direction-finder (Huff-Duff) receivers that detected U-boat radio transmissions, and Axis failure to concentrate their effort contained the menace in Caribbean waters.

16 FEBRUARY • A Navy developed air-track blind landing system reached daily use in Iceland for landing flying boats. Other blind-landing systems were in various phases of development, including work on the ground controlled approach system, and sailors had accomplished talk-down landings at the East Boston (Commonwealth) Airport in Massachusetts.

17 FEBRUARY • Commander in Chief U.S. Fleet authorized the removal of athwartships hangar deck catapults from *Yorktown* (CV 5), *Enterprise* (CV 6), *Wasp* (CV 7), and *Hornet* (CV 8).



An amphibious PBY-5A Catalina of VP-63, based out of Port Lyautey, Morocco, carries antisubmarine retro-rockets while on patrol of the Strait of Gibraltar.

19 FEBRUARY • One hundred eighty-nine aircraft from the Japanese carriers *Akagi*, *Kaga*, *Hiryū*, and *Sōryū*, and 54 Mitsubishi G4M1 Type 1 land attack planes from the Kanoya and 1st *Kōkūtais* (groups) attacked Darwin, Australia. The ships in the harbor included USS *William B. Preston* (AVD 7) after the seaplane tender's escape from the Philippines. Despite damage, a temporarily loss of steering control, and 11 dead, two missing, and three wounded, *William B. Preston* defiantly reached the open sea. Nine Mitsubishi A6M Type 0 carrier fighters shot down Lt. Thomas H. Moorer of VP-22 while he piloted a PBY-5 Catalina, BuNo 2306, off northern Australia. Freighter *Florence D* under charter with the Army rescued the survivors, only to be sunk by enemy carrier planes. One of Moorer's crew and three of the 37 men on board *Florence D* died, but Moorer survived to become the 18th Chief of Naval Operations and later Chairman of the Joint Chiefs.

20 FEBRUARY • A Japanese Kawanishi H6K4 Type 97 flying boat of the Yokohama *Kōkūtai* (Air Group) spotted Task Force 11, Vice Adm. Wilson Brown Jr. commanding, en route to attack Japanese forces at Rabaul, New Britain. Brown cancelled the strike and two waves of 17 Japanese Mitsubishi G4M1 Type 1 land attack planes of the 4th *Kōkūtai* attacked the Americans off Bougainville, Solomon Islands. F4F-3 Wildcats from VF-3 and SBD-3 Dauntlesses from VS-2, embarked on board *Lexington* (CV 2), broke up the attackers. The carrier avoided damage from bombs and from two



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Barely two months after he shot down four Japanese planes and damaged two others on 20 February 1942, Lt. Edward H. O'Hare of VF-3 smiles from the cockpit of his F4F Wildcat for photographers during a publicity break at Kaneohe Naval Air Station on 10 April. He later received the Medal of Honor for his actions.

bombers that attempted *taiatari* (body-crashing) suicide dives. Fifteen Japanese bombers, three flying boats, and an Aichi E13A1 Type 0 floatplane failed to return; most had been shot down. Wildcat pilot Lt. Edward H. O'Hare claimed four of the attackers and damaged two more, an exploit for which he received the Medal of Honor. Lt. Cmdr. John S. Thach shot down a bomber and assisted in downing a second one and a H6K4 Type 97 flying boat. Two Wildcats fell to the enemy with the loss of Ens. John W. Wilson, and seven fighters received damage, some caused by *Lexington's* guns.

21 FEBRUARY • Seaplane tender *Curtiss* (AV 4) and VP-14 arrived at Nouméa, New Caledonia, to begin operations from what developed into a principal Navy base in the South Pacific.

23 FEBRUARY • BUAER outlined a comprehensive program, which became the basis for the wartime expansion of pilot training. In place of the existing seven-month course, the new program required 11 1/2 months for pilots of single- or twin-engine aircraft, and 12 1/2 months for four-engine pilots. The curriculum consisted of three months at induction centers, three months in primary, three and one-half months in intermediate, and two or three months in operational training, depending on the types of aircraft used.

24 FEBRUARY • Task Force 16, Vice Adm. William F. Halsey Jr. commanding, raided the Japanese garrison at Wake Island. Thirty-six SBD-2 and -3 Dauntlesses from VB-6 and VS-6, respectively, and TBD-1 Devastators from VT-6 launched from *Enterprise* (CV 6) bombed and strafed ships and installations, supported by a bombardment from cruisers and destroyers. The raiders caused minimal damage and sank only two guardboats, but U.S. Marines, sailors, and construction workers captured by the Japanese during the seizure of the island survived the raid unscathed. The enemy shot down one Dauntless.

26 FEBRUARY • The Navy's coordinator of Research and Development requested the development by the National Defense Research Committee of an expendable radio sonobuoy for use by lighter-than-air craft to hunt submarines.

27 FEBRUARY • Allied attempts to reinforce the Netherlands East Indies (Indonesia) included convoy MS-5 among which was seaplane tender *Langley* (AV 3) and four freighters transporting 65 Curtiss P-40Es of the Army's 35th and 51st Pursuit Groups embarked from Melbourne, Australia. *Langley* ferried 32 of the Warhawks. Planners considered rerouting the convoy to India, but the Dutch requested aid and thus *Langley* and several ships made for Tjilatjap, Java. Nine Japanese two-engine naval land attack planes and six fighters irreparably damaged *Langley* 74 miles from Tjilatjap. Destroyer *Whipple* (DD 217) shelled and torpedoed the tender but the possibility of renewed attacks compelled the flight of the survivors and they did not record her sinking. Some survivors were transferred to oiler *Pecos* (AO 6) and, on 1 March, endured the demise of another ship when Japanese Aichi D3A1 Type 99 carrier bombers from carriers *Akagi*, *Kaga*, *Hiryū*, and *Sōryū* sank *Pecos* south of Christmas Island. Sixteen men from *Langley* died. Freighter *Sea Witch* delivered 27 crated Warhawks to Tjilatjap, but on 2 March they were destroyed to prevent their capture, and *Sea Witch* escaped.

1 MARCH • With the impending fall of Java in the Netherlands East Indies (Indonesia), the Allies dissolved the American-British-Dutch-Australian Command.

1 MARCH • Ens. William Tepuni, USNR, of VP-82, piloted a PBO-1 Hudson from Argentia, Newfoundland, and spotted German submarine *U-656* inbound to North

American waters on the surface about 60 miles southeast of Cape Race, Newfoundland. The Hudson sank *U-656* with all hands—the first U-boat confirmed sunk by the United States during World War II. Tepuni received the Distinguished Flying Cross.

1 MARCH • Carrier Replacement Air Group 9 was established at NAS Norfolk, Va., Cmdr. William D. Anderson commanding. The action marked the first numbered air group in the Navy and the end of the practice of naming air groups for the carriers to which they were assigned.

2 MARCH • The Naval Air Transport Service inaugurated regularly scheduled operations with a Douglas R4D Skytrain flight from NAS Norfolk, Va., to Squantum, Mass.

4 MARCH • Task Force 16, Vice Adm. William F. Halsey Jr. commanding, raided Marcus Island. *Enterprise* (CV 6) moved to within 1,000 miles of Japan and just before sunrise launched six F4F-3A Wildcats of VF-6 and 32 SBD-2 and -3 Dauntlesses of VB-6 and VS-6, respectively. The carrier's radar directed the planes to their attack. Japanese antiaircraft fire shot down one of the Dauntlesses but both crewmen survived captivity.

7 MARCH • Patrol Wing 10 completed its withdrawal from the Philippines and the Netherlands East Indies (Indonesia) and patrolled along the west coast of Australia from its newly established headquarters in Perth. The command lost 41 of its 45 planes during the first several months of the war including 14 shot down. More than half of its men captured by the Japanese in the Philippines died in captivity.

7 MARCH • Blimp K-5 and submarine *S-20* (SS 125) demonstrated the practicability of using a radio sonobuoy in aerial antisubmarine warfare during an exercise off New London, Conn. The buoy detected the sound of the submerged submarine's propellers at distances of up to three miles, and radio reception on board the blimp proved satisfactory up to five miles.

8 MARCH • VS-2 Detachment 14 inaugurated air operations from the Society Islands. The squadron arrived at Bora Bora on 17 February.

9 MARCH • Air transport squadron VR-1, Cmdr. Cyril K. Wildman commanding, was established as the first of 13 such squadrons created under the Naval Air Transport Service during World War II at NAS Norfolk, Va.

10 MARCH • Task Force 11, Vice Adm. Wilson Brown Jr. commanding, and elements of Task Force 17, Rear Adm. Frank J. Fletcher commanding, attacked Japanese ships landing troops and supplies at Lae and Salamaua, New Guinea. *Lexington* (CV 2) and *Yorktown* (CV 5) launched F4F-3 Wildcats of VF-3 and -42, SBD-2 Dauntlesses of VB-2, SBD-3s of VB-5 and VS-2 and -5, and TBD-1 Devastators of VT-2 and -5. The planes flew over the Owen Stanley Mountains and sank armed merchant cruiser *Kongō Maru*; auxiliary minelayer *Tenyō Maru*; and transport *Yokohama Maru*; and damaged seaplane carrier *Kiyokama Maru*; light cruiser *Yūbari*; destroyers *Asanagi*, *Asakaze*, *Oite*, *Yakaze*, and *Yūnagi*; minelayer *Tsugaru*; transport *Kokai Maru*; and minesweeper *No. 2 Tama Maru*. One VS-2 Dauntless was shot down. A following raid by USAAF Boeing B-17 Flying Fortresses and Royal Australian Air Force Lockheed Hudsons failed to inflict appreciable damage. The raid helped convince the Japanese of their need for additional carrier support to complete their conquest of the region, and thus indirectly set the stage for the Battle of the Coral Sea.

10 MARCH • The Office of Scientific Research and Development at Johns Hopkins University signed a Navy contract to operate a laboratory. The facility became known as the Applied Physics Laboratory and proved one of several important steps in the transition of the radio-proximity fuze from development to large-scale production. Some of the other steps taken within the following six weeks included the organizational transfer of Section T from the National Defense Research Committee directly to the Office of Scientific Research and Development, and the relocation of most of the Section T staff from the Carnegie Institution of Washington to the Applied Physics Laboratory at Silver Spring, Md.

26 MARCH • Naval aviator Adm. Ernest J. King relieved Adm. Harold R. Stark as Chief of Naval Operations under the provisions of an executive order that combined the duties of Commander in Chief U.S. Fleet and CNO.

26 MARCH • The Navy and Army Air Forces agreed to vest unity of command to the Navy for aircraft operating over the sea to protect shipping and hunt submarines.

26 MARCH • Task Force 39, Rear Adm. John W. Wilcox Jr. commanding, including *Wasp* (CV 7), sailed from Portland, Maine, to reinforce the British Home Fleet at Scapa Flow in the Orkney Islands during the bitterly contested Arctic convoys to aid the Soviets. The next day, Wilcox was lost overboard from battleship *Washington* (BB 56) during heavy seas, and the command of the force devolved upon Rear Adm. Robert C. Giffen. *Wasp* participated in the Arctic convoys during the succeeding months.

29 MARCH • The forward echelon of VMF-212 arrived at Efaté, New Hebrides (Vanuatu), to construct an air strip from which, on 27 May, the squadron initiated operations.

3 APRIL • Commander in Chief Pacific Fleet Adm. Chester W. Nimitz assumed additional duties as Commander in Chief Pacific Ocean Areas—the North, Central, and South Pacific. Gen. Douglas A. MacArthur, USA, was named as Commander, Southwest Pacific Area.

6 APRIL • Aircraft, Atlantic Fleet, was redesignated Carriers, Atlantic Fleet.

7 APRIL • Aircraft Repair Units 1 and 2 merged to form the Advanced Base Aviation Training Unit at NAS Norfolk, Va. The merger provided aviation maintenance sailors with the specialized training required to support air operations at advanced bases.

9 APRIL • Control pilot Lt. Moulton B. Taylor of Project Fox directed a radio controlled Great Lakes TG-2 drone in a torpedo attack on destroyer *Aaron Ward* (DD 483) as she steamed at 15 knots in Narragansett Bay, R.I. Taylor used a view of the target obtained by a television camera mounted in the drone, and guided the attack to release the torpedo about 300 feet directly astern of the target. The weapon passed beneath the destroyer as planned.

10 APRIL • A reorganization of the Pacific Fleet abolished the Battle and Scouting Forces and set up new type commands for ships and aviation. With the change, the titles of the aviation type commands became Aircraft Carriers,

Vice Adm. William F. Halsey Jr. commanding, and Patrol Wings, Rear Adm. John S. McCain commanding.

13 APRIL • German and Italian aerial attacks on Malta threatened to overwhelm the British defenders of the embattled island without the arrival of reinforcements. The exigencies of the war temporarily deprived the British of available carriers, and Prime Minister Winston S. Churchill appealed to President Franklin D. Roosevelt to provide *Wasp* (CV 7). On this date, *Wasp* embarked 47 Royal Air Force Supermarine Spitfire Mk Vs at King George Dock at Glasgow, Scotland, during Operation Calendar—the aerial reinforcement of Malta. The next day, *Wasp* sailed to rendezvous with British Force W and make for the Mediterranean. On 20 April the ship launched the Spitfires toward Malta. Axis air raids, however, reduced the operational Spitfires to six in four days, which necessitated a second operation the following month. On 26 April, *Wasp* returned to Scapa Flow in the Orkney Islands.

18 APRIL • The Doolittle Raid struck Japan. Lt. j.g. Henry L. Miller had trained the North American B-25B Mitchell crews of the Army's 17th Bombardment Group, Lt. Col. James H. Doolittle, USAAF, commanding, in carrier procedures at Eglin Field, Fla. On 1 April, *Hornet* (CV 8) embarked 16 Mitchells at NAS Alameda, Calif.

Hornet set out the following day and subsequently rendezvoused with Task Force 16, Vice Adm. William F. Halsey Jr. commanding, including *Enterprise* (CV 6), north of the Hawaiian Islands. On this date, Japanese guardboat *No. 23 Nitto Maru* discovered the approach of the force 668 miles from Tōkyō. The Americans had intended to close the Japanese homeland to shorten the flying range but the discovery compelled Halsey to launch the raid earlier than planned. The attackers bombed military and oil installations and factories at Kōbe, Nagoya, Tōkyō, Yokohama, and Yokosuka. A bomb struck Japanese carrier *Ryūhō* at Yokosuka but the strike inflicted negligible damage. All the Mitchells were lost—15 crashed in China and one was interned at Vladivostok in the Soviet Union. The Japanese retaliated with reprisals against the areas in China where people succored the aviators, captured eight of the fliers, and later executed three of them.

F4F-3A Wildcats of VF-6 with SBD-3 Dauntlesses of VB-3 and SBD-2s of VB-6 flying from *Enterprise* coordinated with surface attacks and damaged armed merchant cruiser

Awata Maru and ten guardboats, four of which sank. The Japanese downed a *Dauntless*, but the force escaped. Despite the infinitesimal material damage inflicted, the psychological impact of an aerial threat to Japan and to the emperor ended debate within the Japanese high command concerning a decisive thrust against the U.S. Pacific Fleet. Reporters later queried President Franklin D. Roosevelt for the location from which the bombers launched and he replied, “Shangri-La.”

18 APRIL • A night fighter development unit named Project Argus was established at NAS Quonset Point, R.I. It was renamed Project Affirm to avoid confusion with the electronic element (Argus Unit) of an advanced base. Its official purpose was the development and testing of night fighter equipment for naval aircraft, but it also developed tactics and trained officers and men for early night fighter squadrons and as night fighter directors.

19 APRIL • Two tests of the feasibility of using drone aircraft as guided missiles were conducted in Chesapeake Bay. In one evaluation, VJ-5 used visual direction to crash-dive a Great Lakes BG-1 drone into the water beyond the wreck of target ship *San Marcos* (former battleship *Texas*). Project Fox carried out the second successful test from a Civil Aeronautics Administration intermediate field at Lively, Va., using a television camera fitted to the XB2G-1 drone, BuNo 9722, to view the target. Lt. Moulton B. Taylor flew a control plane 11 miles distant to direct the drone’s crash dive into a raft under tow at a speed of eight knots.

22 APRIL • *Ranger* (CV 4) sailed from NAS Quonset Point, R.I., to West African waters with 68 embarked Curtiss P-40Es of the USAAF 33rd Pursuit Squadron. On 10 May, she launched the Warhawks 82 miles off Accra, Gold Coast (Ghana). From Accra, the fighters were flown in a series of hops to Karachi, India (Pakistan), to operate in the China-Burma-India Theater. The ship turned for Port of Spain in



Hornet (CV 8) launches Lt. Col. James H. Doolittle, USAAF, and 16 Army B-25B Mitchells against the Japanese homeland, 18 April 1942.

Trinidad. This event marked the first of four ferry trips that *Ranger* made to deliver Army fighters across the Atlantic, accomplishing the subsequent launches on 19 July 1942, and 19 January and 24 February 1943.

24 APRIL • A new specification for the color of naval aircraft went into effect. Service aircraft remained nonspecular Light Gray with nonspecular Blue Gray on surfaces visible from above. Advanced trainers were to be finished in glossy Aircraft Gray with glossy Orange Yellow on wing and aileron surfaces visible from above, while primary trainers were to be finished glossy Orange Yellow with glossy Aircraft Gray landing gear.

27 APRIL • Operation Gridiron—the evacuation of Americans including radio interception specialists from the Philippines—began. Pilot Lt. Cmdr. Edgar T. Neale, copilot Lt. j.g. Thomas F. Pollack, and aircrewmembers AMMCs David W. Bounds and Mario Ferrara, AMM1 W. F. Drexler, ARM1 L. Gassett, and ARM2 H. F. Donahue, and pilot Lt. j.g. Leroy C. Deede, copilot Lt. j.g. William V. Gough Jr., aircrewmembers AMMC W. D. Eddy, AMM1s M. H. Crain and M. C. Lohr, ARM1 Edward W. Bedford, and ARM3 W. F. Kelley of Patrol Wing 10, manned two PBV-5s. The Catalinas took off from Perth, Australia,

refueled en route and, on 29 April, landed off Caballo Island. They dropped off parts and medical supplies, embarked passengers, and returned to Lake Lanão on Mindanão. While being towed away from shore to attempt takeoff on 30 April, the first Catalina struck a reef and could not take off. The second continued on to Perth. After cursory repairs, the first was able to get airborne, although some of the evacuees including Cmdr. Francis J. Bridget of the wing remained behind and were later captured. By 3 May the Catalinas returned to Perth after the completion of flights of almost 7,000 miles. Gridiron saved 36 evacuees, and all 14 flight crewmembers received the Silver Star.

30 APRIL • The Air Operational Training Command was established with headquarters at NAS Jacksonville, Fla. Four days later the new command assumed authority over the naval air stations and their satellite fields at Banana River, Jacksonville, Key West, and Miami, Fla.

2 MAY • SBD-3 Dauntlesses of VS-5 and TBD-1 Devastators of VT-5, embarked on board *Yorktown* (CV 5), bombed Japanese submarine *I-21* in the Coral Sea. *I-21* escaped and reported the attack but failed to identify the aircraft as carrier-based. The error enabled Task Force 17, Rear Adm. Frank J. Fletcher commanding, to approach the Solomon Islands undetected.

3 MAY • After Axis aerial attacks on Malta nearly annihilated the British fighters on the island, Prime Minister Winston S. Churchill asked President Franklin D. Roosevelt to provide *Wasp* (CV 7) for “another good sting.” On this date, *Wasp* embarked 47 British Royal Air Force Supermarine Spitfire Mk Vs and sailed with British Force W for the Mediterranean during Operation Bowery—the aerial reinforcement of Malta. The ships rendezvoused with British carrier *Eagle* (D 94), which embarked 17 Spitfires. On 9 May, *Wasp* and *Eagle* launched their planes to Malta. Two days later the Prime Minister signaled the carrier, “Who said a wasp couldn’t sting twice?” On 15 May, *Wasp* arrived at Scapa Flow in the Orkneys.

4 MAY • The Battle of the Coral Sea began, the first naval engagement fought without opposing ships making contact. The Japanese launched Operation MO—the seizure of Port Moresby, New Guinea, and points in the Solomon Islands, Nauru, and the Ocean Islands—preparatory to the

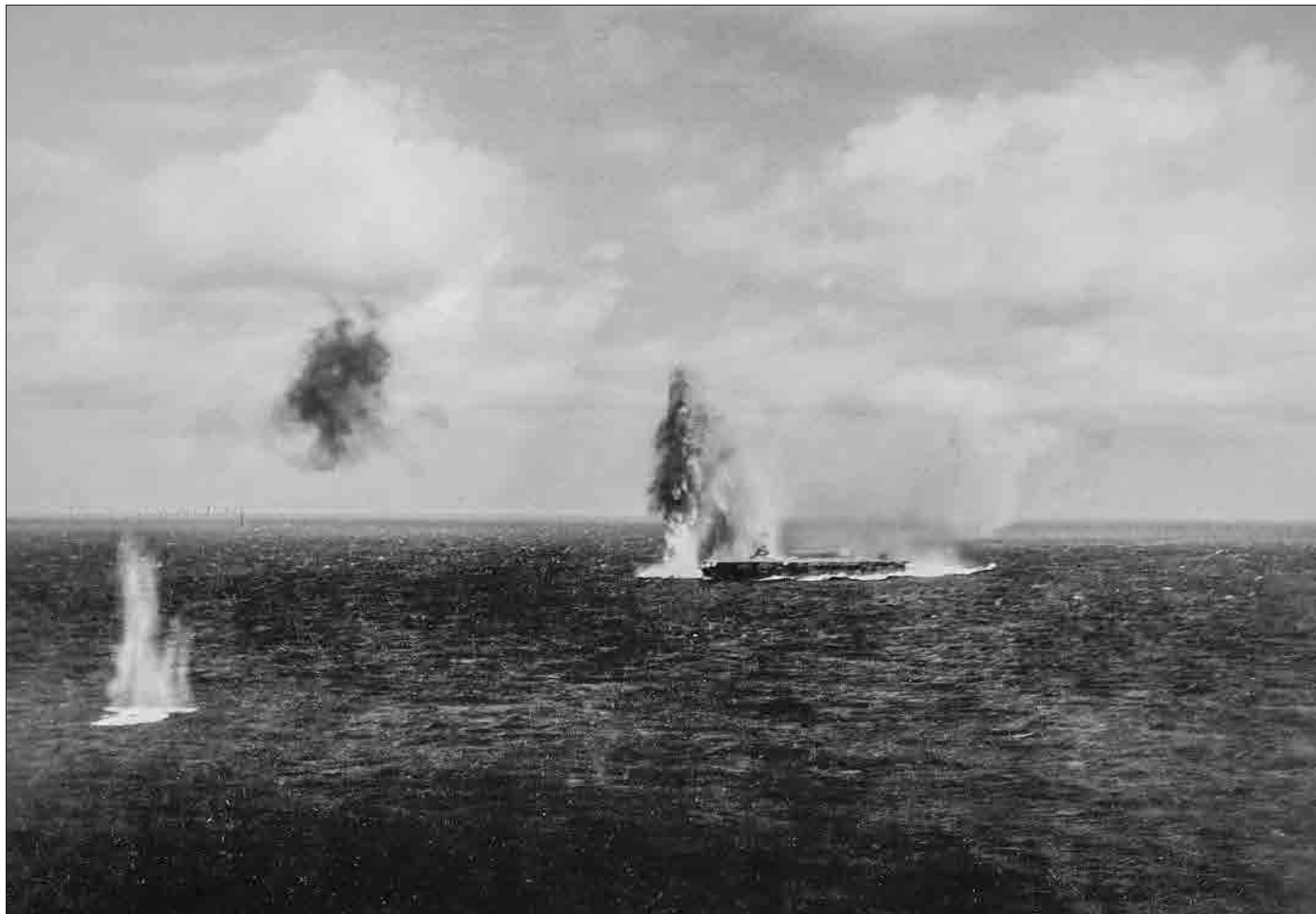
neutralization of Australia as an Allied bastion. Task Force 17, Rear Adm. Frank J. Fletcher commanding, attacked the invading Japanese at Gavutu and Tulagi in the Solomons. F4F-3 Wildcats of VF-42, SBD-3 Dauntlesses of VB-5 and VS-5, and TBD-1 Devastators of VT-5 from *Yorktown* (CV 5), sank destroyer *Kikuzuki*, minesweeper *Tama Maru*, and auxiliary minesweepers *Wa 1* and *Wa 2*, and damaged destroyer *Yuzuki*, minelayer *Okinoshima*, transport *Azumasan Maru*, and cargo ship *Kozui Maru*.

Japanese transports sailed from Rabaul for Port Moresby. On 7 May, Task Force 17, which had been joined by Task Force 11, Rear Adm. Aubrey W. Fitch commanding, including *Lexington* (CV 2), turned north to engage the Japanese Carrier Strike Force, Vice Adm. Takagi Takeo commanding, including carriers *Shōkaku* and *Zuikaku*. SBD-2s from VB-2, SBD-3s of VS-2, and TBD-1s from VT-2, embarked on board *Lexington*, and Dauntlesses of VB-5 and VS-5 and Devastators of VT-5, flying from *Yorktown*, sank light carrier *Shōhō* of the Close Support Force, Rear Adm. Goto Aritomo commanding, in the Coral Sea. Japanese planes sank destroyer *Sims* (DD 409) and damaged oiler *Neosho* (AO 23), which was later scuttled.

The battle concluded the following day. Dauntlesses from *Lexington* and *Yorktown* damaged *Shōkaku* and forced her retirement. Pilot Lt. John J. Powers of VB-5 pressed an attack in an SBD-3 on *Shōkaku* but failed to recover from his dive. He received the Medal of Honor posthumously.

Japanese carrier bombers and attack planes struck Task Force 17. The few available U.S. fighters compelled the continuation of the use of Dauntlesses as an anti-torpedo plane patrol. Pilot Lt. William E. Hall, USNR, of VS-2 in an SBD-2 defended *Lexington*. Although wounded, Hall returned in his damaged Dauntless after participating in the destruction of at least three carrier attack planes and later received the Medal of Honor. The Japanese bombed and torpedoed *Lexington* and bombed *Yorktown*. Gasoline vapors flowing through *Lexington* ignited and triggered massive explosions that led to her abandonment, and destroyer *Phelps* (DD 360) scuttled the carrier at 15°12'S, 155°27'E.

The Americans sustained heavy casualties including the loss of at least 69 planes while the Japanese lost approximately 92 aircraft. The damage to *Shōkaku* and the aerial losses temporarily denied the Japanese the availability of *Shōkaku* and *Zuikaku*. The United States achieved a strategic victory by halting the push southward



SBD Dauntlesses from *Yorktown* (CV 5) attack Japanese carrier *Shōkaku* during the Battle of the Coral Sea on the morning of 8 May 1942.

and blunting the seaborne thrust toward Port Moresby. The Japanese deferred and then abandoned their occupation of Port Moresby by sea and shifted their advance overland across the Owen Stanley Mountains.

10 MAY • An experiment at the Naval Aircraft Factory at Philadelphia, Pa. demonstrated the possibility of increasing the range of small aircraft by operating them as towed gliders. Lt. Cdrs. William H. McClure and Robert W. Denbo piloted F4Fs attached to tow lines streamed behind a twin-engine Douglas BD-1 (A-20A Havoc), BuNo 4251, and, with their engines off underwent tows for an hour at 180 knots at 7,000 feet.

10 MAY • A base construction and garrison convoy, with VS-4 Detachment 14 embarked, arrived in the Tonga Islands and set up facilities to conduct antisubmarine patrols from Nukualofa Harbor, Tongatabu.

11 MAY • President Franklin D. Roosevelt ordered the establishment of the Air Medal for award to any persons who, while serving in any capacity in or with the Army, Navy, Marine Corps, or Coast Guard after 8 September 1939, distinguished or had distinguished themselves by meritorious achievement while participating in aerial flight.

15 MAY • The design of the national star insignia was revised by the elimination of the red disc in the center of the star, and the discontinuance of the use of horizontal red and white rudder striping.

15 MAY • The Chief of Naval Operations ordered the establishment of an Assistant Chief of Naval Operations (Air) to deal with aviation matters directly under the VCNO, and for the chief of BUAER to fill the new office as additional duty. The VCNO subsequently concentrated the aviation

functions already performed in his office into a new Division of Aviation. The office was abolished in mid-June 1942.

15 MAY • VR-2, with a flight from NAS Alameda, Calif., to Honolulu, Hawaiian Islands, initiated air transport service in the Pacific during the first transoceanic flight by planes of the Naval Air Transport Service.

20 MAY • Rear Adm. John S. McCain reported as Commander Air Force, South Pacific, a new command established to direct the operations of tender and shore-based aviation in the South Pacific area.

26 MAY • Lt. j.g. C. Fink Fischer demonstrated the feasibility of rocket-assisted takeoff during a test flight in a Brewster F2A-3 Buffalo using five British anti-aircraft solid propellant rocket motors at NAS Anacostia, D.C. The takeoff distance was reduced by 49 percent.

26 MAY • Aircraft ferry *Kitty Hawk* (AVP 1) disembarked reinforcements for Marine Aircraft Group 22, including seven F4F-3 Wildcats and 19 SBD-2 Dauntlesses, at Midway Island. The ship returned to Pearl Harbor in the Hawaiian Islands on 1 June.

27 MAY • The transfer of Patrol Wing 4 from Seattle, Wash., to the North Pacific began with the arrival of Commander, Kodiak, Alaska.

3 JUNE • The Japanese *Dai-ni Kidō Butai* (2nd Mobile Striking Force), Rear Adm. Kakuta Kikuji commanding, including carriers *Junyō* and *Ryūjō*, attacked Dutch Harbor in the Aleutians, Alaska. PBY-5A Catalinas of VP-41 and -42 of Patrol Wing 4 supported by seaplane tenders *Casco* (AVP 12), *Gillis* (AVD 12), and *Williamson* (AVD 2) patrolled the likely approaches. Harsh weather cloaked the raiders and they eluded discovery and surprised the defenders. The Japanese inflicted light damage and destroyed a Catalina in the harbor. They cancelled a second strike because of the weather, but their fighters shot down three patrolling PBYs.

The next day, the raiders again achieved surprise and shot down a Catalina and began bombing and strafing runs. Fighters downed another Catalina separately and a PBY-5A disappeared. Patrol Wing 4 lost six Catalinas and, the Eleventh Air Force, five planes. The Japanese lost a Mitsubishi A6M Type 0 carrier fighter, five Aichi D3A1

Type 99 carrier bombers, a Nakajima B5N2 Type 97 carrier attack plane, and two Nakajima E8N2 Type 95 floatplanes. Despite this, the Japanese failed to lure strong U.S. forces from Hawaiian waters.

Pilot PO Koga Tadayoshi flew the A6M from *Ryūjō* but ground fire damaged the plane and it nosed over during a forced landing on Akutan Island, killing Koga. On 10 July pilot Lt. William N. Thies of VP-41 in a PBY-5A spotted the wreckage, and afterward led a party to retrieve the aircraft. This provided an example of the foremost Japanese naval fighter to the Allies for study.

3 JUNE • The threat posed by the carriers of the U.S. Pacific Fleet convinced the Japanese to occupy Midway Island to lure the Pacific Fleet into a decisive battle. Japanese Commander in Chief Combined Fleet Adm. Yamamoto Isoroku developed Operation MI—a comprehensive plan that emphasized surprise. U.S. cryptanalysts, however, deciphered some enemy messages through ULTRA, and the Japanese also failed to deploy their submarines in time to discover the movements of the U.S. carriers. On 27 May, *Dai-ichi Kidō Butai* (1st Mobile Striking Force), Vice Adm. Nagumo Chūichi commanding, including carriers *Akagi*, *Kaga*, *Sōryū*, and *Hiryū* sailed from Japanese waters.

Commander in Chief Pacific Fleet Adm. Chester W. Nimitz deployed Task Forces 16, Rear Adm. Raymond A. Spruance commanding, including *Enterprise* (CV 6) and *Hornet* (CV 8); and 17, Rear Adm. Frank J. Fletcher commanding, including *Yorktown* (CV 5). On 3 June, planes from Midway located the Japanese Second Fleet Escort Force about 600 miles west of the island. The next day, 108 Japanese aircraft attacked Midway and F2A-3 Buffaloes and F4F-3 Wildcats of VMF-221 intercepted the raiders. Mitsubishi A6M Type 0 carrier fighters brushed aside the Marines, but the Japanese failed to suppress Midway. Nagumo thus decided upon a second raid.

SBD-2 Dauntlesses and SB2U-3 Vindicators of VMSB-241, TBF-1 Avengers—their introduction to combat—from a detachment of VT-8, and Army Martin B-26 Marauders equipped with torpedoes and Boeing B-17 Flying Fortresses from Midway struck the Japanese ships separately but suffered grim losses. TBD-1 Devastators of VT-3, -6, and -8 gallantly but futilely assailed the enemy carriers as fighters and anti-aircraft fire virtually wiped-out all three squadrons. The multiple attacks drew off the Japanese fighters and threw their

ships' formation into disarray. The arrival of Dauntlesses from VB-6 and VS-6, embarked on board *Enterprise*, thus caught the Japanese unprepared and resulted in the ensuing loss of *Kaga* and damage to *Akagi*. Dauntlesses of VB-3 from *Yorktown* sank *Sōryū*.

Hiryū launched dive bombers that damaged *Yorktown*. Fletcher transferred his flag to heavy cruiser *Astoria* (CA 34) and turned over tactical command to Spruance, but torpedo bombers from *Hiryū* further damaged *Yorktown* during a second attack. Dauntlesses of VB-3 operating from *Enterprise* in lieu of stricken *Yorktown* and from VS-6 damaged *Hiryū*. The loss of the carriers and the irretrievable failure to control the air compelled Yamamoto to retire.

On 5 June, Japanese destroyers scuttled *Akagi* and *Hiryū*. Heavy cruisers *Mikuma* and *Mogami* collided, and, on the 6th, Dauntlesses from *Enterprise* and *Hornet* sank *Mikuma* and damaged destroyers *Arashio* and *Asashio* by near misses. *Enterprise* and *Hornet* recovered their planes and turned around to refuel. The same day, Japanese submarine *I-168* damaged *Yorktown* and sank destroyer *Hammann* (DD 412). The submarine escaped and *Yorktown* foundered the next day. Planes searched for downed aviators and on 21 June, a PBY-5A Catalina of VP-24 made the final rescue 360 miles north of Midway of a two-man crew from a VT-6 Devastator that ditched on 4 June. In addition to the ships, the Japanese lost 258 aircraft plus experienced aircrew and mechanics. While the Americans lost at least 92 carrier and 40 shore-based planes in addition to *Yorktown* and *Hamman*, their decisive victory accelerated the attrition that led to the demise of Japanese naval offensive power.

6 JUNE • *Saratoga* (CV 3) arrived at Pearl Harbor, Territory of Hawaii, after repairs from torpedo damage that she sustained on 11 January. The ship thus missed participation in the Battles of Coral Sea and Midway.

6 JUNE • The Japanese landed on Kiska in the Aleutians, and the following day on Attu. Lt. Litsey of VP-41 piloted a PBY-5A and spotted the enemy there. On 11 June, Commander in Chief Pacific Adm. Chester W. Nimitz directed Patrol Wing 4 to “bomb the enemy out of Kiska.” From 11 to 14 June, about 20 Catalinas from VP-41, -42, -43, and -51, supported by seaplane tender *Gillis* (AVD 12) at Nazan Bay, Atka Island, and USAAF Consolidated B-24 Liberators and Boeing B-17 Flying Fortresses, bombed the



TBF-1 Avengers in flight off Ft. Lauderdale, Florida, January 1943.

Japanese at Kiska in what was dubbed the “Kiska Blitz.” The strikes interfered with Japanese efforts to consolidate their gains until *Gillis* expended her supplies of bombs and fuel, and failed to drive the invaders from the island. Lt. William N. Thies of VP-41 and Ens. James T. Hildebrand Jr. of VP-40, each received the Navy Cross for their separate actions in the fighting. In addition, B-17s, B-24s, and an LB-30 of the Eleventh Air Force damaged Japanese destroyer *Hibiki* on 12 June and sank fleet tanker *Nissan Maru*, on 18 June.

10 JUNE • Project Sail was established to conduct airborne testing and associated work on magnetic anomaly detection (MAD) gear at NAS Quonset Point, R.I. Researchers intended this device to reveal submarines by the change they induced in the earth's magnetic field. The Naval Ordnance Laboratory and the National Defense Research Committee undertook the principal developmental efforts. The promising results of the early trials made with airships and a USAAF Douglas B-18 Bolo led to the procurement of 200 sets of MAD gear.

13 JUNE • The first airborne test of long-range radio navigation (LORAN for LOng RANGE Navigation equipment) occurred. A receiver mounted in airship K-2 accurately determined its position when the airship flew over various identifiable objects during a flight from NAS Lakehurst, N.J. The test culminated with the first LORAN homing from a distance 50 to 75 miles offshore during which operator Dr. J. A. Pierce issued instructions to the airship's commanding officer that brought them over the shoreline near Lakehurst on a course that caused the skipper to remark, "We weren't [just] headed for the hangar. We were headed for the middle of the hangar." The success of these tests led to immediate action to obtain operational LORAN equipment.

15 JUNE • *Copahee* (AVG 12), Capt. John G. Farrell commanding, was commissioned at Puget Sound Navy Yard, Bremerton, Wash. She was the first of ten escort carriers of the *Bogue* class converted from Maritime Commission hulls.

16 JUNE • Congress authorized an increase in the Navy's airship strength to 200 lighter-than-air craft.

17 JUNE • The National Defense Research Committee began the development of the Pelican antisubmarine guided missile with Bureau of Ordnance sponsorship. The device consisted of a glide bomb capable of automatically homing on a radar beam reflected from the target.

17 JUNE • Following the abolition of the newly created office of the Assistant Chief of Naval Operations (Air), the revision of an earlier order that had established an aviation organization in the Office of CNO made the Director of the Aviation Division responsible directly to VCNO.

17 JUNE • A contract was awarded to Goodyear Aircraft Corporation for the design and construction of a prototype M-class scouting and patrol airship with 50 percent greater range and volume (625,000 cubic feet) than the K class. Four M-class airships were built and served during World War II.

25 JUNE • The preliminary investigation of early warning radar had proceeded to the point that the coordinator for research and development requested the development of airborne early warning radar including automatic airborne relay and associated shipboard processing and display

equipment. Interest in early warning radar arose when Adm. Ernest J. King observed to Head, Office of Scientific Research and Development Dr. Vannevar Bush the requirement of Navy ships to "see" beyond the line of sight.

26 JUNE • VR-2 initiated scheduled Naval Air Transport Service operations between the West Coast and Alaska.

26 JUNE • Lt. Cmdr. Frank A. Erickson, USCG, inspected Igor I. Sikorsky's VS-300 helicopter, and three days later, recommended their acquisition for antisubmarine convoy and life-saving duty.

27 JUNE • The Naval Aircraft Factory, Philadelphia, Pa., received directions to participate in the development of high-altitude pressure suits with particular emphasis on testing existing types and obtaining information to facilitate the tailoring and fitting of them for flight use. The Navy thus joined the Army in its sponsorship of work on pressure suits. The factory expanded its use of high-altitude equipment, including the design of a pressure cabin airplane and construction of an altitude test chamber.

1 JULY • *Ranger* (CV 4) sailed from NAS Quonset Point, R.I., to West Africa with 72 embarked Curtiss P-40Fs of the USAAF 57th Fighter Group. On 19 July, she launched the Warhawks to Accra, Gold Coast (Ghana), from where the planes were shipped to the China-Burma-India Theater. The ship turned for Port of Spain, Trinidad.

3 JULY • In the first successful firing of an American rocket from a plane in flight, gunnery officer of Transition Training Squadron, Pacific Fleet Lt. Cmdr. James H. Hean launched a rearward-firing antisubmarine rocket (retrorocket ASR) from a PBV-5A Catalina at Goldstone Lake, Calif. The rocket had been designed at the California Institute of Technology to be fired aft with a velocity equal to the forward velocity of the airplane and thus to fall vertically. After successful tests, the retrorocket became a weapon complementary to magnetic anomaly detection gear. In February 1943, VP-63 received the first service installation.

7 JULY • The Army agreed to deliver to the Navy a specified number of B-24 Liberators, B-25 Mitchells, and Lockheed B-34 Venturas to meet the Navy's requirement for long-range landplanes. The Navy was to relinquish its production

cognizance of the Renton, Wash., Boeing plant to the Army for expanded B-29 Superfortress production, and to limit its orders for PBV Catalinas to avoid interference with the production of Liberators.

12 JULY • Patrol wings were reorganized to increase the mobility and flexibility of patrol aviation. The authorization of headquarters squadrons for each wing furnished administrative and maintenance services to the attached squadrons. Each wing was assigned geographic areas of responsibility, and the discontinuance of permanent squadron assignments facilitated requirements.

19 JULY • Seaplane tender *Casco* (AVP 12) established an advanced base in Nazan Bay, Atka Island, in the Aleutian Islands. The station supported seaplane antishipping searches, bombing of Japanese positions, and cover for ship bombardments against Kiska.

24 JULY • BUAER issued a planning directive calling for the procurement of four Sikorsky helicopters for study and development by the Navy and Coast Guard.

30 JULY • The Women Accepted for Volunteer Emergency Service (WAVES) was established and, on 2 August, Lt. Cmdr. Mildred H. McAfee assumed duties as the first commandant. By the end of the year the WAVES reached a strength of 3,879 officers and enlisted, and by 31 July 1945 their numbers grew to 86,291 women.

1 AUGUST • Ens. Henry C. White, USCG, of Coast Guard Squadron 212, piloted a Grumman J4F-1 Widgeon from Houma, La., and scored the first Coast Guard kill of a German submarine with the sinking of surfaced *U-166* off the passes of the Mississippi. White received the Distinguished Flying Cross.

7 AUGUST • Marine Aircraft Wings, Pacific, Maj. Gen. Ross E. Rowell, USMC, commanding, was organized at San Diego, Calif., for administrative control and logistic support of Marine Corps aviation units assigned to the Pacific Fleet. In September 1944, this command was renamed Aircraft, Fleet Marine Force, Pacific.

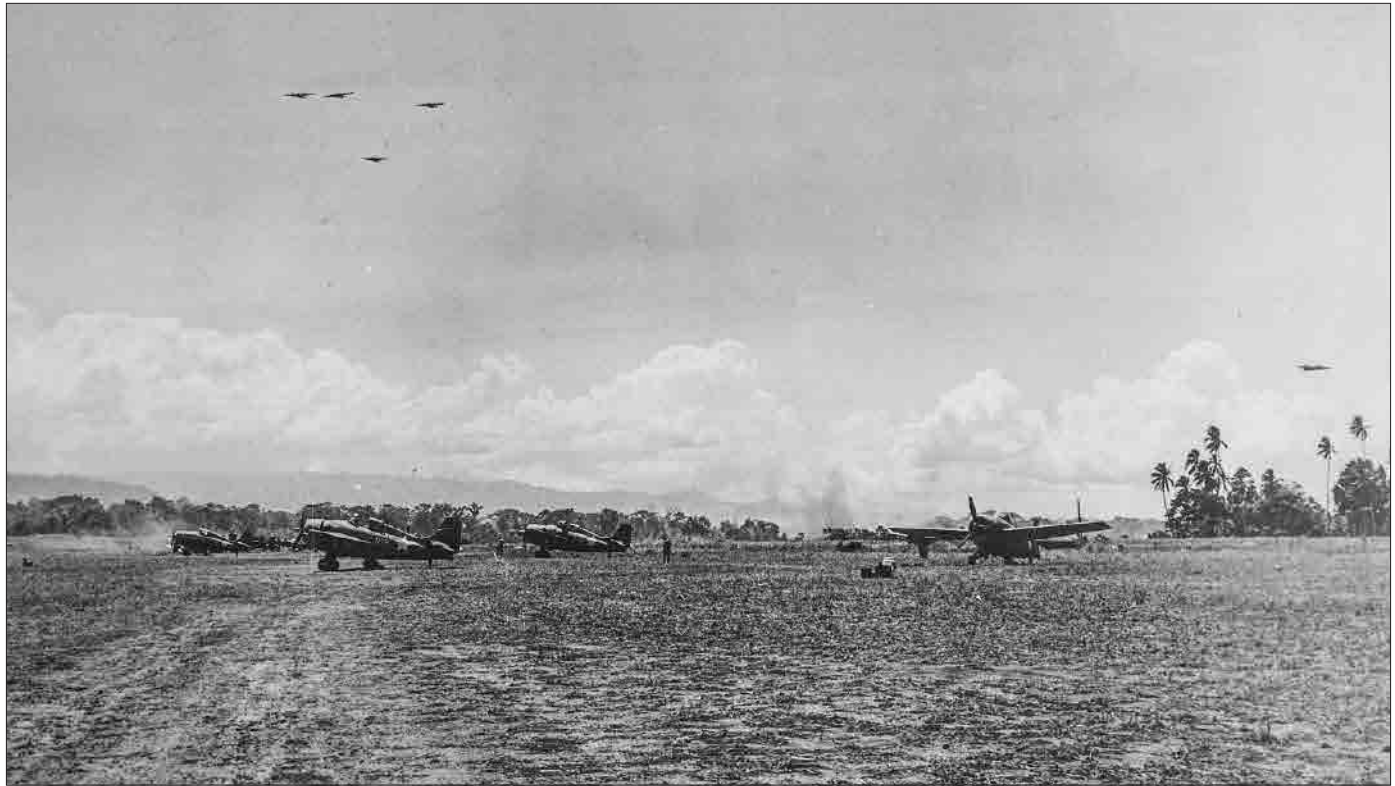
7 AUGUST • The Americans landed on Japanese-held Guadalcanal, Florida, Gavutu, Tanambogo, and Tulagi in



Vice Adm. John S. McCain.

the Solomon Islands during Operation Watchtower—the first U.S. land offensive of World War II. Task Force 61, Vice Adm. Frank J. Fletcher commanding, included Task Group 61.1, Rear Adm. Leigh Noyes commanding, with *Saratoga* (CV 3), *Enterprise* (CV 6), and *Wasp* (CV 7). Task Force 63, Rear Adm. John S. McCain commanding, provided Navy, Marine, and USAAF planes flying from New Caledonia and the New Hebrides (Vanuatu). The Marines wrestled control of the neighboring islands from the Japanese, and simultaneously moved inland on Guadalcanal. The next day, the Marines captured the unfinished Japanese airstrip and redesignated it Henderson Field in honor of Maj. Lofton R. Henderson, USMC, who had been shot down while leading VMSB-241 on an unsuccessful attack on Japanese carrier *Hiryū* at the Battle of Midway.

9 AUGUST • During the Battle of Savo Island, a Japanese force, Vice Adm. Mikawa Gunichi commanding, slipped undetected to the west of the island in the Solomons and inflicted a singularly devastating defeat upon the U.S. Navy. Heavy cruisers *Astoria* (CA 34), *Quincy* (CA 39), *Vincennes*



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Marine F4F Wildcats line Henderson Field during the battle for the control of Guadalcanal as a formation of Army Air Forces B-17 Flying Fortresses approaches, August 1942.

(CA 44), and Australian *Canberra* were sunk, and heavy cruiser *Chicago* (CA 29) and destroyers *Patterson* (DD 392) and *Ralph Talbot* (DD 390) sustained damage. The Americans lightly damaged four Japanese ships. Japanese gunfire set some of the SOC Seagulls embarked on board the cruisers alight, and the ensuing conflagrations spread flaming gasoline that further illuminated the ships for enemy spotters. Despite the overwhelming victory, Mikawa sought to escape aerial retaliation by clearing the area before sunrise, and consequently failed to attack the nearby transports. The defeat prompted the withdrawal of the U.S. carriers and the transports before they had unloaded all their cargoes, but the limited amount of supplies, which had been landed combined with those the Marines seized from the Japanese, enabled the Leathernecks to maintain their tenuous hold on Guadalcanal.

10 AUGUST • The headquarters of Patrol Wing 3 was shifted within the Panama Canal Zone from NAS Coco Solo to Albrook Field for closer coordination with the Army.

12 AUGUST • Light cruiser *Cleveland* (CL 55) operating in Chesapeake Bay tested the effectiveness of radio-proximity

fuzes against planes during simulated combat conditions by destroying three radio-controlled drones with four proximity bursts from her 5-inch guns. This demonstration led to the mass production of the fuzes.

12 AUGUST • *Wolverine* (IX 64), Cmdr. George R. Fairlamb Jr. commanding, was commissioned at Buffalo, N.Y. This ship and *Sable* (IX 81)—which was commissioned on 8 May 1943—were Great Lakes excursion ships *Seeandbee* and *Greater Buffalo*, respectively, converted for aviation training. *Sable* and *Wolverine* operated for the remainder of World War II on Lake Michigan providing flight decks upon which student naval aviators qualified for carrier landings and flight deck crews received practical experience in handling aircraft on board ships.

13 AUGUST • Commander in Chief U.S. Fleet directed the establishment on about 30 September 1942 of an aircraft experimental and developmental squadron at NAS Anacostia, D.C. This squadron replaced the Fleet Air Tactical Unit to conduct experiments with new aircraft and equipment to determine their practical application and tactical employment.

15 AUGUST • Patrol Wing 11, Cmdr. Stanley J. Michael commanding, was established at Norfolk, Va. Five days later, the wing moved to operate within the Caribbean Sea Frontier from San Juan, P.R.

16 AUGUST • Blimp L-8 of ZP-32 departed Treasure Island for a routine patrol off the coast of San Francisco, Calif., but crashed several hours later in Dale City. Despite adequate fuel, her engines ceased operation, and crewmembers Lt. j.g. Ernest D. Cody and Ens. Charles E. Adams disappeared. The lighter-than-air craft apparently drifted with the wind toward land, exceeded her pressure height, and deflated and returned to earth. Local residents referred to the mysterious tragedy as the “Ghost Blimp.” The Navy salvaged L-8, the former advertising airship *Ranger* of the Goodyear Aircraft Corporation, and after the war returned the blimp to the company.

20 AUGUST • The escort carrier designation was changed from Aircraft Escort Vessel (AVG) to Auxiliary Aircraft Carrier (ACV).

20 AUGUST • *Long Island* (ACV 1) launched the first Marine planes to arrive at Henderson Field on Guadalcanal, Solomon Islands—19 F4F-4 Wildcats of VMF-223 and 12 SBD-1 Dauntlesses of VMSB-232. A Japanese flying boat from the Shortland Islands sighted *Long Island*, but the ship retired beyond the range of enemy land-based aircraft. On 22 August, Bell P-400 Airacobras of the USAAF 67th Fighter Squadron joined the Marines, followed two days later by SBD-3s of VB-6 and VS-5 from *Enterprise* (CV 6). Marine planes carried the major air support burden during the campaign, and also flew 2,117 sorties against Japanese planes, losing 118 aircraft in battle and 30 operationally, while claiming the destruction of 427 enemy aircraft.



An SBD Dauntless flies over *Enterprise* (CV 6), foreground, and *Saratoga* (CV 3), near Guadalcanal in December 1942.

24 AUGUST • *Santee* (ACV 29), Capt. William D. Sample commanding, was commissioned at the Norfolk Navy Yard, Va. *Santee* was the first commissioned of four *Sangamon*-class auxiliary aircraft carriers converted from *Cimarron*-class fleet oilers.

24 AUGUST • During the Battle of the Eastern Solomons, Task Force 61, Vice Adm. Frank J. Fletcher commanding, including *Saratoga* (CV 3), *Enterprise* (CV 6), and *Wasp* (CV 7), supported by Marine and USAAF planes from Henderson Field on Guadalcanal, turned back a Japanese attempt to recapture Guadalcanal and Tulagi. The enemy deployed multiple forces including one of carriers *Shōkaku* and *Zuikaku* to cover a group of four transports, and a diversionary force formed around light carrier *Ryūjō*.

SBD-3 Dauntlesses of VB-3 and VS-3 and TBF-1 Avengers of VT-8 from *Saratoga* sank *Ryūjō* and damaged seaplane carrier *Chitose*. A Dauntless of VMSB-232 damaged light cruiser *Jintsū* north of Malaita Island, and planes from ashore sank armed merchant cruiser *Kinryū Maru* and destroyer *Mitsuki*, and damaged destroyer *Uzuki*. *Enterprise* fought off Japanese torpedo bombers but enemy



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A PBY-5A Catalina of VP-61 hunts for Japanese over the Aleutians near Adak, Alaska, in March 1943.

dive bombers made three direct bomb hits and four near misses that killed 74 men and wounded 95. Her crew controlled the fires and *Enterprise* made for Pearl Harbor, Hawaiian Islands. The Japanese lost fewer than 90 aircraft compared to U.S. casualties of 20 planes.

28 AUGUST • Marine and Navy SBD Dauntlesses from Henderson Field on Guadalcanal in the Solomon Islands defeated a Japanese attempt to land reinforcements from destroyers onto the island, sinking destroyer *Asagiri* and damaging *Amagiri*, *Shirakumo*, and *Yugiri*.

30 AUGUST • The Americans landed on Adak, Alaska, and established an advanced seaplane anchorage there based upon seaplane tender *Teal* (AVP 5). The operation placed Allied forces within 250 miles of Japanese-occupied Kiska and in a position to monitor enemy shipping lanes there and to Attu in the Aleutians. Japanese submarine *RO-61* torpedoed seaplane tender *Casco* (AVP 12) as she supported the landings from Nazan Bay. *Casco* was beached and subsequently salvaged.

31 AUGUST • Japanese submarine *I-26* torpedoed *Saratoga* (CV 3) about 260 miles southeast of Guadalcanal in the Solomon Islands, forcing the carrier to retire for repairs.

1 SEPTEMBER • Naval Air Forces, Pacific, Rear Adm. Aubrey W. Fitch commanding, was established for the administrative control of all air and air service units under Commander in Chief Pacific Fleet. This move replaced Commander Carriers, Pacific, and Commander Patrol Wings, Pacific. The establishment of the subordinate commands Fleet Air West Coast, Fleet Air Seattle, Wash., and Fleet Air Alameda, Calif., occurred simultaneously.

6 SEPTEMBER • The first Naval Air Transport Service flight to Argentina, Newfoundland, marked the beginning of air transport expansion along the eastern seaboard of North America. During September, the flights extended briefly to Iceland and reached southward to the Panama Canal Zone and to Rio de Janeiro, Brazil.

7 SEPTEMBER • VR-2, based at NAS Alameda, Calif., established a detachment at Pearl Harbor, Territory of Hawaii, and initiated a survey flight to the South Pacific preliminary to establishing routes between San Francisco, Calif., and Brisbane, Australia.

15 SEPTEMBER • Japanese submarine *I-19* attacked Task Force 18, Rear Adm. Leigh Noyes commanding, south of San Cristobal Island while the force covered a reinforcement convoy from Espiritu Santo, New Hebrides (Vanuatu), bound for Guadalcanal, Solomons. Two of the torpedoes struck *Wasp* (CV 7) in her starboard side near aviation gasoline tanks and magazines, and her commanding officer, Capt. Forrest P. Sherman, ordered the ship abandoned. Destroyer *Lansdowne* (DD 486) scuttled *Wasp*. Battleship *North Carolina* (BB 55) and destroyer *O'Brien* (DD 415) also received damage but the battleship subsequently completed repairs at Pearl Harbor, Hawaiian Islands. On 19 October, *O'Brien* sank northwest of Tutuila, Samoa while en route to the United States for repairs. Naval aviator Sherman survived to become the 12th Chief of Naval Operations.

16 SEPTEMBER • Patrol Wing 12, Capt. William G. Tomlinson commanding, was established at NAS Key West, Fla., from where it conducted operations within the Gulf Sea Frontier.

19 SEPTEMBER • Commander, Patrol Wing 1 departed NAS Kaneohe Bay, Hawaiian Islands, for the South Pacific to direct the operations of patrol squadrons already in the

area. The headquarters was initially established at Nouméa, New Caledonia, and subsequently at Espiritu Santo, New Hebrides (Vanuatu), and on Guadalcanal and Munda in the Solomons.

1 OCTOBER • Airship Patrol Group 3, Capt. Scott E. Peck commanding, was established at NAS Moffett Field, Calif., to serve as the administrative command for airship squadrons operating on the West Coast.

1 OCTOBER • Three functional training commands—Air Technical Training, Air Primary Training, and Air Intermediate Training—were established with their headquarters initially at Chicago, Ill., Kansas City, Mo., and NAS Pensacola, Fla., respectively.

5 OCTOBER • Planes from *Hornet* (CV 8) attacked Japanese staging areas at Buin-Tonolei and Faisi on Bougainville in the Solomon Islands to disrupt enemy reinforcements from reaching Guadalcanal.

11 OCTOBER • Japanese transports proceeded down New Georgia Sound amid the Solomon Islands to disembark reinforcing elements of the 2nd Division for Japanese troops on Guadalcanal. A surface force, Rear Adm. Goto Aritomo commanding, was to cover their movement by shelling Henderson Field. During the ensuing Battle of Cape Esperance, Task Group 64.2, Rear Adm. Norman Scott commanding, maneuvered into a blocking position against Goto. The Japanese landed their reinforcements, but the following morning planes struck the retiring enemy ships. An SBD-3 Dauntless of VS-71 sank Japanese destroyer *Natsugumo* off Savo Island, and a TBF-1 Avenger of VT-8, SBD-3s of VS-3 and -71 and VMSB-141, and F4F-4 Wildcats of VMF-121, -212, and -224 damaged destroyer *Murakumo* off New Georgia. Destroyer *Shirayuki* scuttled *Murakumo*.

12 OCTOBER • The establishment of Naval Air Centers Hampton Roads, Va.; San Diego, Calif.; Seattle, Wash.; and Hawaiian Islands, and Naval Air Training Centers Pensacola, Fla., and Corpus Christi, Texas, consolidated under single commands various naval aviation facilities that had become operational in the vicinity of the large air stations.

14 OCTOBER • SBD-3 Dauntlesses of VS-3 flying from Guadalcanal, Solomon Islands, attacked the six ships of

a Japanese convoy escorted by eight destroyers steaming toward Guadalcanal between Santa Isabel and Florida Islands, but failed to inflict damage. Overnight a Japanese force, Vice Adm. Mikawa Gunichi commanding, bombarded Henderson Field on Guadalcanal to cover the movement of six destroyers and 11 transports to Tassafaronga. Planes from Henderson Field including SBD-3s of VB-6 and VMSB-141, F4F-4 Wildcats of VF-5, a PBV Catalina that operated as the personal “flag” plane of Commanding General 1st Marine Aircraft Wing, and USAAF Boeing B-17s and Bell P-39/P-400 Airacobras attacked the Japanese ships off Tassafaronga. Transport *Azumasan Maru* and cargo ship *Kyushu Maru* were run aground and fires destroyed both ships. The strikes also sank *Sasago Maru* and damaged destroyer *Samidare*. Japanese planes from carrier *Zuikaku* eluded the Wildcats and sank destroyer *Meredith* (DD 434) off San Cristobal.

15 OCTOBER • Patrol Wing 14, Capt. William M. McDade commanding, was established at San Diego, Calif. The wing operated within the Western Sea Frontier to form, establish, and equip patrol squadrons.

16 OCTOBER • Task Force 17, Rear Adm. George D. Murray commanding, including *Hornet* (CV 8), struck Japanese troops on Guadalcanal and a seaplane base at Rekata Bay, Santa Isabel, in the Solomon Islands.

16 OCTOBER • Nine Japanese dive bombers damaged seaplane tender *McFarland* (AVD 14) as she unloaded cargo and evacuated wounded off Lunga Roads on Guadalcanal, Solomon Islands. The tender shot down one of the attackers, but the Japanese also hit a gasoline barge moored alongside her. The crew cut the blazing vessel loose, and *McFarland* was towed to Florida Island for temporary repairs before she moved for additional work.

17 OCTOBER • Inshore patrol squadrons (VS) were transferred to patrol wings for administrative control. This facilitated the operations of squadrons engaged in coastal antisubmarine reconnaissance and convoy duty within the sea frontiers.

18 OCTOBER • Vice Adm. William F. Halsey Jr. relieved Vice Adm. Robert L. Ghormley as Commander South Pacific Area and South Pacific Force on board auxiliary *Argonne* (AG 31) at Nouméa, New Caledonia.

19 OCTOBER • BUAER reported the initial installation and deployment of the ASB-3 airborne search radar. The Naval Research Laboratory developed the radar for carrier-based aircraft and had installed the system in five TBF-1 Avengers and five SBD-3 Dauntlesses at NASs New York and San Pedro, Calif., respectively. One plane of each type was assigned to Air Group 11 on board *Saratoga* (CV 3) and the others were shipped to Pearl Harbor, Hawaii. The remaining sets of the initial contract for 25 were used for spare parts and training.

21 OCTOBER • Eight men including World War I ace Capt. Edward V. Rickenbacker, USAAC (Ret.), crashed in a B-17D Flying Fortress, Serial 40-3089, in the Central Pacific as a result of a navigational error while Rickenbacker toured Allied forces in the Pacific. At one point, Sgt. Alexander Kaczmarczyk, USAAF, died and the castaways buried him at sea. On 12 November, Lt. j.g. F. E. Woodward and ARM2 L. H. Boutte flying a Vought OS2U-3 Kingfisher of VS-1 Detachment 14, spotted a life raft containing the pilot of the Flying Fortress, Capt. William T. Cherry Jr., USAAF. A patrol torpedo boat rescued him. The next day, Lt. William F. Eadie and Boutte crewed the same Kingfisher and spotted the raft carrying Rickenbacker; Capt. Hans C. Adamson, USAAF; and Pvt. John F. Bartek, USAAF; off Nukufetau in the Ellice Islands (Tuvalu). Eadie landed the Kingfisher, rescued the three men, and taxied 40 miles to the nearest land. The Navy later rescued the other three survivors.

22 OCTOBER • An amendment to a design study contract authorized Westinghouse Electric and Manufacturing Co. to construct two 19A axial-flow turbojet powerplants. The move initiated the fabrication of the first jet engine of wholly U.S. design.

25 OCTOBER • Japanese destroyers *Akatsuki*, *Ikazuchi*, and *Shiratsuyu* sank tug *Seminole* (AT 65) and district patrol craft *YP-284* off Guadalcanal in the Solomon Islands, and damaged minesweeper *Zane* (DMS 14) in Sealark Channel. Marine shore batteries and F4F-4 Wildcats of VMF-121 damaged *Akatsuki* off Lunga Point and damaged *Ikazuchi* while USAAF Bell P-39 Airacobras damaged destroyers *Akizuki* and *Samidare*. An SBD-3 Dauntless of VS-71 and USAAF aircraft damaged Japanese light cruiser *Yura* off Santa Isabel. Destroyers *Harusame* and *Yudachi* scuttled *Yura*.

26 OCTOBER • The Battle of the Santa Cruz Islands began. Task Forces 16 and 17, Rear Adms. Thomas C. Kinkaid and George D. Murray commanding, including *Enterprise* (CV 6) and *Hornet* (CV 8), respectively, fought Japanese forces, Vice Adm. Nagumo Chūichi commanding, including carriers *Shōkaku* and *Zuikaku* and light carriers *Junyō* and *Zuihō* that supported an overland thrust on Guadalcanal, Solomon Islands. *Hornet* launched SBD-3 Dauntlesses of VB-8 and VS-8 that damaged *Shōkaku* and destroyer *Terutsuki*, and TBF-1 Avengers of VT-6 that damaged heavy cruiser *Chikuma*. Dauntlesses of VS-10 from *Enterprise* damaged *Zuihō*. Planes from *Shōkaku* and *Junyō* twice damaged *Enterprise*, killing 44 men and wounding 75. Aircraft from *Shōkaku*, *Zuikaku*, and *Junyō* left *Hornet* ablaze from a total of three torpedoes, four bombs, and two crashing Aichi D3A1 Type 99 carrier bombers. Destroyers *Anderson* (DD 411) and *Mustin* (DD 413) attempted to scuttle *Hornet*, but the following day Japanese destroyers *Akigumo* and *Makigumo* sank the carrier. The Japanese lost 99 planes and the Americans 80. The Japanese attained a tactical naval victory, but Marines and soldiers repulsed the enemy's land offensive on Guadalcanal, thus conferring a strategic victory to the Allies.

28 OCTOBER • The procurement of an expendable radio sonobuoy for use in antisubmarine warfare began when Commander in Chief U.S. Fleet directed the Bureau of Ships to procure 1,000 sonobuoys and 100 associated receivers.

31 OCTOBER • Air Transport Squadrons Pacific was established over the Naval Air Transport Service squadrons based in the Pacific and those on the West Coast that flew the routes from the mainland United States to the Hawaiian Islands.

1 NOVEMBER • The War Department designated Japanese aircraft with human names to provide a uniform identification system, initially with fighter types receiving male names and all others female. The 16 major frontline naval types identified to date: Aichi D3A1 Type 99 carrier bomber "Val," Aichi E13A1 Type 0 reconnaissance floatplane "Jake," Kawanishi E7K2 Type 94 reconnaissance floatplane "Alf," Kawanishi H6K4 Type 97 flying boat "Mavis," Kawanishi H8K2 Type 2 flying boat "Emily," Mitsubishi A5M4 Type 96 carrier fighter "Claude," Mitsubishi A6M Type 0 carrier fighter "Zeke," Mitsubishi F1M2 Type 0

observation floatplane “Pete,” Mitsubishi G3M3 Type 96 land attack plane “Nell,” Mitsubishi G4M1 Type 1 attack plane “Betty,” Nakajima A6M2-N Type 2 fighter seaplane “Rufe,” Nakajima B5N2 Type 97 carrier attack plane “Kate,” Nakajima B6N1 carrier attack plane “Jill,” Nakajima E8N2 Type 95 reconnaissance floatplane “Dave,” Yokosuka D4Y1 Type 2 carrier bomber “Judy,” and Yokosuka E14Y1 Type 0 small reconnaissance seaplane “Glen.” The Allies adopted additional names for succeeding Japanese aircraft.

1 NOVEMBER • Patrol wings were redesignated fleet air wings. To permit the organization of patrol aviation on the task force principle, the practice of assigning a standard number of squadrons to each of the wings shifted to provide for the assignment of all types of aircraft required by the wings to perform their missions.

1 NOVEMBER • Airship Patrol Group 1 was redesignated Fleet Airship Group 1 at NAS Lakehurst, N.J.

2 NOVEMBER • NAS Patuxent River, Md., was established to serve as a facility for testing experimental airplanes and equipment, and as a Naval Air Transport Service base. The station eventually assumed the role of the Navy’s principal flight testing and of the Naval Test Pilot School in place of NAS Anacostia, D.C.

2 NOVEMBER • Fleet Air Wing 6, Capt. Douglass P. Johnson commanding, was established for multi-engine aircraft training at NAS Seattle, Wash.

8 NOVEMBER • Task Group 34.2, Rear Adm. Ernest D. McWhorter commanding, including *Ranger* (CV 4), *Suwannee* (AVG 27), *Sangamon* (AVG 26), and *Santee* (ACV 29), covered landings near Casablanca and Fedala in Morocco during Operation Torch, the Allied invasion of North Africa.

The French 2ème Escadre Légère (2nd Light Squadron), Contre-Amiral Raymond Gervais de Lafonde commanding, attempted to disrupt the landings off Casablanca. Naval spotting planes reported the French sortie and naval gunfire and bombing and strafing attacks including F4F-4 Wildcats from VF-9 and -41 and SBD-3 Dauntlesses from VS-41 from *Ranger* overwhelmed the French. Air attacks sank four submarines and damaged light cruiser *Primauguet*, three destroyers, and one

submarine. Wildcats from VF-41 fought French Dewoitine D.520s and Curtiss Hawk 75As of *Groupes de Chasse* I/5 and II/5. Planes spotted the fall of shot for ships against coastal emplacements. Battleship *Massachusetts* (BB 59) and bombing and strafing runs by naval aircraft including Wildcats from VF-41 damaged French battleship *Jean Bart*.

The next day, 14 French light tanks counterattacked along the road to Rabat. Gunfire from light cruiser *Savannah* (CL 42) and aerial runs defeated the armored thrust. The invaders then repulsed a second armored counterattack. On 10 November, scout planes from *Savannah* bombed and strafed French light tanks. *Chenango* (ACV 28) accompanied the assault forces and launched 78 USAAF Curtiss P-40 Warhawks to operate from Port Lyautey. Through 11 November and the Vichy French capitulation, 172 carrier aircraft flew 1,078 combat sorties. Forty-four planes were lost but most of their crewmembers survived. These aircraft claimed the destruction of 20 of the estimated 168 French planes deployed to Morocco.

12 NOVEMBER • The Naval Battle of Guadalcanal began when Japanese land attack planes assaulted ships of Task Force 67 in Lunga Roads at Guadalcanal in the Solomon Islands. During a savage nocturnal action, U.S. ships repulsed the Japanese from an intended bombardment of Guadalcanal’s Henderson Field. The next morning, Task Force 16, Rear Adm. Thomas C. Kinkaid commanding, including *Enterprise* (CV 6)—the last operational fleet carrier in the Pacific and still completing repairs—launched aerial attacks at the retiring Japanese. TBF-1 Avengers of VT-8 from *Enterprise* and of VMSB-131 and SBD-3 Dauntlesses of VMSB-142 from Henderson sank Japanese battleship *Hiei*. Planes also damaged two destroyers.

On 14 November, the failed Japanese bombardment prompted the postponement of landings, and SBD-3s of VMSB-132 sank heavy cruiser *Kinugasa*. Planes damaged heavy cruisers *Chōkai* and *Maya*, light cruisers *Isuzu* and *Tenryu*, and a destroyer. Dauntlesses of VS-10 and VMSB-130 and -141 and Avengers of VT-10 from Henderson Field sank seven transports/cargo ships and damaged a cargo ship. Overnight, the Americans repelled a Japanese force off the island. The following afternoon, Dauntlesses from VS-10 and VMSB-132 and Avengers of VT-10, together with Marine and Army coastal guns and destroyer *Meade* (DD 602), sank four Japanese transports/cargo ships off northern Guadalcanal. The United States suffered the

1942 continued

greater loss of warships during this series of engagements, but the Japanese withdrew and the battle marked their final attempt to dispatch large naval forces into the waters around Guadalcanal.

13 NOVEMBER • PBY-5 Catalinas of VP-73 arrived at Craw Field at Port Lyautey, Morocco, from Iceland via Bally Kelly, Ireland, and Lyncham, England. Seaplane tender *Barneгат* (AVP 10) supported the squadron during antisubmarine operations over the western Mediterranean and the Strait of Gibraltar and its approaches. During these patrols, the Catalinas encountered Spanish Fiat CR.32s over the Canary Islands and German Focke-Wulf Fw 200C Condors near Gibraltar. In addition, a detachment operated from Ben Sergao Field near Agadir. VP-92 arrived at Les Cazes at Port Lyautey via Cuba, Brazil, Ascension Island, and West Africa.

13 NOVEMBER • Two PBY-5As of VP-92 spotted a submarine on the surface that refused to answer recognition signals about 700 miles off Casablanca, Morocco. Because of the communications error, pilot Lt. H. S. Blake and the crew of his Catalina sank Vichy French boat *Le Conquerant* without sighting survivors.

16 NOVEMBER • Marine Night Fighter Squadron (VMF[N])-531, Lt. Col. Frank H. Schwable, USMC, commanding, was established at MCAS Cherry Point, N.C. This first naval aviation night fighter squadron trained initially with SNJ Texans and SB2A4 Buccaneers, and then received twin-engine PV-1 Venturas equipped with British Mark IV type radar.

23 NOVEMBER • The VS-173 full-scale model of the “Flying Flapjack” fighter with an almost circular wing made its first flight at the Vought-Sikorsky plant, Stratford, Conn. A subsequent military version of this aircraft designated XFSU-1 never flew.

1 DECEMBER • Fleet Air Wing 15, Capt. George A. Seitz commanding, was established at Norfolk, Va. to conduct operations within the Moroccan Sea Frontier.

1 DECEMBER • Fleet Airship Wing 30, Capt. George H. Mills commanding, was established at NAS Lakehurst, N.J.

The wing administered Atlantic Fleet airship groups and their squadrons.

1 DECEMBER • Airship Patrol Group 3 was redesignated Fleet Airship Wing 31 at NAS Moffett Field, Calif.

15 DECEMBER • As a result of the matte-black paint schemes of the PBY-5A Catalinas of VP-12 and the night-time bombing operations conducted by the squadron from Nandi in the Fiji Islands around Guadalcanal in the Solomon Islands, VP-12 became known as a “Black Cat” squadron. Other squadrons that subsequently received the appellation included VP-11, -51, and -91.

26 DECEMBER • The Chief of Naval Operations approved the merger of the Service Force Aviation Repair Unit and Advanced Cruiser Aircraft Training Unit, which had been established in October 1941 and June 1942, respectively, to form a scout observation service unit (SOSU) to maintain battleship and cruiser aircraft and indoctrinate pilots in their specific operations. This SOSU was established on 1 January 1943 as the first of three created during World War II.

27 DECEMBER • *Santee* (ACV 29), with Air Group 29 embarked, sailed from NOB Norfolk, Va. *Santee* became the first of 11 auxiliary aircraft carriers to wage free-roving hunter-killer antisubmarine and antiraid operations in the South Atlantic.

31 DECEMBER • The chief of BUAER noted to the Naval Research Laboratory the urgent need for airborne radar that obviated the slower peacetime methods of procurement and fleet introduction, and requested the continuance of the provision of people capable of assisting the fleet in the operation and maintenance of radar equipment until the assembly of a specially trained group. Within a few months, this team evolved into the Airborne Coordination Group that provided trained civilian electronics specialists to the fleet throughout World War II and post-war.

31 DECEMBER • *Essex* (CV 9), Capt. Donald B. Duncan commanding, was commissioned at Norfolk, Va. She was the first of 17 ships of her class commissioned during World War II.

31 DECEMBER • The Japanese decided to evacuate Guadalcanal, Solomon Islands.

1943

1 JANUARY • Naval Reserve aviation bases (NRAB) engaged in primary flight training were redesignated naval air stations (NAS) without a change of mission. There were two exceptions. On 7 July 1943, NRAB Anacostia, D.C., was abolished, and on 1 September 1943, Squantum, Mass., was redesignated as a naval air station.

1 JANUARY • Air Force, Atlantic Fleet, was established, Rear Adm. Alva D. Bernhard commanding. The command provided administrative, material, and logistic services for Atlantic Fleet aviation in place of the separate commands Fleet Air Wings, Atlantic, and Carriers, Atlantic, which were abolished. The same order established Fleet Air, Quonset, R.I., as a subordinate command.

1 JANUARY • The Navy recorded its first emergency use of ground-controlled approach (GCA) equipment when a half hour before the scheduled arrival of a flight of PBVs, a snowstorm closed the field at NAS Quonset Point, R.I. The GCA crew located the incoming Catalinas on their search radar and, using the control tower as a relay station, “talked” one of the planes into position for a landing. This recovery occurred nine days after the first successful experimental demonstration of GCA.

5 JANUARY • Ships of Task Force 67 bombarded Japanese positions in Munda on New Georgia, Solomon Islands. Japanese planes counterattacked, and in the first combat use of a proximity-fuzed projectile, light cruiser *Helena* (CL 50) destroyed a Japanese dive bomber with the second salvo from her 5-inch guns off the south coast of Guadalcanal.

7 JANUARY • The opening of flight preparatory schools in 20 colleges and universities across the United States implemented a change in the pilot training program. Under the new program, students began their training at these schools with three months of academic work fundamental to ground school subjects, then proceeded to War Training Service courses conducted by the Civil Aeronautics Administration at universities for two months’ training in ground subjects and elementary flight under civilian instructors, then to the pre-flight schools for three months of physical conditioning, and finally to Navy flight training beginning at one of the primary training bases.

7 JANUARY • The development of the first naval aircraft to be equipped with a turbojet engine began with the issuance of a letter of intent for engineering, development, and tooling for two fighters to McDonnell Aircraft Corporation. The agreements later specified two Westinghouse 19-B turbojet engines and the aircraft received the designation XFD-1, which became the prototypes for the FH-1 Phantom.

8 JANUARY • *Ranger* (CV 4) sailed from NOB Norfolk, Va., to west African waters with 75 embarked Curtiss P-40Es of the USAAF 325th Fighter Group. On 19 January, she launched the Warhawks from a position off Accra, Gold Coast (Ghana), for shipment to the North African Theater, and then returned to Norfolk.

10 JANUARY • Fleet Air Wing 15 headquarters was transferred from Norfolk, Va., to Port Lyautey, French Morocco, to direct patrol plane operations in the Mediterranean and Strait of Gibraltar area.

12 JANUARY • The chief of Naval Air Operational Training directed the marking of aircraft operating from stations under his command for identification purposes with letters and numerals in three groups separated by dashes. The first group provided a letter identification of the station, the second a letter identifying the unit type, and the third the number of the aircraft in the unit. The order also provided for the addition of a number to the station letter during the operations of more than one unit on board the station. Thus J2-F-22 identified a plane from NAS Jacksonville, Fla., OTU No. 2 Fighter Training Unit, aircraft No. 22.

14 JANUARY • *Independence* (CVL 22) was commissioned at Philadelphia, Pa., Capt. George R. Fairlamb Jr. commanding. She was the first of nine light carriers of her class constructed on the hulls of *Cleveland* (CL 55)-class light cruisers.

15 JANUARY • Head of the Flight Statistics Desk of the Bureau of Aeronautics, Capt. Spencer H. Warner, introduced Grampaw Pettibone in the *BUAER News Letter*. Artist Lt. Robert Osborn drew the cartoon character as a safety feature to help reduce pilot-error accidents. After Osborn’s discharge from the Navy, he contributed Pettibone to *Naval Aviation News* magazine.



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A carrier's landing signal officer guides an F4U Corsair to land.

17 JANUARY • After tests conducted by six experienced pilots flying F4U-1 Corsairs at NAS San Diego, Calif., VF-12 commanding officer Cmdr. Joseph C. Clifton reported that antiblackout suits had raised pilot tolerance to accelerations encountered in gunnery runs and other maneuvers by three to four Gs.

24 JANUARY • Ships of Task Force 67 shelled Japanese ammunition and fuel dumps on Kolombangara, Solomon Islands. Later that day, aircraft operating from Guadalcanal's Henderson Field bombed the targets.

28 JANUARY • *Barnegat* (AVP 10)-class seaplane tender *Absecon* (AVP 23), Cmdr. Robert S. Purvis commanding, was commissioned at Puget Sound Navy Yard at Bremerton,

Wash. *Absecon* had undergone the unique fitting of a catapult and two cranes to facilitate training in catapult launches and sled net recoveries. Her embarked aviation unit consisted initially of one SO3C-1 Seamew and two OS2U-3 Kingfishers. The ship completed 3,733 catapult launches during World War II, and also operated as a mobile target for torpedo planes training from NASs Ft. Lauderdale and Miami, Fla.

31 JANUARY • 1st Lt. Jefferson J. DeBlanc, USMC, of VMF-112 piloted an F4F-4 Wildcat as part of an escort for SBD Dauntlesses and TBF-1 Avengers that bombed Japanese ships in Vella Gulf in the Solomons. The Japanese intercepted the Marines, but DeBlanc shot down two Mitsubishi A6M Type 0 carrier fighters and three floatplanes

over Kolombangara Island. His efforts disrupted the Japanese attacks, but the aviator bailed out from his damaged Wildcat over the enemy-held island. A coastwatcher on Kolombangara rescued DeBlanc and SSgt. James A. Felton, USMC, who had also parachuted. Thirteen days later a J2F-5 Duck returned both men. DeBlanc received the Medal of Honor.

1 FEBRUARY • VB-127, Lt. Cmdr. William K. Gentner commanding, was established at NAS Deland, Fla., equipped with PV-1 Venturas. Although it was not the first Navy landplane patrol squadron, it was the first to receive the VB designation.

1 FEBRUARY • A new specification prescribing the color and marking of naval aircraft became effective. The basic camouflage color scheme for use on fleet aircraft was a pattern of four colors ranging from semigloss Sea Blue on surfaces viewed from above with intermediary blues to nonspecular Insignia White on surfaces viewed from below. It also involved complex countershading paint application. The terms “basic non-camouflage” and “maximum visibility” were introduced for the color schemes described in April 1942 for use on intermediate and primary trainers.

1 FEBRUARY • The revision of regulations governing the display of the national star insignia on aircraft removed those markings from the upper right and lower left wing surfaces.

9 FEBRUARY • Organized Japanese resistance ended on Guadalcanal in the Solomon Islands after the evacuation of their main forces. In addition to the desperately waged carrier battles of the campaign, Allied aircraft operating from ashore had directly supported the hard-pressed soldiers and Marines, and Navy patrol squadrons had flown search, rescue, and offensive missions from sheltered coves and harbors.

11 FEBRUARY • The Navy issued a contract for the XFR-1 to Ryan Aeronautical Corp. This fighter incorporated a conventional reciprocating engine for use in normal operations and a turbojet for use as a booster during takeoffs and maximum performance flight. The development and production were to be handled on a crash basis to equip escort carrier squadrons at the earliest possible date, but design and production problems prevented the plane from entering battle.

11 FEBRUARY • An SON-1 Seagull of VCS-9, embarked on board light cruiser *Helena* (CL 50), operated in a rare coordinated attack with destroyer *Fletcher* (DD 445) to sink Japanese submarine *I-18* in the Coral Sea.

12 FEBRUARY • Vought F4U-1s flew their first combat mission when 12 Corsairs of VMF-124, Maj. William E. Gise, USMC, commanding, based on Guadalcanal escorted a PB2Y-2 Coronado to Vella Lavella in the Solomon Islands to rescue downed pilots. Two days later, the first combat action for Corsairs occurred when the squadron encountered Mitsubishi A6M Type 0 carrier fighters while escorting VP-51 PB4Y-1 Liberators on a daylight strike in the Kahili area of Bougainville. The Japanese downed 10 aircraft, including two Corsairs, while losing three Zeros.

13 FEBRUARY • The reorganization of the Naval Air Transport Service took place and the Navy directed the establishment of wings for the Atlantic and West Coast squadrons.

14 FEBRUARY • *Ranger* (CV 4) sailed from NOB Norfolk, Va., to west African waters with 75 embarked USAAF Curtiss P-40Ls. On 24 February, she launched the Warhawks from a position off Accra, Gold Coast (Ghana), for shipment to the North African Theater. The ship returned to Hampton Roads, Va.

15 FEBRUARY • Commander in Chief, U.S. Fleet assigned the responsibility for the seagoing development of helicopters and their operation in convoys to the Coast Guard, and directed testing to determine their value when operating from merchant ships to fight submarines.

16 FEBRUARY • Fleet Air Wing 16, Capt. Rossmore D. Lyon commanding, was established at NAS Norfolk, Va.

17 FEBRUARY • Airship K-17 of ZP-51 initiated lighter-than-air operations over the Caribbean from Edinburgh Field, Trinidad.

19 FEBRUARY • A letter of intent was issued for two XP2V-1 patrol planes to Vega Airplane Co. The action initiated the development of the Lockheed Neptune.

21 FEBRUARY • Marines and soldiers made unopposed landings in the Russell Islands during Operation Cleanslate—the inaugural movement of Allied forces through the central Solomon Islands. Navy, Marine, and USAAF planes from Aircraft, South Pacific, and Aircraft, Solomons, Central Pacific Forces, including those operating from *Saratoga* (CV 3) and Henderson Field, Guadalcanal, covered the landings. The Allies leapfrogged across the islands and established bases and airfields to support their advance against the Japanese stronghold at Rabaul, New Britain. The Japanese failure to defeat the counteroffensive in the air and by sea enabled the Allies to reduce or bypass enemy garrisons piecemeal.

24 FEBRUARY • The Naval Photographic Science Laboratory was established at NAS Anacostia, D.C. The Bureau of Aeronautics oversaw the laboratory to provide photographic services to the Navy, and to develop equipment and techniques suitable for fleet use.

1 MARCH • Air Transport Squadrons, West Coast, was established at NAAS Oakland, Calif. The command controlled all Naval Air Transport Service squadrons operating west of the Mississippi River, except those that operated from the mainland to Honolulu, Hawaiian Islands.

1 MARCH • A revision of the squadron designation system changed inshore patrol squadrons to scouting squadrons (VS), escort fighting squadrons (VGF) to fighting squadrons (VF), escort scouting squadrons (VGS) to composite squadrons (VC), and patrol squadrons (VP) operating land type planes to bombing squadrons (VB). The revision also redesignated carrier scouting squadrons (VS) as VB and VC, and as a result, the types of squadrons on board *Essex* (CV 9)-class carriers fell to three. In spite of this change, the aircraft complement of their air groups remained at the previous level of 21 fighters, 36 scout bombers, and 18 torpedo bombers.

1 MARCH • Fleet Airship Group 2, Capt. Walter E. Zimmerman commanding, was established at NAS Richmond, Fla. The group oversaw lighter-than-air operations in the Gulf Sea Frontier.

4 MARCH • Secretary of the Navy William F. Knox authorized changes to the characteristics of *Essex* (CV 9)-class

carriers, including the installation of a combat information center and fighter director station, additional antiaircraft batteries, and a second flight deck catapult in lieu of one athwartships on the hangar deck.

4 MARCH • Damage to U.S. carriers in early 1943 reduced the number available in the South Pacific, and the British responded to a request for reinforcements by dispatching their carrier *Victorious* (38). On this date, she reached Pearl Harbor, Hawaiian Islands. The ship embarked Martlet IVs (Grumman F4F-4Bs) of 882, 896, and 898 Squadrons, and Tarpon Is (Grumman TBF-1 Avengers) of 832 Squadron. On 8 May, she sailed for Nouméa, New Caledonia, and into the summer operated with Task Group 36.3, including *Saratoga* (CV 3), in the Solomon Islands. At one point, some of the Tarpons embarked briefly on board *Saratoga* in a rare instance during World War II of British planes operating from a U.S. carrier.

5 MARCH • *Bogue* (ACV 9), with VC-9 embarked, joined Task Group 24.4 at Argentia, Newfoundland, to begin the escort of convoys to mid-ocean and return. *Santee* (ACV 29) previously operated on hunter-killer duty, but *Bogue* became the center of the first of the hunter-killer groups assigned to convoy escort. Through 14 March the ship supported convoy HX-228.

15 MARCH • The headquarters of Fleet Air Wing 4 shifted westward on the Aleutian chain from Kodiak to Adak, Alaska.

15 MARCH • The Navy initiated a system of numbering fleets with those in the Pacific receiving odd numbers and those in the Atlantic even numbers.

20 MARCH • Maj. John W. Sapp, USMC, of VMTB-143, led 42 Navy and Marine TBF-1 Avengers on a night flight from Guadalcanal's Henderson Field in the Solomon Islands, to mine Kahili Harbor, Bougainville. A coordinated attack on the Kahili airfield by USAAF heavy bombers contributed to the success of this first aerial mining mission in the South Pacific.

23 MARCH • The Training Task Force Command was established with its headquarters at NAS Clinton, Okla. The command formed, outfitted, and trained special units for the operational employment of assault drone aircraft.

29 MARCH • Testing of forward firing rocket projectiles from naval aircraft concluded with evaluation of an SB2A-4 Buccaneer at the Naval Proving Ground, Dahlgren, Va.

29 MARCH • Air Transport Squadrons, Atlantic, was established at NAS Norfolk, Va. The command supervised and directed the operations of Naval Air Transport Service squadrons based on the Atlantic seaboard.

30 MARCH • TBF-1 Avengers laid mines near Buin, Bougainville, in the Solomon Islands. On 17 April, Japanese transport *Shinnan Maru* blundered into one of the mines and sank.

1 APRIL • Aircraft Antisubmarine Development Detachment, Cmdr. Aurelius B. Vosseller commanding, was established at NAS Quonset Point, R.I., to develop tactical training programs and techniques to make use of newly developed countermeasures equipment.

1 APRIL • Night Fighting Squadron (VF[N]) 75, Cmdr. William J. Widhelm commanding, was established at NAS Quonset Point, R.I., as the first Navy night fighter squadron.

4 APRIL • The Naval Aircraft Factory, Philadelphia, Pa., reported that during tests of an automatic flying device for use on towed gliders, a Taylorcraft LNT-1 had been towed automatically without assistance from the safety pilot.

9 APRIL • The Navy reestablished the rank of commodore.

14 APRIL • Fleet Air Wing 16 was transferred from NAS Norfolk, Va., to Natal, Brazil, to direct patrol plane antisubmarine operations within the Fourth Fleet in the South Atlantic.

16 APRIL • The Navy changed the color of the working uniform to slate grey. The change proved unpopular among officers and, on 15 October 1946, the service reinstated khakis.

21 APRIL • Capt. Frederick M. Trapnell made the first jet flight by a U.S. naval aviator in the Bell XP-59A Airacomet at Muroc, Calif.



Aviation ordnancemen mount 4.5-inch high-velocity rockets onto a plane.

MAY • Lt. j.g. Richard M. Nixon, USNR, reported to Commander, Naval Air Forces Pacific as officer in charge of the South Pacific Combat Air Transport Command at Guadalcanal, Solomon Islands. Nixon had completed naval aviation indoctrination training at NAS Quonset Point, R.I. While in the South Pacific, he served in the development and maintenance of the aerial supply routes, and afterward on the Green Islands and in Fleet Air Wing 8. On 1 June 1966, Cmdr. Nixon retired from the Naval Reserve, and he subsequently became the 37th president of the United States.

3 MAY • VR-1 extended the area of its operations with a flight from NAS Norfolk, Va., via Reykjavik, Iceland, to Prestwick, Scotland. The event completed the first R5D-1 Skymaster operation of the Naval Air Transport Service.

4 MAY • Fleet Air Wing 4 commenced regular aerial patrols from Amchitka in the Aleutian Islands that extended the search coverage beyond Attu toward the Kurile Islands.

4 MAY • To expedite the evaluation of helicopters in antisubmarine operations, Commander in Chief, U.S. Fleet directed the formation of a joint board with representatives of the Commander in Chief, U.S. Fleet, the Bureau of Aeronautics, the Coast Guard, and the British Admiralty and Royal Air Force. The resulting Combined Board for the Evaluation of the Ship-Based Helicopter in Antisubmarine Warfare later underwent expansion to include representatives of the USAAF, the War Shipping Administration, and the National Advisory Committee for Aeronautics.



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A PV-1 Ventura hunts for enemy submarines, c. 1943.

7 MAY • Navy representatives witnessed landing trials of the XR-4 helicopter on board merchant tanker *Bunker Hill* in Long Island Sound. Col. R. F. Gregory, USAAF, made 15 flights, and in some of these, he landed on the water before returning to the platform on the ship's deck. The Maritime Commission sponsored the demonstration.

8 MAY • Navy and Marine aircraft sank destroyers *Oyashio* and *Kagero*, respectively, after mines damaged both warships off Rendova in the Solomons. Meanwhile, destroyer *Kuroshio* struck a mine laid the previous day and sank in the Blakett Strait, and planes damaged destroyer *Michisio* in the strait.

8 MAY • *Sable* (IX 81) was commissioned at Buffalo, N.Y., Capt. William A. Schoech commanding.

11 MAY • Task Forces 16 and 51 supported landings of the Army's 7th Division on Attu Island, Alaska. Navy and Marine aircraft flew close air support missions from *Nassau* (ACV 16), marking the first use of this type of direct air support from an escort carrier of amphibious operations. Planes from Fleet Air

Wing 4 also took part—PV-1 Venturas from VB-136, PBY-5A Catalinas of VP-43 and -62, and PBY-5s from VP-45 flew from Adak, and Venturas from VB-135 and PBY-5As of VP-61 operated from Amchitka. The seizure of Attu was the debut of a support air commander afloat on board battleship *Pennsylvania* (BB 38), whose team consisted of three officers and a radioman led by experienced Aleutian pilot Col. W. O. Eareckson, USA. Despite extensive naval gunfire and air support the soldiers suffered disproportionately high casualties dislodging the tenacious Japanese defenders.

14 MAY • Lt. P. A. Bodinet of VP-84 piloted a PBY-5A Catalina that sank the German *U-640* using a Mk 24 airborne acoustic homing torpedo dubbed "Fido" off Iceland, east of Cape Farewell, Greenland.

15 MAY • The Naval Airship Training Command was established at Lakehurst, N.J. The command administered and directed lighter-than-air training programs at the naval air centers at Lakehurst and NAS Moffett Field, Calif., and directed Lakehurst's Experimental and Flight Test Department.

15 MAY • OS2U-3 and OS2N-1 Kingfishers of VS-62 and Cuban submarine chaser SC-13 sank the German *U-176* northeast of Havana, Cuba.

18 MAY • The cancellation of the program for the use of gliders as transports for Marine combat troops returned the Navy's glider development to an experimental basis.

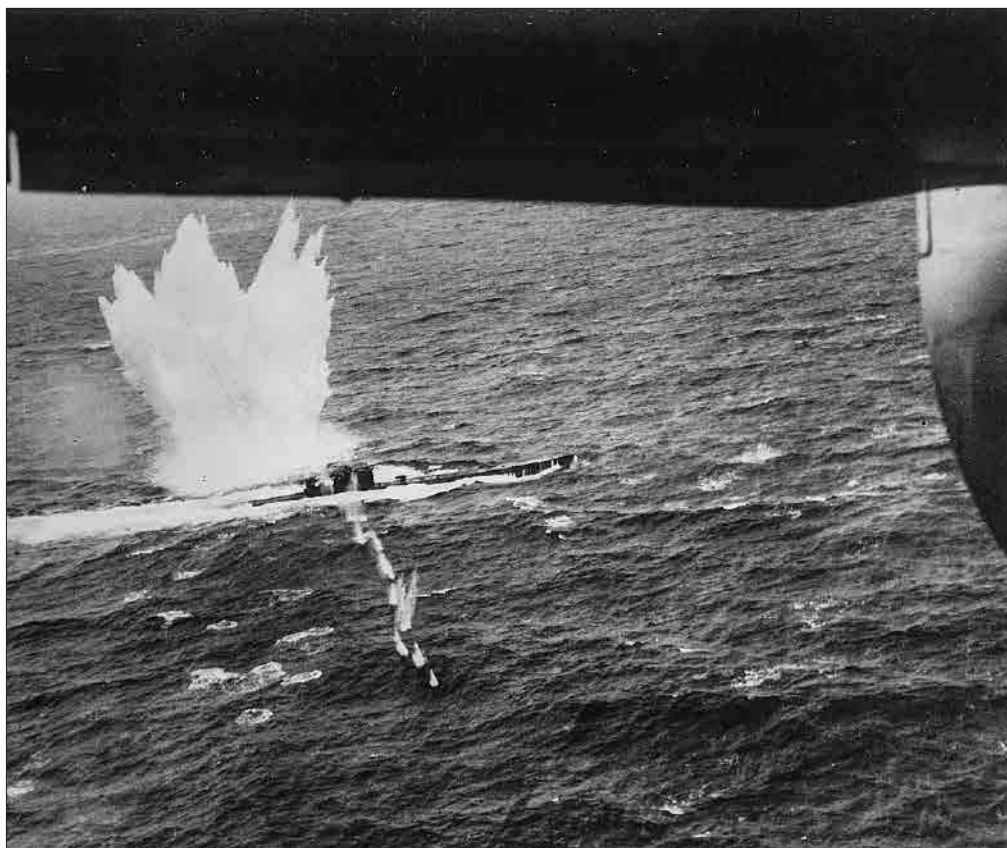
20 MAY • The Navy established the Tenth Fleet with its headquarters in Washington, D.C., to direct antisubmarine warfare efforts in the Atlantic.

22 MAY • During a running battle to protect convoy ON-184 in the North Atlantic, TBF-1 Avengers of VC-9, embarked on board *Bogue* (ACV 9), sank *U-569* to score the first U-boat sinking in World War II by U.S. auxiliary aircraft carriers on hunter-killer patrols. The Germans maintained that the crew scuttled their boat. Avengers also damaged *U-305*. *Bogue* claimed the destruction of 13 U-boats by her planes and escorts during the Battle of the Atlantic.

24 MAY • Special Project Unit Cast was organized at Squantum, Mass., to provide (under Bureau of Aeronautics direction) the services required to flight test electronic equipment under development at the Radiation and Radio Research Laboratories.

5 JUNE • TBF-1s of VC-9, embarked on board *Bogue* (ACV 9), damaged German submarines *U-228*, *U-603*, and *U-641* in the mid-Atlantic. The next day, Avengers from the ship sank *U-217* off the Canary Islands. On 12 June, *Bogue* and her Avengers sank *U-118* near those islands.

7 JUNE • The establishment of NAF Attu within a week of the capture of the island from the Japanese brought Fleet



One of four PB4Y-1 Liberator bombers of VB-107 out of Ascension Island drops Mk 47 depth bombs on *U-848* during the submarine's sinking on 5 November 1943.

Air Wing 4 bases to the tip of the Aleutian chain, nearly 1,000 miles from the Alaskan mainland and 750 miles from Japanese territory in the Kurile Islands.

7 JUNE • Commander in Chief, U.S. Fleet established a project for the airborne testing by Commander Fleet Air, West Coast of high velocity, "forward shooting" rockets. These had nearly double the velocity of those that had been tested earlier at the Dahlgren, Va., Naval Proving Ground. A rocket section led by Dr. C. C. Lauritsen developed the rockets at the California Institute of Technology under National Defense Research Committee auspices and with Navy support. This test project was established in part on the basis of reports of the effectiveness in service of a similar British rocket. On 14 July, the first airborne firing from a TBF-1 Avenger of a British rocket was followed on 20 August by launching of the CalTech round. The favorable results of these evaluations led to the equipping of operational squadrons with forward firing rockets by the end of the year.

1943 continued

10 JUNE • Lt. Cmdr. Frank A. Erickson, USCG, proposed the development of helicopters for antisubmarine warfare, “not as a killer craft but as the eyes and ears of the convoy escorts.” To this end he recommended their equipping with radar and dunking sonar.

15 JUNE • President Franklin D. Roosevelt approved a ceiling of 31,447 planes for the Navy.

17 JUNE • *Monterey* (CVL 26), Capt. Lester T. Hundt commanding, was commissioned at New York Shipbuilding Corp., Camden, N.J. The ship’s company included assistant navigator Lt. Gerald R. Ford Jr., USNR. On 28 June 1963, Lt. Cmdr. Ford was discharged from the Naval Reserve, and afterward became the 38th president of the United States.

20 JUNE • Lt. E. W. Wood of VP-84 piloted a PB5Y-5A Catalina that sank German submarine *U-388* and damaged *U-420* in Icelandic waters. The battle marked the second combat use of Mk 24 Fido acoustic torpedoes.

20 JUNE • African American Ens. Oscar Holmes was designated a naval aviator. Navy officials apparently were unaware of Holmes’ race and he thus became the first documented man of color to receive Navy wings. Holmes had attained experience as a civilian pilot and received the designation after completion of an instructor’s course, rather than the entire Navy flight syllabus.

21 JUNE • Navy, Marine, and USAAF aircraft supported the move of the 4th Marine Raider Battalion into Segi of the New Georgia Group in the Solomon Islands.

28 JUNE • A change in the design of the national star insignia added white rectangles on the left and right sides of the blue circular field to form a horizontal bar, and a red border stripe around the entire design. The substitution of Insignia Blue for the red followed in September.

29 JUNE • NAS Patuxent River, Md., began functioning as an aircraft test organization with the arrival of the flight test unit from NAS Anacostia, D.C.

29 JUNE • Elements of VP-101 arrived at Brisbane from Perth, Australia, thereby extending the patrol coverage of Fleet Air Wing 10 to the east coast of Australia and marking

the beginning of a northward advance of patrol operations toward the Papuan Peninsula, New Guinea.

30 JUNE • Land-based Navy, Marine, and USAAF aircraft of Task Force 33, Vice Adm. Aubrey W. Fitch commanding, supported Operation Toenails—U.S. landings on Rendova and other islands in the New Georgia area of the Solomon Islands, including Kiriwini, Onaivisi, Wickham Anchorage, and Woodlark. Rear Adm. Marc A. Mitscher held tactical command of the planes, which operated primarily from airfields on Guadalcanal and the Russell Islands. The forward echelon of the 2d Marine Aircraft Wing of Headquarters, New Georgia Air Force provided the principal intrinsic air support ashore. Fierce fighting occurred offshore when the Japanese repeatedly attacked the landing forces from the air.

2 JULY • Land-based Navy, Marine, and USAAF aircraft of Task Force 33, Vice Adm. Aubrey W. Fitch commanding, supported soldiers of the 43rd Division and Marines who stormed Viru and Zanana, Solomon Islands. A flight of Japanese Mitsubishi G4M1 Type 1 attack planes escorted by A6M Type 0 carrier fighters disrupted the landings. This is variously attributed to Japanese interception of Allied radio traffic that revealed retiring fighter cover, or the temporary maintenance of the only operating radar set on Rendova. The Bettys and Zeros killed 59 men and wounded 77. The ensuing recriminations between the Army and Navy led to enhanced combat air patrols over the beachhead that protected the landings from continual Japanese aerial counterattacks. Three days later, Allied troops landed at Rice Anchorage.

5 JULY • The first Westinghouse 19A turbojet engine developed for the Navy completed its 100-hour endurance test.

6 JULY • Commanding officer and pilot Lt. Cmdr. Bruce A. Van Voorhis of VB-102 made a daring solitary low-level attack in a PB4Y-1 Liberator against Japanese installations on Greenwich Island (Kapingamarangi). After a flight of almost 700 miles, Van Voorhis made six bombing runs on a radio station and several strafing passes against three Mitsubishi F1M2 Type 0 observation floatplanes (Petes) of the 902d *Kōkūtai* (Air Group) and vessels in the lagoon. The squadron reported that Van Voorhis flew “too low and too slow” on the last run, and that a bomb blast caught the Liberator and the bomber crashed in the lagoon. The Japanese, however, claimed that their floatplanes downed the Liberator. Van

Voorhis received the Medal of Honor, copilot Lt. j.g. Herschel A. Oehlert Jr. was awarded the Navy Cross, and each of the other crewmembers received the Distinguished Flying Cross, all posthumously.

6 JULY • The Army, Navy, and Coast Guard carried out a demonstration of helicopter operations on board Army transport *James Parker* (AP 46) while she sailed from New York City to Virginia. Two YR-4B (HNS-1) Hoverflies landed on a platform fitted to the ship that measured 60 feet long by 50 feet wide forward, tapering aft to 40 feet in width. Through 7 July, the pilots completed 98 landings and takeoffs in winds ranging from 5 to 25 knots, and while the ship pitched up to 6½ degrees.

8 JULY • *Casablanca* (ACV 55), Capt. Steven W. Callaway commanding, was commissioned at Astoria, Ore., as the first of her class and the first auxiliary aircraft carrier designed and built as such.

10 JULY • Light cruisers *Philadelphia* (CL 41) and *Savannah* (CL 42) operated with gunfire support ships during Operation Husky—the Allied invasion of Sicily. *Philadelphia* and *Savannah* launched their SOC-3 and -3A and SON-1 Seagulls to spot the fall of shot. German Messerschmitt Bf 109s shot down three of *Savannah's* four scout planes. The pilot of one, Lt. C. A. Anderson, was killed, but ARM Edward J. True landed the riddled plane and escaped before it sank. The next day, Allied naval gunfire destroyed 13 Axis tanks and continued support over the succeeding days. On 13 July, the Army's 1st Division thanked *Savannah* for “crushing three infantry attacks and silencing four artillery batteries.”

12 JULY • Light cruisers *Birmingham* (CL 62) and *Brooklyn* (CL 40) commenced coverage from off Porto Empédocle of the left flank of the advance of American forces across Sicily. A German minefield compelled the cruisers to maneuver out to sea but their scouting planes spotted the fall of 6-inch supporting fire for more than a week, afterward augmented by additional Allied ships, including light cruiser *Philadelphia* (CL 41).

13 JULY • F4F-4 Wildcats and TBF-1 Avengers of VC-13, embarked on board *Core* (ACV 13), began a month of successful assaults on U-boats during two of the carrier's

patrols. Pilot Lt. Robert P. Williams, USNR, and aircrewmembers ARM1 Morris C. Grinstead and AMM2 Melvin H. Paden sank surfaced *U-487* with depth charges from their Avenger about 720 miles south-southwest of Fayal, Azores. The U-boat shot down Lt. j.g. Earl H. Steiger, USNR, during a strafing run in a Wildcat, BuNo 12112, killing him. Three days later, Avengers from *Core* (which was redesignated CVE-13 the previous day) destroyed *U-67* in the mid-Atlantic, and on 24 August sank *U-84* and *U-185* at two different locations southwest of the Azores.

14 JULY • The Secretary of the Navy issued a General Order forming the Naval Air Material Center, consisting of the separate commands of the Naval Aircraft Factory, the Naval Aircraft Modification Unit, the Naval Air Experimental Station, and the Naval Auxiliary Air Station. This action became effective on 20 July and consolidated in distinct activities the production, modification, experimental, and air station facilities of the former Naval Aircraft Factory organization at Philadelphia, Pa.

15 JULY • The establishment of new designations for carriers limited the previous broadly applied CV symbol to *Saratoga* (CV 3), *Ranger* (CV 4), *Enterprise* (CV 6), and to *Essex* (CV 9)-class carriers, and added CVB (Aircraft Carrier, Large) for the 45,000-ton *Midway* (CVB 41)-class under construction and CVL (Aircraft Carrier, Small) for the nine 10,000-ton *Independence* (CVL 22)-class ships built on the hulls of *Cleveland* (CL 55)-class light cruisers. The same directive reclassified escort carriers as warships and changed their symbol from ACV to CVE.

15 JULY • The Navy modified its airship organization. Fleet Airship Wings 30 and 31 were redesignated Fleet Airships, Atlantic, and Pacific, respectively. Airship patrol groups became airship wings, airship patrol squadrons were redesignated blimp squadrons, and the addition of two more wings and the establishment of blimp headquarters squadrons within each wing was authorized.

17 JULY • SBD Dauntlesses from VB-11 and VMSB-132 and TBF-1 Avengers from VT-11 and -21, escorted by F4U-1s, including Corsairs, from VMF-122, -211, and -221, along with USAAF Consolidated B-24 Liberators escorted by Bell P-39 Airacobras and Curtiss P-40 Warhawks, and Royal New Zealand Air Force Curtiss Kittyhawks of No. 14 Squadron,



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Two ships of Task Group 38.2, *Intrepid* (CV 11) and *Independence* (CVL 22) (left and right, respectively) are seen from *Enterprise* (CV 6) around the time of the Battle of Leyte Gulf, October 1944. The two types formed the basis for the fast carrier task forces at sea.

attacked Japanese ships at Buin, Bougainville, in the Solomon Islands into the following day. In the face of heavy fighter opposition, the attacks sank destroyer *Hatsuyuki* and damaged destroyers *Hatsukaze* and *Yūnagi*, and auxiliary minesweeper *W. 15*.

18 JULY • Lt. N. G. Grills of ZP-21 piloted airship K-74 on a patrol off southeastern Florida from NAS Richmond, Fla. The airship's radar detected a contact at a range of eight miles and ten minutes later the blimp discovered surfaced *U-134* off the port bow. K-74 fired a .50-caliber machine gun and unsuccessfully attempted to drop depth bombs. The U-boat's deck gun and machine gun fire hit the engine and the airship bag, K-74's controls failed to respond, and it fell tail first. The wreck remained afloat until 19 July but then sank, the only

U.S. airship lost to enemy action in World War II. One man died from a shark attack before a J4F-2 Widgeon from ZP-21 directed destroyer *Dahlgren* (DD 187) to the area to rescue Grills and the other eight survivors. Despite damage to her ballast and diving tanks, *U-134* escaped, but the following month British bombers sank her in the Bay of Biscay.

19 JULY • The Naval Aircraft Factory, Philadelphia, Pa., received authorization to develop the Gorgon aerial ram or air-to-air missile powered by a turbojet engine and equipped with radio controls and a homing device. The Gorgon program later underwent expansion embracing turbojet, ramjet, pulsejet, and rocket power; straight wing, swept wing, and canard (tail first) air frames; and visual, television, heat-homing, and three types of radar guidance

for use as air-to-air, air-to-surface, and surface-to-surface guided missiles, and as target drones.

22 JULY • The Vice Chief of Naval Operations approved the removal of arresting gear and related equipment for landing over the bow of aircraft carriers because experience had failed to demonstrate its operational value.

23 JULY • The first of 15 VP-63 PBV-5s reached Pembroke Dock, England. Their arrival marked the initial U.S. Navy squadron operations from the United Kingdom during World War II. The Catalinas supported the British in antisubmarine patrols over the Bay of Biscay.

2 AUGUST • Fleet Air Wing 4, Capt. Walter E. Zimmerman commanding, was established at Maceio, Brazil, and Fleet Air Wing 5, Cmdr. John D. Reppy commanding, was established at Edinburgh Field, Trinidad, to conduct antisubmarine and convoy patrols in the South Atlantic and the southern approaches to the Caribbean.

4 AUGUST • The chief of Naval Air Intermediate Training directed the establishment of aviation safety boards at each training center under his command.

5 AUGUST • Commander in Chief, U.S. Fleet Adm. Ernest J. King directed the use of fleet air wing commanders in the subordinate commands of sea frontiers, and suggested their assignment as deputy chiefs of staff for air.

9 AUGUST • Allied aircraft, including planes from *Ranger* (CV 4), covered the arrival of British liner *Queen Mary* at Halifax, Nova Scotia. The ship had embarked British Prime Minister Winston S. Churchill for his participation in the conference at Québec, Canada, codenamed Quadrant, with President Franklin D. Roosevelt and key Allied leaders.

15 AUGUST • The arrival of Aircraft Experimental and Development Squadron (later Tactical Test) from NAS Anacostia, D.C., to NAS Patuxent River, Md., completed the transfer of the Navy's aircraft test activities.

15 AUGUST • The landing of Army and Canadian troops on Kiska in the Aleutian Islands marked the first use in the Pacific of air liaison parties with forces ashore. The Japanese had deserted the island but the landing provided

the opportunity to prove the soundness of the principle and demonstrated the operational application of rapid and reliable voice communications between frontline commanders and the support air control unit afloat.

15 AUGUST • Navy, Marine, and USAAF aircraft supported landings on Vella Lavella that bypassed Japanese garrisons on Kolombangara in the Solomon Islands. The initial combat air patrol over the beaches included F4U-1 Corsairs of VMF-123 and -124 operating from Munda. The Japanese counterattacked vigorously during more than 100 sorties, but continual air cover over the landings and bombing raids against the enemy fields at Ballale, Buin, and Kahili secured the success of the operation. After 2d Lt. Kenneth A. Walsh, USMC, piloting a Corsair of VMF-124 shot down a Mitsubishi A6M Type 0 carrier fighter and two Aichi D3A1 Type 99 carrier bombers, he returned to Munda in a plane so battered that it was stricken. Fifteen days later, Walsh repeated his exploit by downing four Japanese aircraft near Kahili. He later received the Medal of Honor.

18 AUGUST • To provide naval aviation authority commensurate with its World War II responsibility, the Secretary of the Navy established the Office of the Deputy Chief of Naval Operations (Air) and charged it with "the preparation, readiness and logistic support of the naval aeronautic operating forces." By other orders issued the same day, five divisions were transferred from the Bureau of Aeronautics to form the nucleus of the new office. Vice Adm. John S. McCain assumed command as the first DCNO (Air).

21 AUGUST • The headquarters of Fleet Air Wing 7 was established at Plymouth, England. It directed patrol plane operations against German submarines in the Bay of Biscay, the English Channel, and the southwest approaches to England.

27 AUGUST • Navy, Marine, and USAAF aircraft supported landings of the Army's 172nd Regimental Combat Team on Arundel Island, Solomon Islands.

27 AUGUST • F4F-4 Wildcats and TBF-1 Avengers from VC-1, embarked on board *Card* (CVE 11), sank German submarine *U-847* in the mid-Atlantic. *U-508* escaped during a separate battle.



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An F6F Hellcat laden with rockets and a droppable fuel tank launches from *Hancock* (CV 19).

29 AUGUST • The formation of combat units for the employment of assault drone aircraft began within the Training Task Force Command with the establishment of the first of three special task air groups. The component squadrons were designated VK and began to establish on 23 October.

30 AUGUST • Task Force 15, Rear Adm. Charles A. Pownall commanding, including *Essex* (CV 9), *Yorktown* (CV 10), and *Independence* (CVL 22), launched nine strike groups in a day-long attack on Japanese installations on Marcus Island in the prototype fast carrier strike. TBF-1 Avengers from *Independence* sank three small Japanese vessels. This second raid against Marcus marked the first attack by *Essex*- and *Independence*-class carriers and the combat debut of the F6F-3 Hellcat.

1 SEPTEMBER • The Navy assumed full responsibility for airborne antisubmarine warfare by U.S. forces in the Atlantic.

1 SEPTEMBER • Task Group 11.2, Rear Adm. Arthur W. Radford commanding, including *Belleau Wood* (CVL 24) and *Princeton* (CVL 23), and Navy patrol bombers from Canton Island, furnished day and night air cover for the

landing of occupation forces on Baker Island, east of the Gilbert Islands.

9 SEPTEMBER •

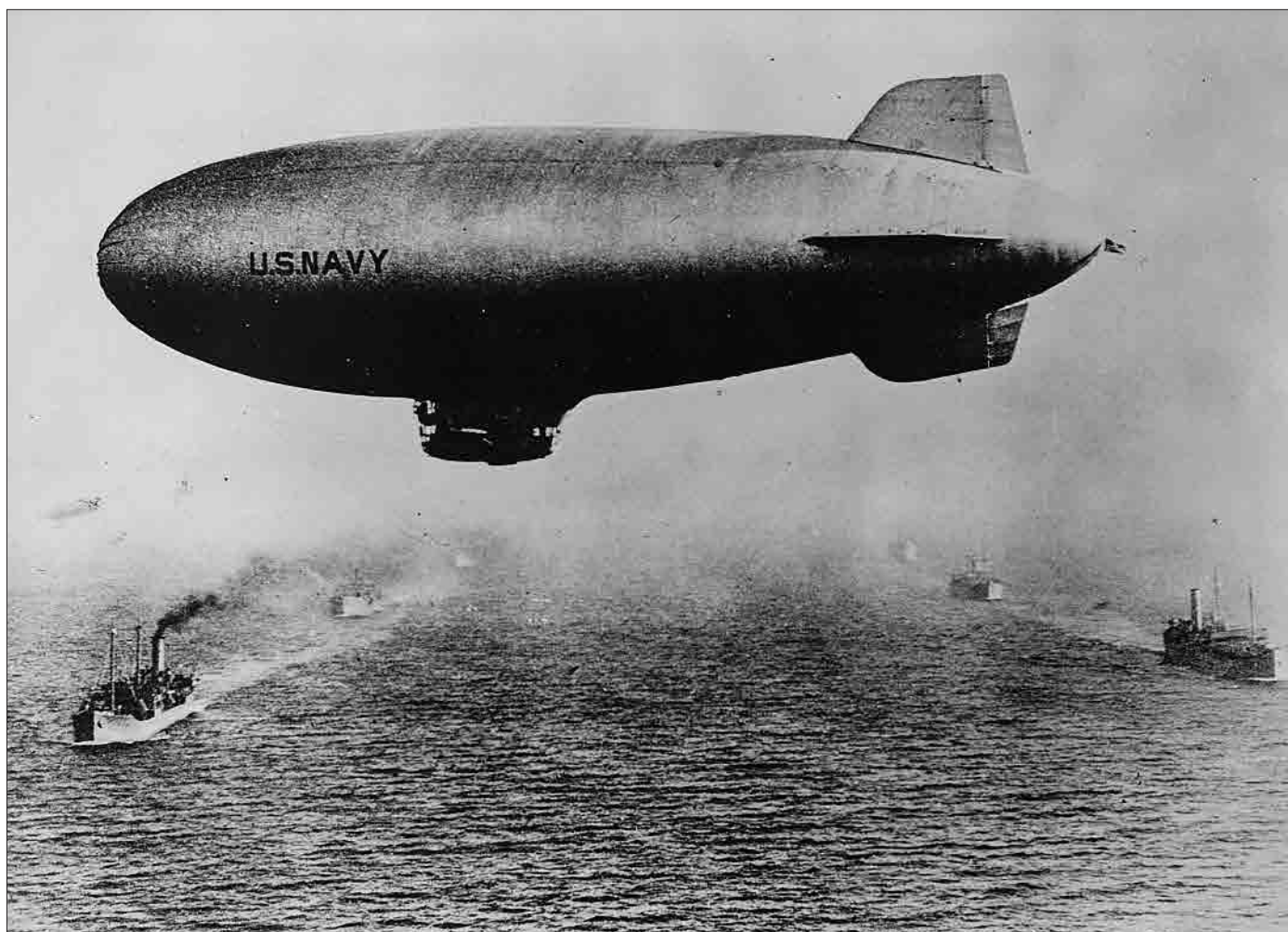
Operation Avalanche—an assault by the Anglo-American troops of the U.S. Fifth Army on the Gulf of Salerno, Italy—began. Allied naval gunfire proved instrumental in halting German counterattacks. SOC-3 and SON-1 Seagulls from VCS-8, embarked on board light cruisers *Philadelphia* (CL 41) and *Savannah* (CL 42), spotted the fall of shot from the cruisers' 6-inch guns. A Seagull operating from *Philadelphia* discovered 35

German *panzers* (tanks) concealed in a thicket adjacent to Red Beach. Salvoes from the cruiser knocked out seven tanks before the survivors dashed to the rear. *Savannah* silenced a railway battery and broke up an enemy armored thrust. The cruisers covered the landings until 11 September, when German Dornier Do 217E-5s damaged both ships with FX 1400 radio-controlled glide bombs. *Philadelphia* suffered minor damage and continued the battle, but *Savannah* turned for repairs at Malta.

15 SEPTEMBER • Fleet Air Wing 17, Commodore Thomas S. Combs commanding, was established for operations in the Southwest Pacific Area from Brisbane, Australia.

15 SEPTEMBER • VFP-1 was established at NAS Norfolk, Va. Through the remainder of the year, Free French sailors under U.S. Navy control manned the patrol squadron with varying numbers of PBM-3S Mariners and PBY-5A Catalinas.

18 SEPTEMBER • Task Force 15, Rear Adm. Charles A. Pownall commanding, attacked Japanese-occupied Abemama, Makin, and Tarawa Atolls in the Gilbert Islands.



A K-class airship protects a convoy of merchant ships from German submarines in the Atlantic.

18 SEPTEMBER • Fleet Air Wing 5 at NAS Norfolk, Va., was assigned a primary mission of training. Fleet Air Wing 9 assumed responsibility for all patrol plane operations within the Eastern Sea Frontier.

19 SEPTEMBER • *Ranger* (CV 4) anchored in Scapa Flow, Orkney Islands. The ship had provided air cover over British battlecruiser *Renown* while she returned Prime Minister Winston S. Churchill from the Quadrant conference, a series of strategy meetings, with President Franklin D. Roosevelt and Allied leaders at Québec, Canada.

27 SEPTEMBER • Naval airship operations over the South Atlantic began with the arrival of blimp K-84 of ZP-41 at Fortaleza, Brazil.

30 SEPTEMBER • An advance detachment of VB-107 PB4Y-1 Liberators joined USAAF planes flying antisubmarine barrier patrols and sweeps from Ascension Island over the South Atlantic.

1 OCTOBER • Air Force, Atlantic Fleet, was reorganized and Fleet Air, Norfolk, and Fleet Airships, Atlantic, were established as additional subordinate commands.

1 OCTOBER • The increase of the authorized complement of fighters in *Essex* (CV 9)-class carrier air groups raised the number of planes normally embarked on board to 36 fighters, 36 bombers, and 18 torpedo bombers. The authorized complement for CVL groups was established as 12 fighters, 9 bombers, and 9 torpedo bombers, revised the following month to 24 fighters and 9 torpedo bombers, and remained at that level through the end of World War II.



The first of the Navy's PB4Y Liberator bombers came from the U.S. Army Air Forces and included the Army's serial number. This B-24D, 41-23827, was the second to join the Navy and became BuNo 31937.

4 OCTOBER • In September, British X-craft midget submarines had temporarily immobilized German battleship *Tirpitz*. *Ranger* (CV 4) carried out the only U.S. carrier operation in Northern European waters during World War II in Operation Leader—a raid against German forces in Norway made possible by the removal of the threat posed by *Tirpitz*. On this date, *Ranger* launched a strike against German ships at Bodø and a second raid along the coast from Alter Fjord to Kunna Head. F4F-4 Wildcats of VF-4, TBF-1 Avengers of VT-4, and SBD-5 Dauntlesses of VB-4 sank German steamers *Kaguir*, *La Plata*, and *Rabat*, transport *Skramstad*, and Norwegian steamer *Vaagan*, and damaged two tankers, three steamers, and a ferry. Antiaircraft fire downed two Dauntlesses of VB-4 and an Avenger, and damaged several aircraft. Wildcats shot down two German planes that approached the task force—a Junkers Ju 88D-1 of *Fernaufklarungs Gruppe* (Long Range Reconnaissance Group) 22, and a Heinkel He 115B of *Küstenflieger Gruppe* (Coastal Patrol Group) 406. A Wildcat crashed upon landing, but British destroyer *Scourge* recovered the pilot. The *Ranger* air group, CVG-4, later requested additional training and newer aircraft.

4 OCTOBER • F4F-4 Wildcats and TBF-1C Avengers from VC-9, embarked on board *Card* (CVE 11), discovered German *U-264*, *U-422*, and *U-455* while they rendezvoused with *Milchkühe* (milk cow) refueling boat *U-460* north of the

Azores, and sank *U-422* and *U-460*. This action allowed convoy UGS-19 to pass through the vicinity unmolested by the enemy.

5 OCTOBER • Coast Guard Patrol Squadron 6, Cmdr. D. B. MacDiarmid, USCG, commanding, was established at Argentia, Newfoundland. The Coast Guardsmen assumed rescue duties that had been performed by naval planes operating from Greenland and Labrador.

5 OCTOBER • Task Force 14, Rear Adm. Alfred E. Montgomery commanding, including *Essex* (CV 9), *Yorktown* (CV 10), *Lexington* (CV 16), *Independence* (CVL 22), *Belleau Wood* (CVL 24), and *Cowpens* (CVL 25),

attacked Japanese installations during the second carrier raid on Wake Island. In the course of the two-day battle, the ships launched six strike groups totaling 738 combat sorties and lost 12 planes shot down and 14 from accidents. The raiders tested ship handling techniques for a multicarrier force devised by the staff of Rear Adm. Frederick C. Sherman on the basis of experience gained in the South Pacific. The lessons learned from operating the carriers as a single group of six, as two groups of three, and as three groups of two provided the basis for some of the tactics that afterward characterized carrier task force operations. The island's Japanese commander, Rear Adm. Sakaibara Shigematsu, feared the strikes portended a landing and ordered the execution of the remaining 98 U.S. civilians held captive on the island.

6 OCTOBER • The Naval Airship Training Command at NAS Lakehurst, N.J., was redesignated the Naval Airship Training and Experimental Command.

12 OCTOBER • The Bureau of Ordnance established a production program for 3,000 Pelican guided missiles at a delivery rate of 300 per month.

16 OCTOBER • The Navy accepted its first helicopter, a YR-4B (HNS-1) Hoverfly, following a one-hour acceptance test flight by Lt. Cmdr. Frank A. Erickson, USCG, at Bridgeport, Conn.

18 OCTOBER • *Cowpens* (CVL 25) and destroyer *Abbot* (DD 629) collided during maneuvers in Hawaiian waters. *Abbot* required three months of repairs at the Pearl Harbor Navy Yard.

19 OCTOBER • An Allied force, including *Ranger* (CV 4), covered the transport of Norwegian troops to Spitzbergen, Svalbard Archipelago, to reestablish bases destroyed by the Germans during Operation *Zitronella*—a raid on 8 September 1943 on the islands by battleships *Tirpitz* and *Scharnhorst*. The Allies also embarked the survivors of the original garrison.

27 OCTOBER • Navy, Marine, USAAF, and New Zealand aircraft from the South Pacific Air Force supported landings of the 8th New Zealand Brigade Group on Mono and Stirling Islands in the Treasury Island Group of the Solomon Islands, together with a divisionary landing by the 2d Marine Parachute Battalion on the west coast of Choiseul Island.

31 OCTOBER • Lt. Hugh D. O'Neil of VF(N)-75 piloted an F4U-2 Corsair from Munda, New Georgia, and destroyed a Japanese Mitsubishi G4M1 Type 1 Betty during a night attack off Vella Lavella. O'Neil thus scored the first kill by a radar-equipped night fighter of the Pacific Fleet. Maj. Thomas E. Hicks, USMC, and TSgt. Gleason, USMC, of VMF(N)-531 provided ground-based fighter direction.

31 OCTOBER • Airship K-94 caught fire while en route from NS Guantánamo Bay, Cuba, to San Juan, P.R., and crashed 35 miles north of Cape Borinquen, P.R. Its eight-man crew was reported missing.

1 NOVEMBER • Task Force 31 landed the I Marine Amphibious Corps at Cape Torokina, Bougainville, in the Solomon Islands. Task Force 38, Rear Adm. Frederick C. Sherman commanding, including *Saratoga* (CV 3) and *Princeton* (CVL 23), launched preliminary strikes against Japanese airfields and installations in the Buka-Bonis area. SBD Dauntlesses and TBF-1 Avengers of VC-38, VMSB-144, and VMTB-143, -232, and -233, covered by F4U-1 Corsairs of VF-17 and VMF-215 and -221, bombed and strafed the Japanese defenders five minutes before the Marines landed. A combat air patrol averaging 38 fighters rotated over the beaches and disrupted major Japanese aerial counterattacks.

1 NOVEMBER • A detachment of VB-145 PV-1 Venturas began operations from Fernando Noronha Island, extending the area of Fleet Air Wing 16 antisubmarine patrols over the South Atlantic toward Ascension Island.

2 NOVEMBER • During the nighttime Battle of Empress Augusta Bay, surface Task Force 39 intercepted and turned back a Japanese force en route to attack transports off Bougainville in the Solomon Islands. Japanese planes attacked the task force during its retirement after dawn but the preliminary air strikes against enemy airfields in the Buka-Bonis area the previous day prevented a decisive counterattack.

5 NOVEMBER • Task Force 38, Rear Adm. Frederick C. Sherman commanding, launched an aerial attack on the Japanese fortress of Rabaul on New Britain. Planes from *Saratoga* (CV 3) and *Princeton* (CVL 23) damaged heavy cruisers *Atago*, *Chikuma*, *Maya*, *Mogami*, and *Takao*; light cruisers *Agano* and *Noshiro*; and destroyers *Amagiri* and *Fujinami* of the Second Japanese Fleet, Rear Adm. Takagi Takeo commanding.

8 NOVEMBER • The Chief of Naval Operations directed the establishment of aviation safety boards in the Intermediate Training Command similar to those in the Primary and Operational Training Commands.

8 NOVEMBER • Naval Ordnance Test Station, Inyokern, Calif., was established for the research, development, and testing of weapons, and to provide primary training in their use. The facility initially supported the California Institute of Technology, which developed and tested rockets, propellants, and launchers through the Office of Scientific Research and Development.

11 NOVEMBER • Task Groups 50.3, Rear Adm. Alfred E. Montgomery commanding, including *Saratoga* (CV 3) and *Princeton* (CVL 23), and 50.4, Rear Adm. Frederick C. Sherman commanding, including *Essex* (CV 9), *Bunker Hill* (CV 17), and *Independence* (CVL 22), launched the second strike on the Japanese fortress of Rabaul, New Britain. Planes sank destroyer *Suzunami*, and damaged light cruisers *Agano* and *Yūbari*, and destroyers *Naganami*, *Urakaze*, and *Wakatsuki*. This attack witnessed the introduction to combat of SB2C-1 Helldivers, embarked with VB-17 on board



An SB2C Helldiver lands on board a carrier while flight deck crewmen race to free the bomber to clear the deck for an approaching plane, c. 1945.

Bunker Hill. Lt. j.g. Eugene A. Valencia, USNR, of VF-9, embarked on board *Essex*, flew an F6F-3 Hellcat and shot down a Japanese Mitsubishi A6M Type 0 carrier fighter over Rabaul. Valencia scored 23 confirmed victories during World War II and his decorations include the Distinguished Flying Cross.

13 NOVEMBER • Navy and USAAF planes of Task Force 57, Rear Adm. John H. Hoover commanding, conducted long-range night bombing attacks through 19 November from islands of the Ellice, Phoenix, and Samoan groups and on Baker Island against Japanese bases in the Gilbert and Marshall Islands as a preliminary to the invasion of the Gilberts.

18 NOVEMBER • Task Force 50, Rear Adm. Charles A. Pownall commanding, began a two-day air attack on the Japanese during Operation Galvanic—the occupation of the Gilbert Islands. Task Group 50.4, Rear Adm. Frederick C. Sherman commanding, attacked Nauru in support. *Saratoga* (CV 3), *Enterprise* (CV 6), *Essex* (CV 9), *Yorktown* (CV 10), *Lexington* (CV 16), *Bunker Hill* (CV 17), *Independence* (CVL 22), *Princeton* (CVL 23), *Belleau Wood* (CVL 24), *Cowpens* (CVL 25), and *Monterey* (CVL 26) comprised the main force. Eight escort carriers covered the approach

of assault shipping and supported the V Amphibious Corps against bitter resistance on Tarawa, and the landings on Abemama and Makin Atolls. On 20 November, a Japanese aerial torpedo damaged *Independence*.

Through 24 November, planes flew 2,278 close support, combat air patrol, and antisubmarine sorties. On 24 November, Japanese submarine *I-175* escaped after torpedoing and sinking *Liscome Bay* (CVE 56) 20 miles southwest of Butaritari Island, killing 645 men; 272 survived. On 25 November, F6F-3 Hellcats of VF-1 from *Barnes* (CVE 20) and *Nassau* (CVE 16) landed on the airstrip at Tarawa as the first planes of the garrison air force. Once the Marines secured the islands, one carrier group remained in the area for an additional week as a protective measure.

Galvanic included the first attempts at night interception from carriers. Air Group Commander Lt. Cmdr. Edward H. O'Hare led two F6F-3s and one radar-equipped TBF-1 of VT-6 from *Enterprise* for the purpose. The fighters flew wing on the Avenger and after being vectored to the vicinity of enemy aircraft by the *Enterprise* fighter director, relied on the Avenger's radar to close to visual range. The Hellcats failed to intercept on the first occasion but two days later disrupted an enemy attack during the first air battle of its type.

27 NOVEMBER • VR-8 received the first Martin XPB2M-1R Mars flying boat at NAS Patuxent River, Md.

29 NOVEMBER • TBF-1C Avengers of VC-9, embarked on board *Bogue* (CVE 9) during the ship's eighth and most successful patrol, sank German submarine *U-86* about 385 miles east of Terceira, Azores. *U-238* and *U-764* escaped. The following day, *Bogue's* Avengers damaged *U-238* east of the Azores, on 12 December damaged *U-172* south-southwest of the Canary Islands despite the escape of *U-219*, the next day took part in sinking *U-172* 660 miles west-southwest of the Canary Islands, and on 21 December, sank *U-850* some 530 miles southwest of Fayal in the Azores.



Sailors haul torpedoes, each weighing more than a ton, toward a waiting SB2C Helldiver during strike preparations on *Hornet* (CV 12), c. fall 1944.

30 NOVEMBER • Lt. Cmdr. W. E. Coney piloted the Martin Mars from NAS Patuxent River, Md., during the first operational assignment of the aircraft. The plane delivered 13,000 pounds of cargo during a nonstop flight of 4,375 miles in 28 hours 25 minutes to Natal, Brazil.

30 NOVEMBER • The Navy authorized a department of aviation medicine and physiological research at the Naval Air Material Center to study physiological factors related to the design of high-speed and high-altitude aircraft.

1 DECEMBER • Aircraft, Central Pacific, Rear Adm. John H. Hoover commanding, was established under Commander, Central Pacific for the operational control of defense forces and shore-based air forces in the area.

1 DECEMBER • The Naval Air Ferry Command was established as a wing of the Naval Air Transport Service. The command assumed the functions previously performed by aircraft delivery units in ferrying new planes from contractor plants and modification centers to embarkation points for ultimate delivery to the fleet.

4 DECEMBER • Two groups of Task Force 50, Rear Adm. Charles A. Pownall commanding, including *Enterprise* (CV 6), *Essex* (CV 9), *Yorktown* (CV 10), *Lexington* (CV 16), *Belleau Wood* (CVL 24), and *Cowpens* (CVL 25), bombed the Japanese at Kwajalein and Wotje Atolls in the Marshall Islands at the close of Operation Galvanic—the occupation of the Gilbert Islands. About 50 Japanese fighters intercepted the attackers and heavy antiaircraft fire at 8,500 feet obliged



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Marine ace Maj. Gregory Boyington briefs his pilots on an upcoming mission at VMF-214's base on Espiritu Santo.



1061902

An HNS-1 Hoverfly, BuNo 39040—the Navy's first helicopter type—from Coast Guard Air Station Brooklyn, N.Y., demonstrates its search and rescue capabilities in Jamaica Bay on 25 August 1944.

the U.S. planes to drop to 5,000 feet, and in combination with the garrison's determined achievement at camouflage reduced the effectiveness of the raid. The Americans lost five planes and claimed the destruction of 55 enemy aircraft, cargo ship *Tateyama Maru*, auxiliary submarine chaser No. 7 *Takunan Maru*, guardboat No. 5 *Mikuni Maru*, and collier *Asakaze Maru*, and damaged light cruisers *Isuzu* and *Nagara*, a stores ship, an auxiliary vessel, and three transports. During the U.S. retirement, a gale delayed escape beyond the range of Japanese shore-based bombers, and the next night, retaliatory strikes damaged three ships, including an aerial torpedo that struck *Lexington* and killed nine men and wounded 35.

8 DECEMBER • A striking force, Rear Adm. Willis A. Lee commanding, including *Bunker Hill* (CV 17) and *Monterey* (CVL 26), attacked Japanese installations on Nauru to the west of the Gilberts. The Japanese deployed few aircraft on the island and the raiders achieved meager results, claiming the destruction of at least eight planes while losing four. OS2U-3 and OS2N-1 Kingfishers from VO-6 and -9, embarked on board battleships *North Carolina* (BB 55), *Washington* (BB 56), *South Dakota* (BB 57), and *Alabama* (BB 60), strafed and photographed the area around the barracks when the ships ceased fire.

15 DECEMBER • VOF-1, Lt. Cmdr. William F. Bringle commanding, was established at NAS Atlantic City, N.J., as the first of three observation fighter squadrons raised during World War II.

17 DECEMBER • Commander Aircraft, Solomons, dispatched a fighter sweep of Navy, Marine, and New Zealand planes led by Maj. Gregory Boyington, USMC, against the Japanese naval fortress at Rabaul on New Britain. Boyington subsequently received the Medal of Honor and credit for shooting down 26 Japanese aircraft during the war. Intensive follow-up attacks through February 1944 assisted in the establishment of Allied bases that encircled the stronghold. The Allies bypassed the Japanese garrison at Rabaul but continually subjected the fortress to aerial attacks. On 9 August 1945, Marine PBJ-1 Mitchells launched the final strike.

18 DECEMBER • On the basis of his belief that experimentation had indicated the practicability of ship-based helicopters, the Chief of Naval Operations separated pilot training from test and development functions in the helicopter program. He directed that, effective on 1 January 1944, the Coast Guard was to conduct a helicopter pilot training program under the direction of the Deputy CNO (Air) at CGAS Floyd Bennett Field, N.Y. Lt. Cmdr. Frank A. Erickson, USCG, subsequently attained the designation of Coast Guard Helicopter Pilot No. 1 and oversaw the training of a total of 125 helicopter pilots during the war, including 96 Coast Guardsmen, 12 sailors, two soldiers, 11 members of the Royal Air Force, and four civilians.

20 DECEMBER • The Naval Air Training Command, under the Chief of Naval Operations, was established to coordinate and direct all naval aviation training in the

activities of the Primary, Intermediate, and Operational Training Commands at NAS Pensacola, Fla.

20 DECEMBER • Two VP-43 PBY-5A Catalinas flew the first Navy photoreconnaissance and bombing mission from Attu, Aleutians, over the Japanese-held Kuriles.

20 DECEMBER • Cmdr. Frank A. Erickson, USCG, reported to the Bureau of Aeronautics concerning experiments with a helicopter used as an airborne ambulance at CGAS Floyd Bennett Field, N.Y. An HNS-1 Hoverfly made flights carrying, in addition to its normal crew of a pilot and a mechanic, a weight of 200 pounds in a stretcher suspended approximately four feet beneath the float landing gear. Early the following year, a Hoverfly made landings at the steps of the dispensary with a stretcher attached to the side of the helicopter's fuselage.



Marine ace Capt. Joseph J. Foss, USMC, recounts one of his victories to his pilots.

25 DECEMBER • Task Group 50.2, Rear Adm. Frederick C. Sherman commanding, including *Bunker Hill* (CV 17) and *Monterey* (CVL 26), attacked Japanese shipping at Kavieng on New Ireland as a covering operation for landings the following day by Marines in the Borgen Bay area of New Britain. Planes sank Japanese transport *Tenryu Maru*, and damaged minesweepers *W.21* and *W.22* and transport (ex-armed merchant cruiser) *Kiyozumi Maru*.

27 DECEMBER • From 24 September to 6 November, the Navy gradually relieved the Army of antisubmarine patrols over British waters. During this period, VB-103, -105, and

-110 participated in British Operation Stonewall—the interception of Axis blockade runners. On this date, the Germans attempted to rendezvous with blockade runner *Alsterufer*, but a British Royal Air Force Liberator sank the ship. The next day, a VB-105 PB4Y-1 flying from a British station at Dunkeswell, England, sighted German destroyers *Z23*, *Z24*, *Z27*, *Z32*, and *Z37*, and torpedo boats *T22*, *T23*, *T24*, *T25*, *T26*, and *T27* in the Bay of Biscay. Six of the 15 U.S. Liberators dispatched—one from VB-103 and five from VB-105—found and attacked the Germans. A Liberator shot down a Focke-Wulf Fw 200C Condor, but flak downed one U.S. bomber and the crew spent several months interned in

Spain. These planes directed British light cruisers *Enterprise* and *Glasgow* to the scene and they sank *Z27*, *T25*, and *T26*. The British subsequently transferred the station and, on 23 March 1944, it was redesignated NAF Dunkeswell.

31 DECEMBER • Fleet Air Wing 17 departed Australia to set up its headquarters at Samarai on the tip of the Papuan Peninsula, New Guinea.

1944

1 JANUARY • Task Group 37.2, Rear Adm. Frederick C. Sherman commanding, attacked a Japanese convoy off Kavieng, New Ireland. Planes from *Bunker Hill* (CV 17) and *Monterey* (CVL 26) damaged light cruiser *Noshiro*.

1 JANUARY • Lt. M. G. Taylor of VB-107 piloting Aircraft No. 107-B-9, a PB4Y-1 Liberator, sighted and tracked German blockade runner *Weserland*, 595 miles south-southwest of Ascension Island. The ship, disguised as British freighter *Glenbank*, was smuggling a load of crude rubber from Japanese waters. *Weserland* opened fire and knocked out the

bomber's number three engine and wounded AOM2 Robert E. MacGregor. The plane returned to Ascension Island. The following day, pilot Lt. Robert T. Johnson attacked in Aircraft No. 107-B-12, BuNo 32065. The blockade runner returned fire and damaged the aircraft, which ditched en route to Ascension and was lost with all its crew. Destroyer *Somers* (DD 381) sank *Weserland* just after midnight. Five Germans died in these battles but *Somers* rescued 134 survivors.

3 JANUARY • During the early morning, a series of internal explosions sank destroyer *Turner* (DD 648) while she lay anchored off Ambrose Light, N.J., killing 15 officers and 123 enlisted men. Pilot Cmdr. Frank A. Erickson, USCG, and copilot Ens. Walter C. Bolton took off in an HNS-1 from CGAS Floyd Bennett Field, N.Y., and flew to Battery Park on Manhattan Island to pick up an emergency delivery of two cases of 40 units of blood plasma. With the supplies lashed to the floats of the Hoverfly, it continued to Sandy Hook, N.J., where responders administered the plasma to the survivors. Erickson and Bolton accomplished this first recorded helicopter lifesaving operation through snow squalls, sleet, and winds reaching 20 to 25 knots that grounded all other aircraft.

4 JANUARY • An accidental gasoline fire damaged *Tripoli* (CVE 64) at Naval Repair Base, San Diego, Calif.

4 JANUARY • Light cruiser *Omaha* (CL 4) and destroyer *Jouett* (DD 396) intercepted German blockade runner *Rio Grande* about 55 miles northeast of the coast of Brazil. Gunfire and scuttling charges sank the smuggler. The following day, Lt. Stanley V. Brown of VP-203 piloted a PBM-3S that sighted German blockade runner *Burgenland*. The Mariner crew summoned *Omaha* and *Jouett*, but gunfire and scuttling charges sank *Burgenland*. Through 8 January, light cruiser *Marblehead* (CL 12) rescued 72 survivors from *Rio Grande*, and destroyers *Winslow* (DD 359) and *Davis* (DD 395) recovered 56 men from *Burgenland*.



Enterprise (CV 6), which experiences almost continuous action during World War II, carries a splinter camouflage scheme, c. mid-1944.

7 JANUARY • *Belleau Wood* (CVL 24) and destroyer *Dunlap* (DD 384) collided and both ships sustained minor damage during exercises off Oahu in the Hawaiian Islands.

11 JANUARY • Two TBF-1Cs of VC-58, embarked on board *Block Island* (CVE 21), during an attack against German submarine *U-758*, made the first U.S. use of forward-firing rockets. The Avengers damaged the boat and compelled her return to German-occupied St. Nazaire, France.

16 JANUARY • Lt. j.g. Stewart R. Graham, USCG, made a 30-minute flight in an R-4B (HNS-1) Hoverfly from a 60- by 80-foot flight deck fitted to British freighter *Daghestan* while en route from New York City to Liverpool, England. Graham made his flight in spite of 20-knot winds and the ship rolling 10 to 20 degrees. The harsh weather during the mid-winter North Atlantic crossing permitted only two additional flights. The sponsoring Combined Board for Evaluation of the Ship-based Helicopter in Antisubmarine Warfare decided that the marginal performance of the underpowered helicopters precluded their operations from ships in convoy, and recommended their confinement to coastal waters until the availability of models with improved performance.

18 JANUARY • PBV-5As of VP-63, operating from NAS Port Lyautey—established on 12 January—in Morocco began two-plane barrier patrols of the Strait of Gibraltar and its approaches with magnetic anomaly detection gear. The Catalinas typically flew at an altitude of 55 feet from dawn to dusk. Antiaircraft batteries in Spanish Morocco frequently shot at the patrolling planes whenever they flew close to the three-mile limit but, until the end of the war, their patrols effectively closed the strait to the transit of U-boats during daylight hours.

22 JANUARY • Operation Shingle—landings by the Anglo-American troops of the U.S. VI Corps at Anzio and Nettuno to outflank German defensive positions across the Italian peninsula—began. The Allies failed to advance inland decisively, and their inaction enabled the German forces in the area to counterattack vigorously to deter further landings in Italy and France. Allied planes proved unable to prevent *Luftwaffe* (German air force) raids on the beachhead or on the ships offshore, but air power and naval gunfire support proved essential in the efforts to hold the perimeter. SOC-1, -3, and SON-1 Seagulls of VCS-8, embarked on board

light cruisers *Brooklyn* (CL 40) and *Philadelphia* (CL 41), directed the fall of the cruisers' 6-inch shot at times. By May, the Allies broke out of the beachhead, linked up with troops that pierced German defensive lines inland, and on 4 June liberated Rome.

25 JANUARY • A fire damaged *Sangamon* (CVE 26) after a barrier crash by a TBM-1C Avenger of VC-37 while the ship sailed en route to the Marshall Islands. The crew contained the conflagration within eight minutes but seven men died, two of the 15 who jumped overboard to escape the flames were lost, and seven were injured. *Sangamon* made temporary repairs at sea and took part in the fighting at the Marshalls.

29 JANUARY • Task Force 58, Rear Adm. Marc A. Mitscher commanding, including *Saratoga* (CV 3), *Enterprise* (CV 6), *Essex* (CV 9), *Yorktown* (CV 10), *Intrepid* (CV 11), *Bunker Hill* (CV 17), *Princeton* (CVL 23), *Belleau Wood* (CVL 24), *Cowpens* (CVL 25), *Monterey* (CVL 26), *Langley* (CVL 27), and *Cabot* (CVL 28), attacked the Japanese garrisons of Kwajalein, Maloelap, and Wotje during Operation Flintlock—the occupation of the Marshall Islands. Land-based planes of Task Force 57, Rear Adm. John H. Hoover commanding, also supported the landings.

These raids destroyed the Japanese air strength on the islands. Aircraft from eight escort carriers flew cover and antisubmarine patrols, and scout planes assisted naval bombardments. On 31 January, Marines and soldiers landed on islands at Kwajalein and Majuro. Into the first three days of February, planes from Task Group 58.3, Rear Adm. Frederick C. Sherman commanding, bombed Japanese aircraft and airfields at Engebi Island at Eniwetok Atoll. Through 7 February, Task Group 58.4, Rear Adm. Samuel P. Ginder commanding, supplemented Sherman. On 1 February, additional landings occurred on Kwajalein, Namur, and Roi.

Commander Task Force 51 Rear Adm. Richmond K. Turner led the joint expeditionary force from amphibious force command ship *Rocky Mount* (AGC 3). The increasing complexity of amphibious operations necessitated the use of command ships and the Marshalls marked their introduction to battle. *Rocky Mount* provided improved facilities for Commander Support Aircraft Capt. H. B. Sallada, who assumed control of target combat air patrol—a task previously vested in carriers. A force fighter director on Sallada's staff coordinated fighter direction.



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A carrier's fighter direction control team sends the planes of a combat air patrol against Japanese attackers.

30 JANUARY • PB2Y-3 Coronados of VP-13 and -102 flew more than 2,100 miles from Midway Island on a nocturnal bombing raid against the Japanese airfield and installations on Wake Island to prevent the garrison of Wake from threatening U.S. operations in the Marshall Islands. Previous raids on Wake had resulted in casualties because of poor navigation and radio silence breaks that alerted the Japanese. The strike marked the first employment of Coronados as bombers. They repeated the raids on the nights of 4, 8, and 9 February and completed 50 sorties without losing a plane. Commander Fleet Air Wing 2 Rear Adm. John D. Price considered the neutralization of Wake of such importance that he twice accompanied the bombers.

2 FEBRUARY • President Franklin D. Roosevelt approved the last of the World War II ceilings for Navy aircraft, which called for an increase to 37,735 useful planes.

3 FEBRUARY • The Deputy Chief of Naval Operations (Air) and the Chief of BUAER jointly issued Flight Safety Bulletin No. 1, which announced the intention to issue consecutive numbered bulletins concerning the safe operation of naval aircraft.

4 FEBRUARY • Blimp K-29 of ZP-31 made the first carrier landing by a nonrigid airship during a test of refueling operations on board *Altamaha* (CVE 18) off San Diego, Calif.



The wreckage of at least four Japanese bombers litter the end a runway at Engebi in the Marshall Islands during an attack by U.S. carrier planes in late 1943 or early 1944.

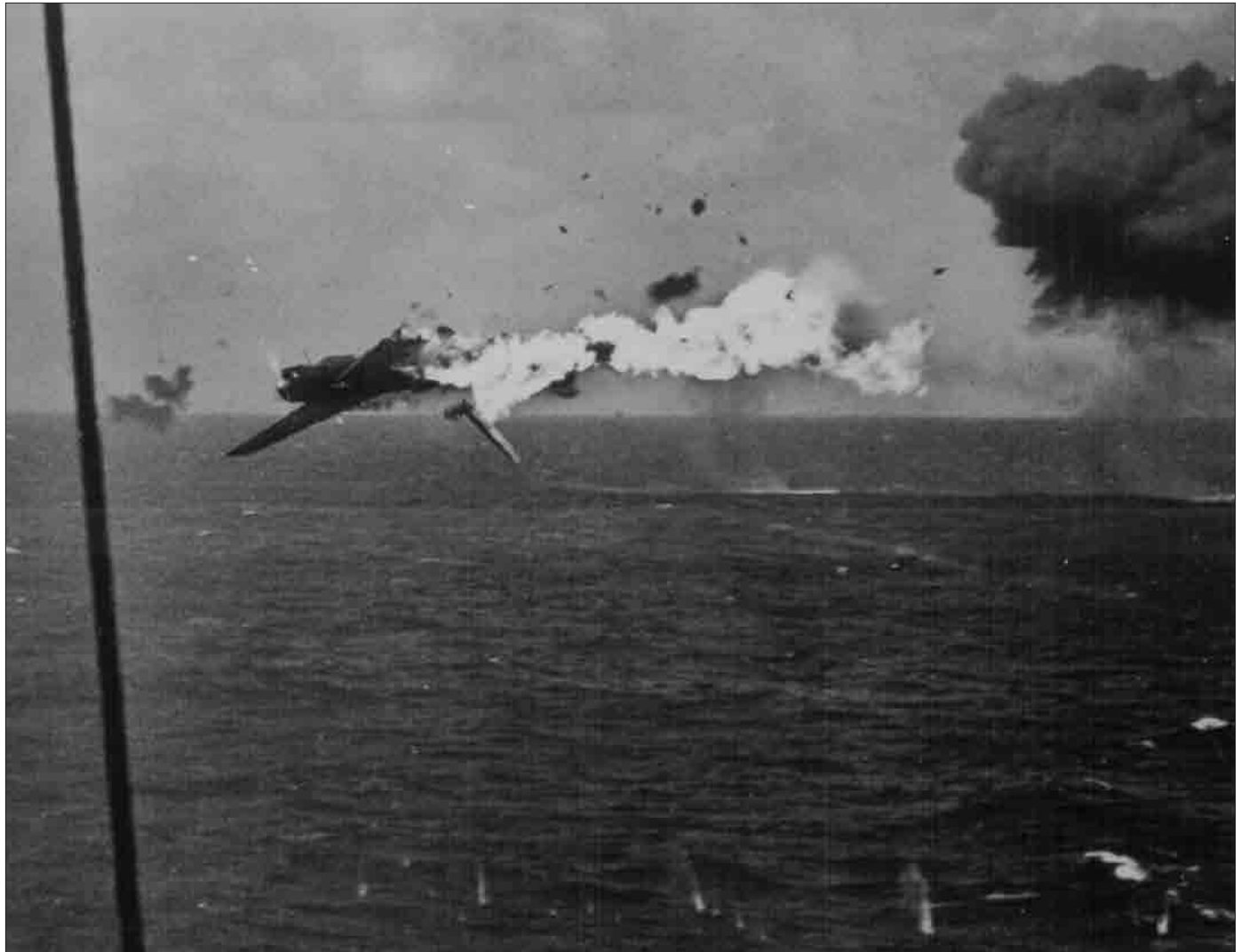
4 FEBRUARY • Two PB4Y-1 Liberators of VMD-254 made the first photographic reconnaissance of Truk Lagoon, Caroline Islands, during a 12-hour night flight from the Solomon Islands. Cloud cover prevented complete coverage but the information acquired proved useful in planning a subsequent carrier strike on 17 February.

10 FEBRUARY • Planes from Task Group 58.4, Rear Adm. Samuel P. Ginder commanding, bombed Japanese installations on Eniwetok Atoll, Marshall Islands. The strikes continued to 12 February.

14 FEBRUARY • Forward Area, Central Pacific was established, Rear Adm. John H. Hoover commanding.

He broke his flag in seaplane tender *Curtiss* (AV 4) and controlled the operations of shore-based planes and ships assigned to the Ellice, Gilbert, and Marshall Islands.

15 FEBRUARY • Lt. j.g. Nathan G. Gordon (Naval Aviator No. 11421) piloted a PBY-5 of VP-34 and defied close-range Japanese fire during three full-stall landings in the harbor of Kavieng, New Ireland, and rescued nine survivors from three downed Fifth Air Force bombers. Despite heavy swells, Gordon took off each time but received another report of a raft with survivors. The pilot swung the Catalina about and under intense fire brought six more men on board, and escaped with the 15 survivors to seaplane tender *San Pablo* (AVP 30) at



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A Japanese Nakajima B6N carrier attack plane is hit by a 5-inch shell from *Yorktown* (CV 10) off Kwajalein, 4 December 1943.

Wewak, New Guinea. Gordon received the Medal of Honor and each of his crewmembers the Silver Star.

17 FEBRUARY • Two fast carrier groups had operated to the west of Eniwetok and neutralized Japanese air and naval forces capable of defending the atoll. These operations permitted the second phase of the Marshall Islands campaign earlier than the planned date of 10 May during Operation Catchpole—the seizure of Eniwetok. On this date, planes from Task Groups 58.4 including *Saratoga* (CV 3), *Princeton* (CVL 23), and *Langley* (CVL 27), and 53.6 including *Sangamon* (CVE 26), *Suwannee* (CVE 27), and *Chenango* (CVE 28), supported landings on Engebi Island, and on 19 and 22 February landings on Eniwetok and Parry Islands, respectively.

17 FEBRUARY • The covering operations for the liberation of the Marshall Islands included Operation Hailstone—a strike on the Japanese naval anchorage at Truk Lagoon, Caroline Islands. During a two-day attack, Vice Adm. Raymond A. Spruance, whose forces included Task Force 58, Rear Adm. Marc A. Mitscher commanding, with *Enterprise* (CV 6), *Essex* (CV 9), *Yorktown* (CV 10), *Intrepid* (CV 11), *Bunker Hill* (CV 17), *Belleau Wood* (CVL 24), *Cowpens* (CVL 25), *Monterey* (CVL 26), and *Cabot* (CVL 28), launched 1,250 combat sorties that dropped 400 tons of bombs and torpedoes and sank 37 Japanese ships aggregating 200,000 tons and damaged installations.

The vessels sunk included light cruiser *Naka*; training cruiser *Katori*; destroyers *Fumizuki*, *Maikaze*, *Oite*, and *Tachikaze*; armed merchant cruiser *Akagi Maru*;

auxiliary submarine depot ship *Heian Maru*; submarine chasers *Ch 24* and *Ch 29*; aircraft transport *Fujikawa Maru*; transports *Aikoku Maru*, *Amagisan Maru*, *Gosei Maru*, *Hanakawa Maru*, *Hokuyo Maru*, *Kensho Maru*, *Kiyozumi Maru*, *Matsutani Maru*, *Momokawa Maru*, *No. 6 Unkai Maru*, *Reiyo Maru*, *Rio de Janeiro Maru*, *San Francisco Maru*, *Seiko Maru*, *Taihō Maru*, *Yamagiri Maru*, and *Zukai Maru*; fleet tankers *Fujisan Maru*, *Hoyo Maru*, *No. 3 Tonan Maru*, and *Shinkoku Maru*; water carrier *Nippo Maru*; auxiliary vessel *Yamakisan Maru*; army cargo ships *Nagano Maru* and *Yubai Maru*; merchant cargo ship *Taikichi Maru*; and motor torpedo boat *Gyoraitei No. 10*.

Twelve radar-equipped TBF-1C Avengers from VT-10, embarked on board *Enterprise*, carried out the first U.S. carrier-launched night bombing raid and scored several hits on ships in the lagoon. Night fighter detachments of F6F-3 Hellcats and F4U-2 Corsairs fitted with AIA radar from VF(N)-76 and -101 operated from five carriers and on occasion were vectored against enemy night raiders. The first night, however, a Japanese aerial torpedo struck *Intrepid*, but despite steering problems she returned for repairs to Pearl Harbor in the Hawaiian Islands.

17 FEBRUARY • Navy SBD Dauntlesses and TBF Avengers bombed Japanese shipping in Keravia Bay near Rabaul, New Britain.

20 FEBRUARY • Upon completion of the strike on Truk Lagoon in the Caroline Islands, a small force, Rear Adm. John W. Reeves Jr. commanding, including *Enterprise* (CV 6) separated from the main force and launched two air strikes on Jaluit.

22 FEBRUARY • Two carrier groups of Task Force 58, Rear Adm. Marc A. Mitscher commanding, launched raids against the Japanese garrisons on Guam, Rota, Saipan, and Tinian in the Mariana Islands for the dual purpose of reducing enemy air strength and to gather photographic intelligence for the impending invasion. The attackers claimed the destruction of 67 Japanese aircraft in the air and 101 on the ground through 23 February.

24 FEBRUARY • Lts. Howard Baker and T. R. Woolley of VP-63 piloted two PBY-5A Catalinas on a magnetic anomaly detection (MAD) barrier patrol of the approaches to the



Vice Adm. Marc A. Mitscher.

Strait of Gibraltar. Their patrol marked the first operational employment of MAD gear for tracking a submerged submarine. Baker and Woolley joined Lt. P. L. Holmes of VB-127 flying a PV-1 Ventura and a British Catalina of the Royal Air Force's No. 202 Squadron in an attack on German submarine *U-761* as it attempted to slip through the strait from the Mediterranean to the Atlantic. The U.S. Catalinas damaged *U-761* with retrorockets and the Ventura depth-charged the boat. The Germans scuttled the submarine near Tangier, Morocco.

4 MARCH • The Navy reported a reduction in flight training and fixed the total outputs for 1944, 1945, and 1946 at 20,500, 15,000, and 10,000 pilots, respectively.

6 MARCH • A new specification for the color of naval aircraft went into effect. A modification of the basic camouflage scheme for use with fleet aircraft required nonspecular Sea Blue on upper fuselage surfaces, the retention of semigloss Sea Blue on airfoil surfaces visible from above, and semigloss Insignia White on surfaces visible from below. A new basic non-camouflage color scheme, all

Aluminum, applied for general use on aircraft not in combat theaters. The maximum visibility color scheme used on primary trainers became glossy Orange Yellow overall.

15 MARCH • PBJ-1 Mitchells received their baptism of fire in naval service during an attack by VMB-413 on the Japanese garrison at Rabaul, New Britain.

18 MARCH • Task Group 50.10, Rear Adm. Willis A. Lee commanding, including *Lexington* (CV 16), bombed and shelled the Japanese garrison on Mili in the Marshall Islands.

20 MARCH • Planes from two escort carriers provided cover and air spotting for a battleship and destroyer bombardment of Japanese installations on Kavieng, New Ireland, and nearby airfields in a covering action for the occupation of Emirau.

22 MARCH • A new specification for the color of fighter aircraft went into effect that directed they be painted glossy Sea Blue on all exposed surfaces.

26 MARCH • F4U-1 Corsairs of VMF-113 operating from Engebi Island at Eniwetok Atoll in the Marshall Islands escorted USAAF B-25 Mitchells on a 360-mile bombing mission against the Japanese garrison on Ponape. The Corsairs' effectively destroyed the enemy interceptors and thus ensured that Allied aircraft carried out their subsequent missions over the island unmolested.

27 MARCH • *Saratoga* (CV 3), Capt. John H. Cassady commanding, rendezvoused with ships of the British Eastern Fleet for temporary operations in the Indian Ocean approximately 1,000 miles south of Ceylon (Sri Lanka).

30 MARCH • Task Force 58, Vice Adm. Marc A. Mitscher commanding, including 11 carriers, launched a series of attacks on Japanese garrisons and vessels at Palau, Ulithi, Woleai, and Yap in the Western Caroline Islands. Planners intended these strikes to eliminate Japanese opposition to landings at Hollandia on northern New Guinea and to gather photographic intelligence for future battles. TBF-1C and TBM-1C Avengers from VT-8, -2, and -16, embarked on board *Hornet* (CV 12), *Bunker Hill* (CV 17), and *Lexington* (CV 16), respectively, sowed extensive minefields in the approaches to the Palau Islands in the first U.S. large-scale

daylight tactical use of mines by carrier aircraft. These raids continued until 1 April and claimed the destruction of 157 Japanese aircraft, sank destroyer *Wakatake*, repair ship *Akashi*, aircraft transport *Goshu Maru*, and 38 other vessels, damaged four ships, and denied the harbor to the enemy for an estimated six weeks.

1 APRIL • The Coast Guard christened helicopter training platform *Mal de Mer* (sea sickness) at CGAS Brooklyn, N.Y. The 40-by-60-foot platform simulated landing conditions on board ships by rolling five to ten degrees within a period of ten seconds.

15 APRIL • The formation of air-sea rescue squadrons (VH) in the Pacific Fleet provided rescue and emergency services as necessary in the forward areas. Before this, regularly operating patrol squadrons performed rescue functions as an additional duty.

16 APRIL • Carrier Transport Squadron, Pacific, was established for administrative and operational control over escort carriers assigned to deliver planes, spare parts, and naval aviation servicemembers in direct support of Pacific Fleet operations.

18 APRIL • Photographic-equipped PB4Y-1 Liberators of VD-3 obtained coverage of Aguijan, Saipan, and Tinian in preparation for the campaign to occupy the Mariana Islands. During the 13-hour flight from Eniwetok, USAAF B-24 Liberators escorted the image-gathering planes and bombed the islands in a diversionary action. This operation marked the first mission by shore-based planes over the Marianas.

19 APRIL • The British Eastern Fleet, Adm. Sir James F. Somerville, RN, commanding, including British carrier *Illustrious* (87), and U.S. Task Group 58.5 with *Saratoga* (CV 3), struck Sabang off northern Sumatra, Netherlands East Indies (Indonesia), during Operation Cockpit. In the first operation in which the Pacific Fleet operated alongside the British in offensive action in the Indian Ocean, the Allies achieved poor results because of the limited number of Japanese ships in the area. Twenty-four F6F-3 Hellcats from VF-12, 18 SBD-5 Dauntlesses from VB-12, and 11 TBF-1C and TBM-1C Avengers of VT-12, together with 13 British Corsair IIs of Nos. 1830 and 1833 Squadrons, and 17 Fairey Barracuda IIs of Nos. 810 and 847 Squadrons,



Escort carriers turn toward their stations to support an amphibious landing against the Japanese.

sank Japanese minelayer *Hatsutaka*, transport *Kunitsu Maru*, and army transport *Haruno Maru*. Allied planes claimed the destruction of 24 Japanese planes on the ground and damaged oil storage tanks and installations. Antiaircraft fire shot down a VF-12 Hellcat but British submarine *Tactician* rescued the pilot. Japanese Mitsubishi G4M1 Type 1 bombers counterattacked the ships during their retirement, but Hellcats shot down three of the Bettys. On 17 May 1944 the Anglo-American force launched a similar strike against Soerabaja, Sumatra.

21 APRIL • Task Force 58, Vice Adm. Marc A. Mitscher commanding, supported the assault of the Army's I Corps at Aitape and Tanahmerah Bay (Operation Persecution) and at Humboldt Bay on Hollandia (Operation Reckless) on the north coast of New Guinea. On this date, five heavy and seven light carriers launched preliminary strikes on Japanese airfields around Hollandia, Sawar, and Wakde; the next day covered landings at Aitape, Tanahmerah Bay, and Humboldt Bay; and

into 24 April, supported troop movements ashore. Planes from *Sangamon* (CVE 26), *Suwannee* (CVE 27), *Chenango* (CVE 28), *Santee* (CVE 29), *Coral Sea* (CVE 57), *Corregidor* (CVE 58), *Manila Bay* (CVE 61), and *Natoma Bay* (CVE 62), flew cover and antisubmarine patrols over ships of the attack group during the approach, and supported the amphibious assault at Aitape. Carrier aircraft claimed the destruction of 30 Japanese planes in the air and 103 on the ground.

23 APRIL • VR-3 operated the first regularly scheduled Naval Air Transport Service transcontinental hospital flight between Washington, D.C., and March Field, Calif.

26 APRIL • The headquarters of Fleet Air Wing 4 was established on Attu in the Aleutians of Alaska.

29 APRIL • While Task Force 58, Vice Adm. Marc A. Mitscher commanding, returned to Majuro following landings at Hollandia on New Guinea, Mitscher launched a

two-day attack on Japanese installations and supply dumps at Truk Lagoon in the Caroline Islands. The previous strike on 17 February had wreaked havoc on the Japanese, but on 30 April aircraft reported a paucity of vessels in the area and sank only two ships and claimed the destruction of 145 enemy aircraft. Task Group 58.1, Rear Adm. Joseph J. Clark commanding, detached on the second day, launched planes for protective cover of a cruiser bombardment of Satawan, and on 1 May supported the bombardment of Ponape with air cover and bombing and strafing runs.

1 MAY • Aircraft, Central Pacific, was dissolved and Commander, Marshalls Sub-Area assumed its functions.

4 MAY • The eponymous board headed by Rear Adm. Arthur W. Radford submitted a report that impacted aviation planning into the immediate post-war period. The Integrated Aeronautic Program for Maintenance, Material and Supply evolved from these recommendations and involved the assignment of new planes to combat units, the return of aircraft to the United States for reconditioning and reassignment after specified combat tours, the retirement of second tour aircraft before maintenance became costly, and the support of the aeronautical organization through the use of factors and allowances for pools, pipelines, and reconditioning. Frequent appraisal by inspectors realistically maintained the program.

8 MAY • Seaplane tender *Kenneth Whiting* (AV 14) was commissioned as the first of four ships of the class at Tacoma, Wash., Cmdr. Raymond R. Lyons commanding.

8 MAY • Commander, Naval Forces, Northwest African Waters approved the assignment of an initial nine naval aviators from VCS-8 to the 111th Tactical Reconnaissance Squadron, Twelfth Air Force, for flight training and combat operations in North American P-51C Mustangs. Previous combat experience with SOC Seagulls and OS2U Kingfishers used in aerial spotting and reconnaissance missions had demonstrated the vulnerability of both types to enemy fighters and antiaircraft fire. Planners expected the higher performance of the Mustangs to result in a reduction of casualties on these missions. Eleven naval aviators eventually participated in combat operations in Mustangs in support of the fighting in Italy and the invasion of Southern France. On 2 September the Navy directed all of these men to return to their ships.

13 MAY • The abolition of the helicopter class designation VH plus a mission letter (i.e., VHO for observation and VHN for training) and establishment of helicopters as a separate type H helped distinguish between fixed- and rotary-wing heavier-than-air craft. The previous mission letters became classes O, N, and R for observation, training, and transport, respectively.

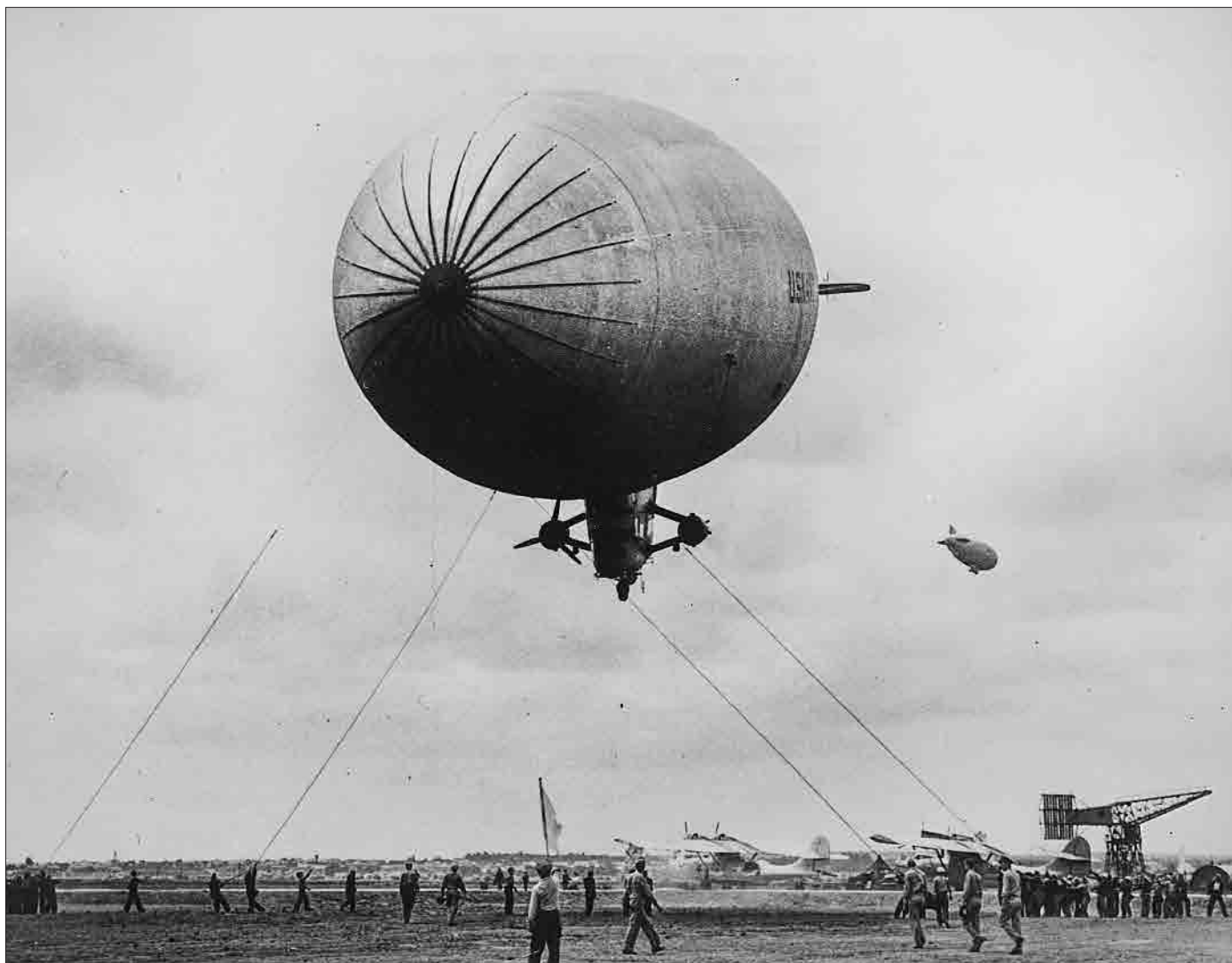
13 MAY • To meet the needs of the fleet for people trained in the use of electronic countermeasures equipment, the Chief of Naval Operations directed the establishment on 1 June by the chief of Naval Air Technical Training of the Special Projects School for Air, located initially at NAAS San Clemente Island, Calif.

15 MAY • Naval Air Transport Service planes made the first of 16 transatlantic flights through 23 May to the United Kingdom to deliver 165,000-pounds of minesweeping gear for the D-Day landings in Normandy, France.

17 MAY • BUAER authorized CGAS Floyd Bennett Field, N.Y., to collaborate in the installation of an automatic pilot in an HNS-1 helicopter with the Sperry Gyroscope Company.

17 MAY • During Operation Transom, the Allies attacked Japanese shipping and installations in the Netherlands East Indies (Indonesia) timed to coincide with Operation Straightline—landings in the Wakde-Toem area of New Guinea. Planes from the British Eastern Fleet, Adm. James F. Somerville, RN, commanding, including British carrier *Illustrious* (87) and U.S. Task Group 58.5, with *Saratoga* (CV 3), raided Soerabaja, Java. Twenty-four F6F-3 Hellcats from VF-12, 18 SBD-5 Dauntlesses from VB-12, and 12 TBF-1C and TBM-1C Avengers of VT-12, embarked on board *Saratoga*, and 16 British Corsair IIs of Nos. 1830 and 1833 Squadrons, and 18 Avenger IIs of Nos. 832 and 845 Squadrons, operating from *Illustrious*, sank Japanese transport *Shinrei Maru* and damaged six vessels and oil stores. One U.S. Avenger was shot down and the crew captured, and two British Avengers crashed on take-off but their crewmembers survived. *Saratoga* had delayed her departure for repairs at Puget Sound Navy Yard at Bremerton, Wash., to participate during her eastward passage. The next day the ship detached.

19 MAY • Planes from Task Group 58.6, Rear Adm. Alfred E. Montgomery commanding, attacked Marcus Island with a predawn fighter sweep, strafing and bombing Japanese



Airships of ZP-14 from NAS South Weymouth, Mass., arrive at NAS Port Lyautey, Morocco, 1 June 1944.

installations for two consecutive days during the third raid on the island. On 23 May, Montgomery shifted from Marcus to attack Wake Island with five composite bombing, strafing, and rocket strikes during the third carrier raid on the atoll since the Japanese overran it.

29 MAY • Six days before, *Block Island* (CVE 21) had sailed from Casablanca, Morocco, to relieve *Bogue* (CVE 9) during hunter-killer operations around Madeira and the Cape Verde Islands. At 2013 on this date, three torpedoes from German submarine *U-549* struck the carrier in rapid succession northwest of the Canary Islands. *Block Island* sank by the stern. The U-boat then damaged destroyer escort *Barr* (DE 576) with an acoustic torpedo, but destroyer escorts *Ahrens* (DE 575) and *Eugene E. Elmore* (DE 686) sank the attacker.

31 MAY • Commander, Training Task Force was directed to establish on 1 June, within his command at NAS Traverse City, Mich., a detachment designated Special Weapons Test and Tactical Evaluation Unit to research special weapons and other airborne equipment.

1 JUNE • Blimps of ZP-14 assigned to antisubmarine operations around Gibraltar reached NAS Port Lyautey, Morocco, completing the first crossing of the Atlantic by nonrigid airships after lifting off from NAS South Weymouth, Mass., on 29 May. In 58 hours the blimps covered 3,145 nautical miles and—including time for stopovers at Argentia, Newfoundland, and the Azores—in 80 hours moved their area of operations across the ocean.

1 JUNE • VR-9 was formed at NAS Patuxent River, Md., and VR-12 at Honolulu, Territory of Hawaii, to function as headquarters and maintenance squadrons for their commands, Naval Air Transport Service Atlantic and Pacific, respectively.

4 JUNE • Task Group 22.3, Capt. Daniel V. Gallery commanding, a hunter-killer group including *Guadalcanal* (CVE 60), with FM-2 Wildcats and TBM-1C Avengers of VC-8 embarked, and destroyer escorts *Pillsbury* (DE 133), *Pope* (DE 134), *Flaherty* (DE 135), *Chatelain* (DE 149), and *Jenks* (DE 665) forced German submarine *U-505* to the surface 150 miles off Cape Blanco, Rio de Oro, Africa. During salvage operations, *Pillsbury* collided with *U-505*, but Lt. j.g. Albert L. David led a boarding party from *Pillsbury* that saved the submarine despite the dangers posed by scuttling charges. David later received the Medal of Honor. The U-boat is on display in Chicago, Ill.

5 JUNE • The Deputy Chief of Naval Operations (Air) reported that aviation safety boards that had been established in one large command had reduced the fatal accident rate by 47 percent during one quarter of operation. He thus directed the establishment of similar boards in other commands outside advanced combat areas, and the appointment of a flight safety officer to each squadron.

6 JUNE • Seventeen naval aviators from aviation detachments on board battleships and cruisers served in bombardment duty with VCS-7 during Operation Overlord—the Allied landings in German-occupied Normandy, France. From D-Day through 26 June, the squadron operated with the British Fleet Air Arm and Royal Air Force, flying gunfire-spotting missions in Supermarine Spitfires over the Normandy beaches.

10 JUNE • PB4Y-1s of VB-108 and -109 swept ahead of Task Force 58, Vice Adm. Marc A. Mitscher commanding, to intercept and destroy Japanese planes in the path of the carriers as they approached the Mariana Islands. The Liberators repeated the sweeps the next day. One bomber from each of the squadrons shot down a Japanese plane. Planners chose to use the Liberators as a diversion from the carriers because the Japanese routinely sighted the long-range planes in that region.

11 JUNE • Task Force 58, Vice Adm. Marc A. Mitscher commanding, including seven heavy and eight light carriers opened the campaign to occupy the Mariana Islands with a fighter sweep that destroyed one-third of the defending Japanese air force. Sixteen F6F Hellcats from each carrier and 12 from each small carrier, accompanied by a TBF Avenger or SB2C Helldiver from each task group to lead and navigate for the fighters, attained tactical surprise and assured control of the air over the islands. In bombing and strafing attacks on shore installations and shipping over the succeeding days, Mitscher's force prepared the way for the 15 June amphibious assault on Saipan. Carrier planes supported operations ashore with daily offensive missions on 15, 16, and 24 June; 3 and 4 July; and 4 and 5 August; isolated the area with attacks on airfields and shipping in the Bonin and Volcano Islands; and on 19 and 20 June successfully defended the landings against a Japanese counterattack during the Battle of the Philippine Sea.

12 JUNE • Planes from Task Group 58.4, including *Essex* (CV 9) and small carriers *Cowpens* (CVL 25) and *Langley* (CVL 27), destroyed a Japanese convoy northwest of Saipan en route from Tanapag, Saipan to Japan.

12 JUNE • Elements of Special Task Air Group (STAG 1) arrived in the Russell Islands in the South Pacific in the first deployment of a guided missile unit into a combat theater.

13 JUNE • Task Force 58, Vice Adm. Marc A. Mitscher commanding, launched additional strikes against the Japanese garrison on Saipan in the Mariana Islands. Carrier planes destroyed a convoy of five small cargo vessels and sank other ships separately. The Japanese shot down Cmdr. William I. Martin, commanding officer of VT-10 embarked on board *Enterprise* (CV 6), flying a TBM-1C Avenger over Saipan. The pilot parachuted into the sea off Red Beach Three and, prior to his rescue, observed that the Japanese had marked ranges to the reef offshore with red and white pennants. This valuable intelligence was given to the approaching amphibious forces.

15 JUNE • Carrier aircraft from Task Groups 58.1 and 58.4, Rear Adms. Joseph J. Clark and William K. Harrill commanding, respectively, bombed Japanese installations on Chichi Jima and Haha Jima in the Bonin Islands and Iwo Jima in the Volcano Islands. The following day, the planes

repeated the attack on Iwo Jima. These raids disrupted the staging areas for Japanese aircraft en route to the Mariana Islands and contributed to the U.S. victory in the Battle of the Philippine Sea.

15 JUNE • American landings on Saipan in the Mariana Islands during Operation Forager penetrated the inner defensive perimeter of the Japanese Empire and thus triggered A-Go—a Japanese counterattack that led to the Battle of the Philippine Sea. Task Force 58, Vice Adm. Marc A. Mitscher commanding, included *Enterprise* (CV 6), *Essex* (CV 9), *Yorktown* (CV 10), *Hornet* (CV 12), *Lexington* (CV 16), *Bunker Hill* (CV 17), *Wasp* (CV 18), *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 Japanese 1st Mobile Fleet, Vice Adm. Ozawa Jisaburō commanding, included *Taihō*, *Shōkaku*, *Zuikaku*, *Chitose*, *Chiyōda*, *Hiyō*, *Junyō*, *Ryūhō*, and *Zuihō*. The enemy intended for its shore-based planes to cripple Mitscher's air power to facilitate Ozawa's strikes, which were to refuel and rearm on Guam. Japanese fuel shortages and inadequate training bedeviled A-Go, however, and U.S. signal decryption breakthroughs enabled attacks on Japanese submarines that deprived the enemy of intelligence, raids on the Bonin and Volcano Islands disrupted Japanese aerial staging en route to the Marianas, and their main attacks passed through heavy U.S. antiaircraft fire to reach the carriers.

On 17 June, five PBM-3D Mariners of VP-16 commenced operations from seaplane tender *Ballard* (AVD 10) within range of Saipan's guns. Throughout the day Task Force 58 repelled Japanese air attacks and destroyed at least 300 planes in what Navy pilots called the "Great Marianas Turkey Shoot." Commander CVG-15, Cmdr. David S. McCampbell, flew an F6F-3 Hellcat from *Essex* and shot down at least seven Japanese planes. Submarines *Albacore* (SS 218) and *Cavalla* (SS 244) sank *Taihō* and *Shōkaku* in separate attacks, respectively, and Japanese suicide planes narrowly missed *Bunker Hill* and *Wasp*.

The following afternoon, Mitscher launched an air attack at extreme range on the retreating Japanese ships that sank *Hiyō* and two fleet oilers, and damaged *Zuikaku*, *Chiyōda*, and *Junyō*. That night, despite the risk of submarine attacks, Mitscher ordered his ships to show their lights to guide returning aircraft low on fuel, thus saving



Cmdr. David S. McCampbell is the Navy's highest scoring ace with 34 kills.

lives. The Japanese lost 395 carrier planes and an estimated 50 land-based aircraft from Guam. The Americans lost 130 planes and 76 pilots and aircrewmen.

Planes from an initial force of 11 escort carriers covered the landings. *Manila Bay* (CVE 61) and *Natoma Bay* (CVE 62) ferried aircraft to operate from captured airfields. On 17 June OY-1 Sentinels of VMO-4 arrived ashore, followed on 22 and 24 June by USAAF Republic P-47 Thunderbolts and Northrop P-61 Black Widows, and on 12 July by F4U-2 Corsairs of VMF(N)-532. On 9 July, organized resistance ended on Saipan; on 21 July, the Americans landed on Guam, and three days later on Tinian.

24 JUNE • A TBM-1C Avenger from VC-69, embarked on board *Bogue* (CVE 9), sank Japanese submarine *I-52* about 800 miles southwest of Fayal, Azores, near 15°16'N, 39°55'W. The submarine sailed from Kure, Japan, reputedly carrying two tons of gold ingots valued at \$25 million as the balance of a payment owed by the Japanese to the Germans for technical information and war materials. *I-52* rendezvoused with German submarine *U-530* for the transfer of three Germans and some radio equipment to the Japanese boat prior to continuing to Lorient, France, but

Allied intelligence had identified the meeting. The Avenger dropped sonobuoys to assist in locating and destroying the blockade runner.

24 JUNE • To reduce the pilot training program the Chief of Naval Operations promulgated plans that required the transfer of some students already in pre-flight and prior stages of training, and the retention of enough people to maintain a course in pre-flight schools expanded to 25 weeks. Early the next month, the chief of Naval Air Training instituted the program of “deselection” and voluntary withdrawal of surplus students. The resulting reductions proved responsible in August for the discontinuance of the War Training Service Program, and in September for the closure of the flight preparatory schools and the release of training stations.

24 JUNE • Aircraft from two carrier task groups, Rear Adms. Joseph J. Clark and Alfred E. Montgomery commanding, struck Japanese airfields and facilities on Iwo Jima in the Volcano Islands and Pagan Island in the Marianas.

26 JUNE • Seaplane tender *Currituck* (AV 7) was commissioned as the first of four ships of her class at Philadelphia, Pa., Capt. William A. Evans commanding.

29 JUNE • The Parachute Experimental Division was established for the research, development, and testing of parachutes and survival gear at NAS Lakehurst, N.J.

29 JUNE • The standardization of carrier air groups took place for all commands: CVBG, large carrier air group; CVG, medium carrier air group; CVLG, small carrier air group; CVEG, escort carrier air group—*Sangamon* (CVE 26) class; and VC, escort carrier air group—*Long Island* (CVE 1), *Bogue* (CVE 9), *Charger* (CVE 30), and *Casablanca* (CVE 55) classes.

30 JUNE • The Naval Aircraft Modification Unit of the Naval Air Material Center at Philadelphia, Pa., was relocated to Johnsville, Pa. This was prompted by Johnsville’s facilities for intensified efforts in guided missile development and quantity modification of service aircraft.

4 JULY • Carrier-based aircraft and naval gunfire from two task groups, Rear Adms. Joseph J. Clark and Ralph E. Davison, commanding, attacked Japanese installations on Chichi Jima and Haha Jima in the Bonin Islands and Iwo Jima in the Volcano Islands.

6 JULY • As part of USAAF and British attempts to counter German *Vergeltungswaffen* (retaliation weapons) attacks by V-1 flying bombs (and subsequently V-2 rockets) against the United Kingdom, the Navy experimented with drones in Project Anvil. On this date, Special Air Unit 1 with Cmdr. James A. Smith, officer in charge, was formed under Commander, Air Force, Atlantic Fleet, for transfer to Commander Fleet Air Wing 7 in Europe to assail German V-weapon sites with PB4Y-1 Liberators converted to assault drones.

6 JULY • BUAER authorized Douglas to proceed with the design and manufacture of 15 XBT2D dive and torpedo bombers, jointly designed by both. Through subsequent development and model redesignation these became the prototypes for the AD Skyraider.

14 JULY • Joint action by the Deputy Chief of Naval Operations (Air) and the Chief of BUAER established the Flight Safety Council to plan, coordinate, and execute flight safety programs by coordinating all safety functions through a central organization.

14 JULY • PB4Y-1 Liberators of VB-109 flying from Saipan in the Mariana Islands made the first strike by shore-based planes on the Japanese garrison on Iwo Jima, Volcano Islands.

21 JULY • Task Force 53, Rear Adm. Richard L. Conolly commanding, including *Sangamon* (CVE 26), *Suwannee* (CVE 27), *Chenango* (CVE 28), *Coral Sea* (CVE 57), and *Corregidor* (CVE 58), supported Operation Stevedore—landings by the 3d Marine Division, 1st Provisional Marine Brigade, and the Army’s 77th Division on Guam.

25 JULY • Task Force 58, Vice Adm. Marc A. Mitscher commanding, attacked Japanese installations and shipping in the Western Caroline Islands at Fais, Ngulu, Palau, Sorol, Ulithi, and Yap. Air strikes continued until 28 July and included photographic flights to obtain intelligence of enemy

defenses. The ships then steamed north to attack the Bonin and Volcano Islands. By the time Guam was declared secured on 10 August, carrier aircraft claimed the destruction of 1,223 Japanese aircraft and the sinking of 110,000 tons of shipping. During this fighting, groups of the fast carrier force retired in turn to advanced fleet bases for brief periods of rest and replenishment, thus initiating a practice that continued during all future extended fighting.

27 JULY • The headquarters of Fleet Air Wing 17 was moved to Manus, Admiralty Islands.

29 JULY • In the first successful test of a Pelican guided missile, two of the four launched struck target ship *James Longstreet* 44 miles offshore of NAS New York, N.Y.

29 JULY • A detachment of PB4Y-1 Liberators of VB-114 from NAS Port Lyautey, Morocco, was established under British command for antisubmarine operations at Lajes, Azores Islands.

31 JULY • The Accelerated Field Service Test Unit was redesignated Service Test and established as a separate department at NAS Patuxent River, Md.

4 AUGUST • Task Group 58.1, Rear Adm. Joseph J. Clark commanding, savaged Japanese Convoy 4804 about 25 miles northwest of Muko Jima, Bonin Islands, sinking destroyer *Matsu*, landing ship *T 133*, a collier, four transports, and a cargo ship. Meanwhile, planes from Task Group 58.3, Rear Adm. Alfred E. Montgomery commanding, bombed Japanese airfields on Iwo Jima, Volcano Islands.

5 AUGUST • The Fast Carrier Task Force was reorganized into the First and Second Fast Carrier Task Forces, Pacific, Vice Adms. Marc A. Mitscher and John S. McCain commanding, respectively.

7 AUGUST • Carrier Division 11 was established, Rear Adm. Matthias B. Gardner commanding, at Pearl Harbor, Hawaiian Islands. The division consisted of *Saratoga* (CV 3) and *Ranger* (CV 4) and comprised the first U.S. carrier command specifically established for night operations.

9 AUGUST • A PB4Y-1 Liberator of VB-116 crashed on takeoff from Stickell Field, Eniwetok, Marshall Islands, and

burned amid 340 planes in the carrier aircraft replacement pool area, resulting in the destruction of 106 aircraft—primarily FM Wildcats, F6F Hellcats, SB2C Helldivers, and TBM Avengers.

10 AUGUST • Naval air bases commands were established within each Naval District, the Training Command, and within Marine Corps bases. These received authorization for the military direction and administrative coordination of matters affecting the development and operational readiness of aviation facilities in their respective areas.

10 AUGUST • The operating aircraft complement of carrier air groups underwent a revision to 54 fighters, 24 bombers, and 18 torpedo planes, with the provision that four night fighters and two photographic planes were to be included among the 54 fighters.

11 AUGUST • An electric-powered rescue hoist was installed on an HNS-1 Hoverfly, BuNo 39040, at CGAS Floyd Bennett Field, N.Y. During the ensuing four-day test period, flights conducted over Jamaica Bay demonstrated the feasibility of rescuing victims from the water and of transferring people and equipment to and from underway boats. Six weeks later, the installation and successful testing of a hydraulic hoist led to the adoption of the device for service use because it overcame the basic disadvantages of the electric hoist. Also on this date Dr. M. F. Bates of the Sperry Gyroscope Company, submitted a brief report of the trial installation and flight test of a helicopter automatic pilot (cyclic pitch control) in a Hoverfly at Floyd Bennett Field.

12 AUGUST • Lt. Joseph P. Kennedy Jr., USNR, of VPB-110, temporarily assigned to Special Air Unit 1, and Lt. Wilford J. Willy participated in a mission in a PB4Y-1 Liberator, BuNo 32271, against a German V-1 flying bomb launching site in German-occupied France. The weight of the Liberator—which carried 21,170-pounds of high explosives—precluded take off by remote control, so Kennedy and Willy voluntarily made the takeoff from Winfarthing (Fersfield), England. The men remained with the drone to ensure the assumption of control by two “mother” planes—one used as insurance against potential equipment failure in the primary—and were then to bail out over England. At 1820, the Liberator suddenly exploded killing Kennedy and Willy. No cause

1944 continued

was ever determined. The two each received the Navy Cross posthumously and destroyer *Joseph P. Kennedy Jr.* (DD 850) was named in his honor.

15 AUGUST • Allied carriers of the Naval Attack Force, Rear Adm. Sir Thomas H. Troubridge, RN, commanding, devastated columns of German troops, motor transport, and railway rolling stock during Operation Dragoon—landings by the U.S. VI and Free French II Corps in southern France. F6F-3N and F6F-5 Hellcats of VF-74, embarked on board *Kasaan Bay* (CVE 69), and F6F-5s of VOF-1 flying from *Tulagi* (CVE 72), together with British planes from escort carriers *Attacker* (D 02), *Searcher* (D 40), *Khedive* (D 62), *Pursuer* (D 73), *Hunter* (D 80), *Stalker* (D 91), and *Emperor* (D 98), flew defensive fighter cover over the shipping area, spotted naval gunfire, flew close air support missions, attacked enemy concentrations and lines of communication, and assisted Allied troops during their advance up the Rhône Valley. Hellcats from *Kasaan Bay* bombed and strafed enemy positions, vehicles, and tanks, and shot down two German planes over the invasion beaches. On *Tulagi's* last day to support the landings, 21 August, her Hellcats shot down three German Junkers Ju 52s, and wreaked havoc with a German convoy retreating northward, snarling roads for miles around Remoulins. The Allied carriers launched more than 1,500 sorties through 29 August.

20 AUGUST • Nonrigid airship K-111, Lt. Cmdr. Frederick N. Klein commanding, demonstrated the feasibility of refueling and replenishing airships from aircraft carriers during 72.5 hours of operations into 23 August with *Makassar Strait* (CVE 91) off San Diego, Calif. The airship's crew was relieved every 12 hours and her engines operated continuously. The airship remained on the flight deck for 32 minutes during one evolution.

24 AUGUST • CVLG(N)-43 was established as the first night carrier air group at Charlestown, R.I., along with its component squadrons VF(N)-43 and VT(N)-43.

24 AUGUST • Fleet Air Wing 10 moved forward from Perth, Australia, to Los Negros, Admiralty Islands, to support the advance of Southwest Pacific forces on the Philippines.

31 AUGUST • Task Group 38.4, Rear Adm. Ralph E. Davison commanding, opened the campaign for the occupation of Morotai and Palau with three days of attacks on Chichi Jima in the Bonin Islands and Iwo Jima in the Volcano Islands. Davison intended the raids to neutralize Japanese installations as a diversion in advance of the landings in the Morotai, Palau, and Philippine areas. Off Iwo Jima, F6F Hellcats from *Franklin* (CV 13) sank an auxiliary minesweeper and cargo ship.

During an attack on 2 September against a Japanese radio station on Chichi Jima, ground fire struck TBM-1C, BuNo 46214, of a division of four Avengers from VT-51, embarked on board *San Jacinto* (CVL 30). Lt. j.g. George H. W. Bush, USNR, (Naval Aviator No. C5907); Lt. j.g. William G. White, USNR; and ARM2 John L. Delaney manned the bomber. Despite the smoke and flames, Bush continued his dive and scored damaging hits before the Avenger crashed. Submarine *Finback* (SS 230) rescued the pilot after he spent four hours in the water, however, White and Delaney perished. Bush received the Distinguished Flying Cross for the attack, was discharged on 18 September 1945, and on 24 October 1955 resigned with the rank of lieutenant. He subsequently became the 41st President of the United States. *George H. W. Bush* (CVN 77) was named in his honor.

1 SEPTEMBER • The Bureau of Ordnance reported the beginning of an investigation by a group of scientists from Section T of the Office of Scientific Research and Development (OSRD) into the practicability of developing a guided jet-propelled antiaircraft weapon. The project subsequently was designated Bumblebee. In December, the scientists completed their preliminary analysis and the Chief of Naval Operations approved a developmental program. That month, the OSRD and the Applied Physics Laboratory of Johns Hopkins University completed their withdrawal from the proximity fuze program to concentrate upon the guided missile phase of the antiaircraft problem. The fuze endeavor thus fell completely within the Bureau of Ordnance.

3 SEPTEMBER • Pilot Lt. Ralph D. Spaulding Jr., of Special Air Unit 1 assigned to Fleet Air Wing 7, lifted off in a PB4Y-1 Liberator for a drone mission from Winfarthing (Fersfield), England. The raid involved the drone, two control planes, and fighters along with navigational, frequency search

monitor, and photo aircraft. Spaulding set the radio control on the torpex-laden Liberator and parachuted to safety. Ens. James M. Simpson in a PV-1 Ventura controlled the Liberator's flight and attacked German U-boat pens on Heligoland Island. Simpson lost momentary view of the plane in a rain shower during the final alignment, and relying only upon the drone's television picture, aimed the plane into barracks near fuel dumps and shops on an airfield on Dune Island. The attackers lost reception just before impact when flak apparently struck the camera in the nose of the drone and thus proved unable to assess the damage.

3 SEPTEMBER • Task Group 12.5, Rear Adm. Allen E. Smith commanding, including *Monterey* (CVL 26), attacked Japanese installations on Wake Island. This was the fourth carrier raid on the atoll since the Japanese overran it.

6 SEPTEMBER • A contract was awarded to McDonnell Aircraft Corporation, for development of the LBD-1 Gargoyle radio-controlled low-wing glide bomb fitted with a rocket booster and designed for launching from carrier-based dive bombers and torpedo planes against enemy ships.

6 SEPTEMBER • The establishment of a Flight Safety Section in the Office of the Deputy Chief of Naval Operations (Air) expanded the scope of the aviation safety program. The section assumed responsibility for direction and supervision of the program.

6 SEPTEMBER • After wide-flung sweeps by Task Force 38, Vice Adm. Marc A. Mitscher commanding, the force arrived off Palau and began attacks against Japanese airfields and installations in the Western Caroline Islands. An unopposed fighter sweep disclosed extensive damage inflicted by earlier raids. *Independence* (CVL 22) commenced operations of an air group specifically trained for night work, marking the first time that a fully equipped night carrier operated with the fast carriers. Meanwhile, Task Group 38.4, Rear Adm. Ralph E. Davison commanding, launched a fighter sweep over Yap and continued the neutralization of Palau while Mitscher moved against the Philippines with strikes at airfields on Mindanão and in the Visayas.

9 SEPTEMBER • Task Force 38, Vice Adm. Marc A. Mitscher commanding, sent two days of fighter sweeps against Japanese airfields and port facilities on Mindanão, Philippines.

Planes sank a transport in the Sulu Sea and two transports and a cargo ship in the Mindanão Sea, and aircraft from *Langley* (CVL 27) covered a surface group that decimated a Japanese coastal convoy off the west coast of Mindanão.

9 SEPTEMBER • Fleet Air Wing 17 moved forward to the Schouten Islands to direct patrol plane operations supporting the occupation by Southwest Pacific forces of Morotai in the Netherlands East Indies (Indonesia).

11 SEPTEMBER • The shift of the fighting in the South Pacific drove the transfer of Commander Fleet Air Wing 1 based on seaplane tender *Hamlin* (AV 15) from Espiritu Santo in the New Hebrides (Vanuatu) to Guam, to direct the operations of patrol squadrons in the Central Pacific.

11 SEPTEMBER • President Franklin D. Roosevelt and British Prime Minister Winston S. Churchill led a meeting named Octagon of the Allied combined chiefs of staff at Québec, Canada. The chiefs cancelled a planned attack on Yap, approved the advance of the date for the invasion of the Philippines from 20 December to 20 October, and the shifting of the assault from southern Mindanão to Leyte. Their decision occurred in large part because of the recommendation of Commander Third Fleet Adm. William F. Halsey Jr., who based his proposal on intelligence that indicated Japanese weakness in the central Philippines corroborated by a lack of aerial opposition—the Japanese preserved their forces to repel the landings. Ens. Thomas C. Tillar, USNR, of VF-2 from Carrier Air Group 2 embarked on board *Hornet* (CV 12), had crashed in an F6F-3 Hellcat near Apit Island off southwestern Leyte. Filipino freedom fighters rescued him and revealed to the pilot the vulnerable state of the Japanese defenses before his return via an SOC Seagull from heavy cruiser *Wichita* (CA 45). Octagon concluded on 16 September.

12 SEPTEMBER • Task Force 38, Vice Adm. Marc A. Mitscher commanding, launched strikes into 14 September against Japanese airfields and ports on Cebu, Negros, and Panay in the Visayas and Legaspi, Luzon in the Philippines, claiming the destruction of 26 enemy vessels.

12 SEPTEMBER • Task Group 38.4 and four escort carriers of Carrier Unit One, Rear Adm. William D. Sample commanding, began three days of preparatory aerial attacks for the occupation of Peleliu.



USMC 97976

A Marine F4U Corsair drops napalm against determined Japanese forces defending Peleliu in fall, 1944.

14 SEPTEMBER • Task Group 38.1, Vice Adm. John S. McCain commanding, detached from the main forces to attack Mindanão, Philippines, and to support Operation Trade Wind—landings the following day by the Army’s 41st Division on Morotai, Netherlands East Indies (Indonesia).

15 SEPTEMBER • Aircraft of Task Group 38.4 and four escort carriers of Carrier Unit One, Rear Adm. William D. Sample commanding, supported Operation Stalemate II—the landing of the 1st Marine Division on Peleliu. The Japanese had prepared the main line of resistance inland from the beaches to escape naval bombardment, and three days of preliminary carrier air attacks in combination with intense naval gunfire failed to suppress the tenacious defenders. Through 18 September, the fleet carriers supported the landings and until the end of the month a total

of ten escort carriers fought as Task Group 32.7, Rear Adm. Ralph A. Ofstie commanding. The Army’s 81st Division later reinforced the Marines and, on 1 February 1945, the final Japanese forces surrendered. On 17 September, carriers also supported landings on Angaur, on 23 September at Ulithi, and on 28 September a shore-to-shore movement from Peleliu to Ngesebus assisted by Marine planes from Peleliu. On 24 September, VMF(N)-541 became the first squadron to arrive ashore.

18 SEPTEMBER • The Navy terminated the Pelican guided missile production program and returned the project to developmental status. Despite some success during the preceding six weeks, the decision stemmed from tactical, logistic, and technical problems.

21 SEPTEMBER • After the fighting at Morotai in the Netherlands East Indies (Indonesia), Task Group 38.1 rejoined the main body of fast carriers. The combined force launched two days of strikes on Clark and Nichols Fields on Luzon, shipping around Manila and Subic Bays and Cavite Island, and on a convoy off Luzon, followed on 24 September by additional raids on airfields, military installations, and shipping in the central Philippines. Planes sank 39 Japanese vessels including destroyer *Satsuki*.

27 SEPTEMBER • Special Task Air Group (STAG) 1 began a combat demonstration of TDR-1 assault drones from Stirling, Treasury Islands, during the first use of guided missiles in action in the Pacific. Ships had delivered the drones to the Russell Islands and they were then flown 45 miles to the Northern Solomons, stripped for pilotless flight, and armed with bombs of up to 2,000-pounds. At least one control operator in an accompanying TBM Avenger guided the pilotless aircraft by radio during attacks against heavily defended targets and directed the final assault by means of pictures received from the drones' nose-mounted television cameras. In the initial assault against Japanese antiaircraft guns emplaced in a beached freighter defending Kahili airstrip on South Bougainville in the Solomons, two of four TDR-1s struck the target ship.

30 SEPTEMBER • During September, carrier planes claimed the destruction of 893 Japanese aircraft and 67 ships totaling 224,000 tons.

1 OCTOBER • Patrol Squadrons (VP) and multi-engine bombing squadrons (VB) were redesignated patrol bombing squadrons (VPB).

2 OCTOBER • Lt. j.g. Stewart R. Graham, USCG, made the first Coast Guard demonstration of a helicopter rescue from the open sea off Manasquan Inlet, N.J. Graham, in an HNS-1 Hoverfly, hoisted aloft four men from two life rafts and lowered them safely to a 38- by 63-foot flight deck fitted to Coast Guard cutter *Governor Cobb* (WPG 181). Chief of BUAER Rear Adm. DeWitt C. Ramsey observed and expressed his approval of the demonstration.

7 OCTOBER • A new BUAER color specification went into effect, which provided seven different color schemes for aircraft depending upon their design and use. The most

basic change concerned the use of overall glossy Sea Blue on carrier-based aircraft and seaplane transports, trainers, and utility planes. The basic nonspecular camouflage, semigloss Sea Blue above and nonspecular Insignia White below, was to be applied to patrol and patrol bombing types and to helicopters. The prescription regarding antisubmarine warfare identified two special camouflage schemes, Gull Gray on top and sides and Insignia White on bottom, or Insignia White all over (the selection depended upon the prevailing weather conditions and, since 19 July 1943, had been used by AirLant). Overall Aluminum was to be applied to landplane transports and trainers and landplane and amphibian utility aircraft, Orange Yellow on target-towing planes and primary trainers, and glossy Insignia Red on target drones. Provision allowed for the optional use by tactical commanders of special identification markings on combat aircraft, preferably with temporary paint.

10 OCTOBER • Task Force 38, Vice Adm. Marc A. Mitscher commanding, struck Japanese reinforcement staging areas in the opening blow of the campaign to liberate Leyte, Philippines. Aircraft from 17 carriers bombed airfields on Okinawa and other islands of the Ryūkyūs and sank 29 vessels. The following day, planes struck airfields on northern Luzon in preparation for raids on the Japanese bastion of Formosa (Taiwan). From 12 to 14 October the force then attacked ships, aerodromes, and industrial plants on Formosa and sank 22 vessels. These raids drew heavy Japanese aerial counterattacks and, on 13 October, a *kamikaze* suicide plane crashed *Franklin* (CV 13), and the next day *Hancock* (CV 19) received damage from bombs, but both ships continued. The destruction of Japanese air power on Formosa paved the way on 14 and 16 October for USAAF Boeing B-29 Superfortress raids on island aircraft plant and airfield facilities. On 14 October, the carriers launched a second raid on northern Luzon, and the next day, a sweep over the Manila area. These strikes in total destroyed an estimated 438 Japanese aircraft in the air and 366 on the ground and, in combination with other battles, effectively cleared the skies for landings on Leyte.

14 OCTOBER • The Navy directed Amphibious Forces Training Command, Pacific to form mobile air support training units to train carrier air groups and Marine squadrons in the techniques of close air support operations.



47012

Navy SB2C Helldivers from *Hancock* (CV 19) attack *Kumano* in Tablas Strait, off Mindoro Island, during the Battle of Leyte Gulf, 26 October 1944. The Japanese cruiser escaped despite three hits.

15 OCTOBER • Special Task Air Group (STAG) 1 launched four TDR-1 assault drones against Matupi Bridge near Simpson Harbor, Rabaul, New Britain. The drones took part in a coordinated attack by aircraft from Green Island including PBJ-1D Mitchells of VMB-423, F4U-1 and FG-1 Corsairs of VMF-218 and -222, and SBD-5 Dauntlesses of VMSB-244 and -341. The raid failed to hit the targets because of poor picture reception and pilot error.

17 OCTOBER • Commander Fleet Air Wing 10 arrived in Philippine waters on board seaplane tender *Currituck* (AVP 7) to direct patrol plane operations in support of landings on Leyte.

17 OCTOBER • Task Group 38.4, Rear Adm. Ralph E. Davison commanding, attacked Japanese installations at Legaspi and Clark Field, Luzon, in the Philippines.

17 OCTOBER • The Army's 6th Ranger Battalion landed on Dinagat and Suluan Islands at the entrance to Leyte Gulf

to destroy Japanese installations capable of providing early warning of a U.S. attack. The Suluan garrison transmitted an alert that prompted Japanese Commander in Chief Combined Fleet Adm. Toyoda Soemu to order SHO-1—an operation to defend the Philippines. The raid thus helped to bring about the Battle of Leyte Gulf.

19 OCTOBER • Commander Fleet Air Wing 17 moved to Morotai in the Netherlands East Indies (Indonesia) to support operations against Japanese forces in the Philippines.

19 OCTOBER • President Franklin D. Roosevelt approved a plan providing for the acceptance of African American women in the women's Navy Reserves. The plan called for the immediate commissioning of a limited number of black women as administrative officers, and the subsequent enlistment of additional African American women.

20 OCTOBER • The Seventh Fleet, Vice Adm. Thomas C. Kinkaid commanding, landed four divisions of the

Sixth Army on Leyte, Philippines. Eighteen escort carriers organized in Task Units 77.4.1, 77.4.2, and 77.4.3 but known as Taffy 1, 2, and 3, respectively, supplemented the fast carriers by operations. Taffy 1 sailed southward off northern Mindanão, Taffy 2 off the entrance to Leyte Gulf, and Taffy 3 to the north off Samar. Japanese planes counterattacked the ships and a bomb damaged *Sangamon* (CVE 26) but she continued the fight.

20 OCTOBER • Special Task Air Group (STAG) 1 launched three TDR-1 assault drones against Japanese gun positions west of Ballale, Bougainville, in the Solomon Islands. One drone was lost, one made a hit with its bomb but crashed before striking a beached Japanese freighter—christened by the men involved “Kahili Maru”—equipped with antiaircraft guns off the airstrip at Kahili, and the final drone bombed and crashed the freighter.

21 OCTOBER • Task Group 38.2, Rear Adm. Gerald F. Bogan commanding, attacked Japanese ships and installations near Cebu, Masbate, Negros, and Panay in the Philippines.

21 OCTOBER • Marine Carrier Air Groups was established under Aircraft, Fleet Marine Force, Pacific, to direct the formation and training of Marine squadrons earmarked to operate from escort carriers. Plans called for the formation of six such groups, each composed of a fighter and a torpedo squadron. Four were to be assigned to ships and the remaining two to function as replacement and training groups.

23 OCTOBER • The Battle of Leyte Gulf began when Japanese Operation SHO-1 attempted to disrupt U.S. landings in the gulf. Commander Third Fleet Adm. William F. Halsey Jr. led nine fleet and eight light carriers. Commander Seventh Fleet Vice Adm. Thomas C. Kinkaid led 18 escort carriers organized in Task Units 77.4.1, 77.4.2, and 77.4.3 and known as Taffy 1, 2, and 3, respectively. Japanese fuel shortages compelled the dispersal of its fleet into the Northern (decoy), Central, and Southern Forces that converged separately on Leyte Gulf. Attrition had reduced the Northern Force’s 1st Mobile Force, Vice Adm. Ozawa Jisaburō commanding, to carrier *Zuikaku* and light carriers *Chitose*, *Chiyōda*, and *Zuihō*. In the Sibuyan Sea, U.S. planes attacked the Central Force, Vice Adm. Kurita Takeo commanding, and sank battleship *Musashi* south of Luzon. Aircraft also attacked the Southern Force as it proceeded

through the Sulu Sea, and sank destroyer *Wakaba* and damaged battleships *Fusō* and *Yamashiro*.

Commander CVG-15 Cmdr. David S. McCampbell and his wingman, Lt. j.g. Roy Rushing, flew F6F-3 Hellcats from *Essex* (CV 9), and broke up a formation of an estimated 60 Japanese aircraft, downing nine (claiming 15). McCampbell subsequently received the Medal of Honor for this and the action on 19 June. During a Japanese counterattack on Task Group 38.3, a bomb from a Yokosuka D4Y1 Type 2 Judy struck *Princeton* (CVL 23) and she was later scuttled. On 25 October, the Seventh Fleet turned back the Southern Force before daylight in the Battle of Surigao Strait.

The Central Force made a night passage through San Bernardino Strait and at daylight off Samar attacked Taffy 3, Rear Adm. Clifton A. F. Sprague commanding. Valiant rearguard efforts threw Kurita’s ships into disarray and compelled his retirement despite the Japanese superiority in weight and firepower. Aircraft damaged battleships *Yamato* and *Kongō* and heavy cruisers *Chikuma*, *Chōkai*, and *Suzuya*. Japanese gunfire sank *Gambier Bay* (CVE 73), two destroyers and a destroyer escort; damaged *Kalinin Bay* (CVE 68), *Fanshaw Bay* (CVE 70), a destroyer and a destroyer escort; and straddled *St. Lo* (CVE 63), *White Plains* (CVE 66), and *Kitkun Bay* (CVE 71). *Kamikaze* planes sank *St. Lo* and damaged *Kalinin Bay*, *Kitkun Bay*, *Suwannee* (CVE 27), and *Santee* (CVE 29)—also torpedoed by submarine *I-56*—and missed *Sangamon* (CVE 26), *Petrof Bay* (CVE 80), and *White Plains*.

The Northern Force decoyed Halsey’s Third Fleet beyond range to protect Taffy 3 but off Cape Engaño aircraft sank all four Japanese carriers, and *Chitose* with the assistance of cruiser gunfire. In addition, planes sank (some scuttled by the Japanese) heavy cruisers *Chikuma*, *Chōkai*, *Mogami*, and *Suzuya*; light cruisers *Abukuma* (by USAAF B-24 Liberators) *Kinu*, *Noshiro*, *Nowaki* (by gunfire) and *Tama* (also from submarine *Jallao* [SS 368]); and destroyers *Hatsuzuki* (by gunfire) *Hayashimo*, and *Uranami*; and damaged battleships *Yamato*, *Haruna*, and *Nagato*; heavy cruisers *Kumano*, *Myōkō*, and *Tone*; light cruiser *Yahagi*; and destroyers *Fujinami*, *Kiyoshimo*, and *Okinami*.

On 27 and 28 October, aircraft from the heavy carriers attacked airfields on Luzon and the Visayas, ships near Cebu on 28 October, and the next day, airfields on Luzon and vessels in Manila Bay. On 27 October, Allied aircraft from Tacloban assumed direct air support missions



238363

Kitkun Bay's (CVE 71) 5-inch gun makes a direct hit on a Japanese torpedo bomber attacking a carrier aft of her off Saipan, 18 June 1944.



700560

A Japanese suicide plane narrowly misses *Sangamon* (CVE 26) during the Battle of Leyte Gulf, 25 October 1944.

over Leyte and Samar, which two days later enabled the retirement of the escort carriers. During October, carrier aircraft claimed the destruction of 1,046 Japanese planes and warships totaling more than 300,000 tons. The Battle of Leyte Gulf effectively finished the Japanese surface fleet.

25 OCTOBER • In recognition of the difference in the functions performed, carrier aircraft service units and patrol aircraft service units operating at advanced bases were redesignated combat aircraft service units (forward), while those commands in the continental United States and Hawaiian Islands retained the original title.

26 OCTOBER • Special Task Air Group (STAG) 1 concluded a month-long demonstration of the first use of guided missiles in the Pacific with a final attack of two TDR-1 assault drones against a lighthouse on Cape St. George, New Ireland, making one hit that demolished the structure. Twenty-nine of the 46 drones expended during the demonstration reached their target areas. In addition to the success against the lighthouse; nine attacked anti-aircraft guns on beached ships and achieved six direct hits and two near misses; and 18 attacked other targets in the Shortlands and Rabaul areas and made 11 hits.

29 OCTOBER • Task Group 38.2, Rear Adm. Gerald F. Bogan commanding, attacked Japanese airfields and shipping in the Manila area, Philippines. Planes damaged heavy cruiser *Nachi*, which was sunk on 5 November. *Intrepid* (CV 11) launched a strike against Clark Field on Luzon. A suicide plane damaged the ship, but *Intrepid* continued in action. The following day, three kamikazes attacked *Franklin* (CV 13) off Samar. The first two damaged the ship, while the third missed and crashed *Belleau Wood* (CVL 24). Both ships completed temporary repairs at Ulithi. Later, *Franklin* proceeded to Puget Sound Navy Yard at Bremerton, Wash., and *Belleau Wood* to Hunters Point, Calif.

5 NOVEMBER • Appalling weather and difficult terrain that delayed the development of airfields on Leyte, Philippines, and the requirement for continued carrier air support influenced the cancellation of a fast carrier strike on Tōkyō. Task Force 38, Vice Adm. John S. McCain commanding, began two days of carrier raids on airfields and shipping around Luzon and Mindoro. Planes from *Essex* (CV 9), *Lexington* (CV 16), and *Langley* (CVL 27) sank heavy cruiser *Nachi* and smaller vessels. Japanese retaliatory air strikes included a kamikaze that crashed *Lexington*, but the ship controlled the blaze and her guns shot down another suicide aircraft as it plunged toward *Ticonderoga* (CV 14). *Lexington* underwent repairs at Ulithi.

6 NOVEMBER • The recognition of the future importance of turbojet and turboprop powerplants prompted BUAER to request a study by the Naval Air Material Center of the requirements for a laboratory to develop and test such engines. This decision initiated action that consequently led to the establishment of the Naval Air Turbine Test Station, Trenton, N.J.

10 NOVEMBER • An estimated 3,000 tons of explosives on board ammunition ship *Mount Hood* (AE 11) exploded in Seeadler Harbor, Manus, Admiralty Islands. The blast damaged 36 nearby ships and landing craft including *Petrof Bay* (CVE 80) and *Saginaw Bay* (CVE 82), which suffered minor damage to their exteriors. The crew of *Saginaw Bay* helped care for the wounded.

11 NOVEMBER • Task Force 38, Vice Adm. John S. McCain commanding, attacked a Japanese reinforcement convoy of four transports and five destroyers in Ormoc Bay, Leyte, in the Philippines, sinking all but one destroyer. On 13 and 14 November, McCain shifted his strikes to the Manila area and central Luzon and sank light cruiser *Kiso*; destroyers *Akebono*, *Akishimo*, *Hatsuharu*, and *Okinami*; and 20 merchant and auxiliary ships. During 19 to 28 November, a group of escort carriers protected convoys from the Admiralty Islands against air and submarine attacks, and from 14 to 23 November another group protected convoys from Ulithi.

17 NOVEMBER • BUAER reported the continuation of technical studies to determine the feasibility of launching an adaptation of the USAAF JB-2 version of German V-1 Buzz Bombs from escort carriers for attacks on enemy ships and shore targets. The modifications envisioned included the installation of radio controls and a radar beacon. This program subsequently developed the Loon.

23 NOVEMBER • The dissolution of Training Task Force Command enabled the relocation of its facilities, people, and equipment to other commands.



Sailors mount a 2,000-pound bomb on a TDR-1 assault drone in preparation for an attack.

25 NOVEMBER • Task Groups 38.2 and 38.3, Rear Adms. Gerald F. Bogan and Frederick C. Sherman commanding, respectively, launched strikes against Japanese ships off central Luzon in the Philippines. In Dasol Bay, planes from *Ticonderoga* (CV 14) sank heavy cruiser *Kumano*. F6F Hellcats, SB2C Helldivers, and TBM-1C Avengers from *Essex* (CV 9), *Ticonderoga*, and *Langley* (CVL 27) attacked a convoy about 15 miles southwest of Santa Cruz off western Luzon and sank coast defense ship *Yasojima* (former Chinese light cruiser *Ping Hai*) and three landing ships. Aircraft from *Essex*, *Intrepid* (CV 11), and *Langley* sank additional vessels. Japanese suicide planes damaged *Essex*, *Intrepid*, *Hancock* (CV 19), and *Cabot* (CVL 28). A plane embarked on board *Independence* (CVL 22) accidentally crashed into the ship's island. All these ships continued in action.

27 NOVEMBER • *Commencement Bay* (CVE 105), Capt. Roscoe L. Bowman commanding, was commissioned as the first of her class built from the last U.S. escort carrier design at Tacoma, Wash.



297413

Vice Adm. Mark A. Mitscher pins the Distinguished Flying Cross on the Navy's second highest scoring ace, Lt. Cecil E. Harris.

29 NOVEMBER • A revision of the aircraft complement of *Essex* (CV 9)–class carrier air groups to 73 fighters, 15 bombers, and 15 torpedo planes reflected the changing character of the war. Fighters consisted of two squadrons of 36 planes each plus one for the carrier air group commander.

30 NOVEMBER • The headquarters of Fleet Air Wing 10 shifted to Jinamoc Island, Philippines.

30 NOVEMBER • During November, Task Force 38 claimed the destruction of 770 Japanese planes.

1 DECEMBER • Electronics Tactical Training Unit was established at NAS Willow Grove, Pa. The unit trained people of the Airborne Coordinating Group as instructors in the operation of all newer types of airborne electronics apparatus including search, navigation, identification, and ordnance radar.

7 DECEMBER • *Chourre* (ARV 1), Capt. Andrew H. Bergeson commanding, was commissioned as the first purpose-built aviation repair ship of the Navy at Baltimore, Md.

11 DECEMBER • During the year a steady decline in U-boat attacks in the Caribbean permitted a reduction of blimp operations over the southern approaches, and Fleet Airship Wing 5 was disestablished at Trinidad.

12 DECEMBER • Three Evacuation Squadrons (VE) were established in the Pacific Fleet from air-sea rescue squadron elements already providing evacuation services.

12 DECEMBER • Six escort carriers of Task Unit 77.12.1, Rear Adm. Felix B. Stump commanding, combined with Marine shore-based aircraft to support Army landings on the southwest coast of Mindoro, Philippines. From 12 to 14 December, planes covered the passage of transports and assault shipping through the Visayas, and, from 15 to 18 December, supported the landings. On the night of D-day, seaplanes also joined with operations from Mangarin Bay. During the morning watch on 15 December, antiaircraft fire shot down two Japanese suicide planes that crashed near *Marcus Island* (CVE 77). On 14 December, Task Force 38, Vice Adm. John S. McCain commanding, including seven heavy and six light carriers, began fighter sweeps over airfields on Luzon. The planes continued with successive combat air patrols that spread an aerial blanket over the area to effectively pin down Japanese aircraft on the island, and accounted for a major share of the estimated 341 enemy aircraft destroyed.

13 DECEMBER • Escort Carrier Force, Pacific, Rear Adm. Calvin T. Durgin commanding, was established for the administrative control of all escort carriers operating in the Pacific, except those assigned to training and transport duties.

14 DECEMBER • The rank of fleet admiral was established. The next day, Adms. Ernest J. King, William D. Leahy, and Chester W. Nimitz received promotions to the rank.

16 DECEMBER • Planes from Task Force 38 sank Japanese freighter *Oryoku Maru* in Subic Bay, Philippines. Pilots attacked unaware that the ship carried at least 1,619 Allied prisoners under shipment to Japan. The men killed included Cmdr. Francis J. Bridget of Patrol Wing 10. On 27 December 1944 and 9 January 1945, the survivors endured additional attacks by U.S. planes at Takao, Formosa (Taiwan), and only 497 prisoners reached Moji, Japan.

18 DECEMBER • A typhoon roared into the Third Fleet, Adm. William F. Halsey Jr. commanding, following the refueling of some of the ships. Destroyers *Hull* (DD 350), *Monaghan* (DD 354), and *Spence* (DD 512) capsized in the



A tender hoists a PBM on board to service the Mariner.

high seas northeast of Samar, Philippines, and 21 other ships including *Cowpens* (CVL 25), *Monterey* (CVL 26), *Cabot* (CVL 28), and *San Jacinto* (CVL 30) of Task Force 38, and *Altamaha* (CVE 18), *Nehenta Bay* (CVE 74), *Cape Esperance* (CVE 88), and *Kwajalein* (CVE 98) of the replenishment group sustained damage, and 146 planes were swept or blown overboard, jettisoned, or crushed by debris or other aircraft torn loose from the carriers, battleships, and cruisers.

26 DECEMBER • A Japanese “Intrusion Force” attacked the U.S. beachhead at Mindoro, Philippines. PB4Y Liberators and PBM Mariners, together with USAAF Curtiss P-40 Warhawks, Republic P-47 Thunderbolts, Lockheed P-38 Lightnings, and North American B-25 Mitchells damaged heavy cruiser *Ashigara*; light cruiser *Oyodo*; destroyers *Asashimo*, *Kasumi*, and *Kiyoshimo*; and destroyer escorts *Kashi*, and *Kaya*. The

Japanese bombarded the beachhead but motor torpedo boats intercepted the intruders. *PT-77* received damage, apparently from misidentification by U.S. planes, and *PT-223* sank *Kiyoshimo* off San Jose south of Manila.

28 DECEMBER • VMF-124 and -213 reported on board *Essex* (CV 9) at Ulithi. Their arrival marked the first Marine fighter squadrons to operate from fast carriers in combat.

30 DECEMBER • An amendment to the specification on aircraft color proscribed a color scheme for patrol and patrol bombing landplanes similar to that of carrier based airplanes—semigloss Sea Blue on top and bottom surfaces of wings and on all horizontal tail surfaces, and nonspecular Sea Blue on other tail surfaces and the fuselage.



The carriers (from front) *Wasp* (CV 18), *Yorktown* (CV 10), *Hornet* (CV 12), *Hancock* (CV 19), and *Ticonderoga* (CV 14) form a powerful centerpiece amid an array of naval power at Ulithi, 8 December 1944.

1945

1 JANUARY • Carrier Training Squadron, Pacific was established in the Pacific Fleet to provide operational control over carriers employed in training carrier air groups out of Pearl Harbor, Territory of Hawaii, and San Diego, Calif. Two carrier divisions composed the squadron.

2 JANUARY • Eighteen fighter bomber squadrons (VBF) were established within the existing carrier air groups to adjust their composition to changing combat requirements in the Pacific.

2 JANUARY • The headquarters of Fleet Air Wing 17, based on seaplane tender *Tangier* (AV 8), began to direct patrol plane support of operations in Lingayen Gulf from San Pedro Bay, Philippines.

2 JANUARY • In spite of almost continuous harsh weather during the month, the Allies invaded Lingayen Gulf on

western Luzon in the Philippines. The Japanese reacted vigorously and their planes attacked the invasion forces during the transit from Leyte Gulf. Task Force 38, Vice Adm. John S. McCain commanding, including seven heavy and four light carriers, a night group of one heavy and one light carrier, and a replenishment group with one hunter-killer and seven escort carriers, concentrated on the destruction of enemy air power and air installations. On 3 January, planes bombed Japanese airfields and ships at Formosa (Taiwan). On 6 January, strikes shifted to airfields and shipping at Luzon in response to Japanese suicide attacks, and on 9 January, the Pescadores and Ryūkyū Islands, claiming the destruction of more than 100 Japanese aircraft and 40,000 tons of merchant and small warships.

During the night of 9–10 January, Task Force 38 made a high-speed run through Luzon Strait into the South China Sea. The replenishment group passed through Balintang Channel. On 12 January, the carriers launched strikes along 420 miles of the Indochina coast. Planes sank training cruiser *Kashii*, 14 small warships, 10 tankers, and



Antiaircraft fire shoots down a Japanese bomber over an *Essex* (CV 9)-class carrier, 1945.

16 transports and cargo vessels totaling 126,000 tons. The raiders also sank French colonial cruiser *Lamotte-Picquet* and surveying vessel *Octant* near the Japanese ships.

The force moved northward to evade a typhoon and, on 15 January, bombed Japanese targets at Hong Kong, along the Chinese coast, Hainan, and Formosa, and the next day concentrated on Hong Kong. The Americans suffered heavy losses in the face of robust resistance, but sank 62,000 tons of shipping. Inclement weather persisted, and the attackers left the South China Sea. On 20 January, they made a nighttime run through Balintang Channel to strike Formosa, the Pescadores, and Okinawa. Japanese planes damaged *Ticonderoga* (CV 14) and *Langley* (CVL 27), but the next day aircraft raided the Ryūkyūs. During three weeks of action, the force claimed the destruction of more than 600 Japanese aircraft and 325,000 tons of shipping.

Seventeen escort carriers of Task Group 77.4, Rear Adm. Calvin T. Durgin commanding, protected the approach of the Luzon attack force to Lingayen Gulf. On 4 January, a *kamikaze* crashed *Ommaney Bay* (CVE 79) in

the Northern Sulu Sea, igniting fueled aircraft on the flight deck that resulted in the deaths of 95 men and the scuttling of the escort carrier. Another *kamikaze* narrowly missed *Lunga Point* (CVE 94), and a bomb passed over seaplane tender *Half Moon* (AVP 26) but failed to explode. On 5 January, additional *kamikaze* and aerial attacks damaged *Manila Bay* (CVE 61) and *Savo Island* (CVE 78). From 7–9 January, planes conducted preliminary strikes in the assault area, on 9 January, covered the landings, and through 17 January, supported the inland advance of troops. Further aerial attacks damaged *Kitkun Bay* (CVE 71) and *Kadashan Bay* (CVE 76) on 8 January, and on 13 January, *Salamaua* (CVE 96).

6 JANUARY • The first detachment of Women Accepted for Volunteer Emergency Service (WAVES) arrived in the Territory of Hawaii. By the end of the war, 4,009 women served in the islands in the only post outside the continental United States to which the Navy permanently assigned women during World War II.

11 JANUARY • The Bureau of Ordnance assigned the first task on Project Bumblebee to the Applied Physics Laboratory. The action established the program for the development of a ram-jet powered, guided antiaircraft weapon from which the Talos, Terrier, and Tartar missiles eventually emerged.

21 JANUARY • Task Force 38, Vice Adm. John S. McCain commanding, attacked Japanese airfields and ships at Formosa (Taiwan), the Pescadores, and Sakishima Gunto and Okinawa in the Ryūkyūs. During the two-day raid, planes sank a guardboat and 22 merchantmen and fishing vessels and damaged installations. A Japanese aircraft glide-bombed *Langley* (CVL 27), and an accidental explosion of bombs carried by a TBM-1C Avenger of VT-7 damaged *Hancock* (CV 19). Two suicide planes crashed *Ticonderoga* (CV 14) and their attacks cost the ship 36 planes, 143 killed or missing, and 202 wounded including her skipper, Capt. Dixie Kiefer. *Ticonderoga* made for Ulithi for temporary repairs and then to Puget Sound Navy Yard at Bremerton, Wash. On 20 April, she completed repairs and, on 22 May, returned to Ulithi.

29 JANUARY • Planes from six escort carriers of Task Group 77.4, Rear Adm. William D. Sample commanding, covered Army landings at San Antonio near Subic Bay, Philippines; on 30 January on Grande Island at the entrance to the bay; and the following day at Nasugbu, south of the entrance to Manila Bay.

6 FEBRUARY • The Chief of Naval Operations directed the equipment of VPB-109, -123, and -124 of Fleet Air Wing 2 to employ Bat—Special Weapons Ordnance Device (SWOD) Mark 9—glide bombs in combat following a period of training at NAS Kaneohe Bay, Hawaiian Islands.

15 FEBRUARY • The disestablishment of the West Coast Wing of the Naval Air Transport Service facilitated the reassignment of its squadrons to the Pacific and Atlantic Wings.

16 FEBRUARY • Task Force 58, Vice Adm. Mark A. Mitscher commanding, including nine heavy and five light carriers and a night group of two heavy carriers launched the first carrier attack against Honshū, Japan, in preparation for Operation Detachment—landings on Iwo Jima in the Kazan Rettō (Volcano Islands) by the 4th and 5th Marine Divisions.

In addition to Navy aircraft, the carriers embarked 144 F4U-1D and FG-1 Corsairs from VMF-112, -123, -124, -213, -216, -217, -221, and -451. PB4Y-1 Liberators and PB4Y-2 Privateers and USAAF B-29 Superfortresses from the Marianas augmented carrier air patrols that swept the seas ahead of the ships to prevent their discovery. Planes bombed Japanese aircraft factories, airfields, and ships around the Tōkyō area. Heavy clouds, snow, and rain squalls impeded operations, but a momentary break in the weather enabled a major dogfight between U.S. and Japanese fighters east of the capital. On 17 February, foul weather persuaded Mitscher to cancel attacks and return to support the landings. Planes also flew neutralization strikes against the Bonin Islands.

Previous carrier raids and USAAF B-24 Liberator and Superfortress missions from the Marianas had weakened but warned the Japanese defenders, and the garrison prepared extensive defenses using the island's caves. The volcanic terrain limited the effectiveness of all but direct hits against these positions and the Marines sustained appalling casualties. On 19 February, naval aircraft that supported the landings included a flight of 24 F6F Hellcats and 24 Marine Corsairs, led by Lt. Col. William A. Millington, USMC, that attacked the Japanese in double-column approaches. The planes broke by division to port and starboard, dropped napalm on their initial runs, and made subsequent rocketing and strafing passes. On this date, 606 planes flew 765 sorties, dropped 1,558 bombs and 104 napalm tanks, and fired 2,254 rockets.

On 25 February, Mitscher returned for a second strike on Tōkyō during harsh weather, followed, on 1 March, with raids on Okinawa and the Ryūkyūs, and then retired to Ulithi, leaving in his wake the destruction of an estimated 648 Japanese aircraft and 30,000 tons of merchant shipping. Task Group 52.2, Rear Adm. Calvin T. Durgin commanding, commenced the Iwo Jima campaign with nine escort carriers, later augmented by one night heavy carrier and two additional escort carriers. From 16–18 February, Durgin dispatched preliminary air strikes against Iwo Jima, and from 19 February – 11 March, these planes supported the Marines and attacked Bonin Islands airstrips.

Planes also protected ships from Japanese submarine attacks including *kaiten* human-guided suicide torpedoes. On 26 February, FM-2 Wildcats and TBM-1C Avengers, embarked on board *Anzio* (CVE 57) and *Tulagi* (CVE 72), sank submarines *I-368* (transporting a *kaiten*) and *RO-43* in separate attacks. Aircraft of Task Group 50.5 operating

from the Marianas conducted shipping reconnaissance and air-sea rescue between Japan and Iwo Jima, and offensive screens for carrier raids and expeditionary forces. From 28 February – 8 March, patrol planes of Fleet Air Wing 1 carried out similar operations from tenders anchored in the lee of Iwo Jima.

On 26 February, two OY-1 Sentinels of VMO-4 and -5 flew ashore from *Wake Island* (CVE 65), and two days later, the balance of the squadrons began to operate from airstrips while under artillery and mortar fire. On 6 March, USAAF North American P-51 Mustangs and Northrop P-61 Black Widows arrived from Saipan, followed two days later by VMTB-242. These aircraft flew day and night combat air patrols and provided all air support upon the 11 March departure of the escort carriers.

Japanese aerial counterattacks included five suicide planes and a bomber that damaged *Saratoga* (CV 3) on 21 February with a loss of 123 men killed or missing. She made for Eniwetok for temporary repairs and then to Puget Sound Navy Yard at Bremerton, Wash., and never returned to action. A kamikaze crashed *Bismarck Sea* (CVE 95) and triggered fires and ammunition explosions that led to the loss of the ship and 318 men. Another suicide plane damaged *Lunga Point* (CVE 94), and a bomb struck *Langley* (CVL 27). On 4 March, a crippled B-29 named *Dinah Might* made the first of more than 2,251 Superfortress emergency landings on Iwo Jima by the end of the war. The campaign included the use of altitude-determining radar on board LSTs, and a night fighter director in the organization of the air support commander. On 16 March, Iwo Jima was declared secured.

19 FEBRUARY • Commander Fleet Air Wing 1 went to sea on board seaplane tender *Hamlin* (AV 15) to direct patrol squadrons in support of the fighting on Iwo Jima, and remained in the area until the island was secure.

26 FEBRUARY • The headquarters of Fleet Air Wing 17 deployed to Clark Field on Luzon, Philippines.

3 MARCH • The Naval Air Transport Service was reorganized and established as a fleet command with its headquarters at NAAS Oakland, Calif. The service operated under the immediate direction of the Commander in Chief and Chief of Naval Operations.

3 MARCH • The Naval Air Training Command incorporated the Naval Air Technical Training Command.

6 MARCH • Ens. Jane Kendeigh became the first Navy flight nurse to serve in a combat zone when she reached Iwo Jima, Volcano Islands. The aircraft on which she arrived took Japanese mortar fire during its landing.

7 MARCH • The commanding officer of CGAS Floyd Bennett Field, N.Y., reported to BUAER the successful test of a dunking sonar suspended from an XHOS-1 helicopter.

7 MARCH • Pilot Frank N. Piasecki and copilot George N. Towson made the first flight of the tandem rotor XHRP-X transport helicopter at P-V Engineering Forum, Sharon Hill, Pa.

8 MARCH • A PBV-5A Catalina launched a rocket-powered Gorgon air-to-air missile that achieved an estimated speed of 550 mph in its first powered test flight. Lt. Cmdr. Moulton B. Taylor directed the experiment off NAS Cape May, N.J.

11 MARCH • Yokosuka P1Y Ginga (Frances) land attack planes flew from Kanoya, Japan, to attack U.S. ships at their Ulithi anchorage. One Frances crashed *Randolph* (CV 15) and killed 25 men and wounded 106. Another bomber slammed into Sorlen Island. Salvage vessel *Current* (ARS 22) sustained damage during a collision with the carrier while firefighting. *Randolph* completed repairs at the atoll.

17 MARCH • The Naval Air Transport Service received responsibility for evacuating wounded sailors and Marines.

18 MARCH • Task Force 58, Vice Adm. Marc A. Mitscher commanding, supported Operation Iceberg—the invasion of Okinawa in the Ryūkyū Islands. Through 22 March, ten heavy and six light carriers launched raids against Japanese airfields and shipping at Kyūshū and Honshū, Japan, claiming the destruction of 482 enemy aircraft by aerial attack and 46 by antiaircraft fire. Japanese planes lashed the ships and a Mitsubishi G4M1 Type 1 Betty crashed close aboard *Intrepid* (CV 11), killing two men and wounding 43. A dud bomb inflicted minor damage on *Enterprise* (CV 6) and the ship later sailed to Ulithi for repairs. Three Yokosuka D4Y1 Type 2 (Judy) dive bombers attacked *Yorktown* (CV 10) during which a bomb from the third plane damaged the ship. The next day, carrier planes attacked targets from Kure to

Kōbe and Osaka, destroyed incomplete submarine *I-205* in drydock, and damaged 14 warships.

Off Shikoku, a suicide plane and a bomber damaged *Wasp* (CV 18), killing 101 men and wounding 269, but for several days the ship continued in action before retiring for repairs. A Japanese bomber dropped two 550-pound bombs on *Franklin* (CV 13) that ignited fires and exploded ordnance and fuel among aircraft spotted on the flight deck or parked below. Despite 724 men killed or missing and 265 wounded, after brief tows, *Franklin* sailed under her own power to New York, N.Y.

On 21 March, 16 Bettys carrying MXY7 *Ohka* (Cherry Blossom) Model 11 flying bombs attacked, but fighters intercepted forcing them to prematurely release their *Ohkas*. Two days later, Task Force 58 began pre-assault strikes on Okinawa, and carrier aircraft neutralized airfields on the surrounding islands, supported ground operations, and intercepted air raids. Task Group 52.1, Rear Adm. Calvin T. Durgin commanding, including 18 escort carriers, took part in the preliminary strikes, and on 25 and 26 March, supported landings on Kerama Rettō and provided close air support. In late April, *Block Island* (CVE 106) and *Gilbert Islands* (CVE 107) arrived with MCVG-1 and -2, consisting of VMF-511 and VMTB-233, and of VMF-512 and VMTB-143, respectively, marking the combat debut of Marine air support carriers. Beginning on 3 April, OY-1 Sentinels of VMO-2, -3, -6, and -7 periodically operated ashore.

From 26 March – 20 April and from 3 – 25 May, Task Force 57, Vice Adm. Sir H. Bernard Rawlings, RN, commanding, fought south of Okinawa. At times British carriers *Formidable* (67), *Illustrious* (87), *Indefatigable* (10), *Indomitable* (92), and *Victorious* (38) launched strikes at airfields on Formosa (Taiwan) and Sakishima Gunto and intercepted air raids. The British carriers' armored flight decks enabled their survival against *kamikazes*.

On 26 March, the commander of Fleet Air Wing 1, based on seaplane tender *Hamlin* (AV 15), arrived at Kerama Rettō to direct patrol squadron operations. On 1 April, Marines and soldiers established a beachhead on western Okinawa and captured an airfield at Yontan (Yomitan), from which six days later aircraft began defensive patrols and close air support missions. On 3 April, two *kamikazes* damaged *Wake Island* (CVE 65) southeast of Okinawa, and although the crew escaped without casualties, she departed for repairs.

On 6 April, the Japanese launched the first of a series of

ten mass *kamikaze* attacks, interspersed with smaller raids and named *Kikusui* (Floating Chrysanthemum) No. 1, against Allied ships operating off Okinawa. These attacks involved 1,465 aircraft through 28 May. The second of two *kamikazes* damaged *San Jacinto* (CVL 30). A U.S. fighter crashed on board *Chenango* (CVE 28) and started fires among the aircraft spotted for a strike. The carrier left the area two days later.

The Japanese dispatched the First Diversion Attack Force, including battleship *Yamato*, across the East China Sea toward Okinawa to lure U.S. carriers from the island and to facilitate *kamikaze* attacks. Submarines *Hackeback* (SS 295) and *Threadfin* (SS 410) and a plane from *Essex* (CV 9) sighted and reported the enemy ships. Lt. James R. Young, USNR, and Lt. j.g. R. L. Simms, USNR, of VPB-21 piloted two PBM-3D Mariners that shadowed the ships and assisted in guiding aircraft toward them. On 7 April, carriers launched 386 planes that sank *Yamato*, light cruiser *Yahagi*, and destroyers *Asashimo*, *Hamakaze*, *Isokaze*, and *Kasumi*, and damaged destroyers *Fuyuzuki*, *Hatsushimo*, *Suzutsuki*, and *Yukikaze*. Antiaircraft fire downed ten U.S. planes. *Kamikazes* took advantage of the diversion and a plane crashed into *Hancock* (CV 19), but she continued the fight despite the loss of 62 men killed and 71 wounded.

On 11 April, Japanese planes damaged *Enterprise* and *Essex*. On 16 April, a *kamikaze* crashed *Intrepid*, and the next day the ship departed for repairs at San Francisco, Calif. On 17 April, Lt. Eugene A. Valencia, USNR, in his VF-9 F6F-3 Hellcat embarked on board *Yorktown* (CV 10), led a combat air patrol and shot down at least six attackers. He subsequently received the Navy Cross. On 4 May, two *kamikazes* attacked *Sangamon* (CVE 26) and the ship sailed for repairs to Norfolk, Va.

On 11 May, two *kamikazes* tentatively identified as a Mitsubishi A6M Type 0 and a Judy crashed flagship *Bunker Hill* (CV 17), which suffered 353 men killed, 43 missing, and 264 wounded. Mitscher shifted his flag to *Enterprise* and *Bunker Hill* made for repairs to Puget Sound Navy Yard, Bremerton, Wash. On 13 and 14 May, carrier aircraft attempted to blunt these counterattacks by raiding airfields on Kyūshū and Shikoku. A *kamikaze* crashed *Enterprise* on 14 May, killing 14 men and wounding 68. The next day, Mitscher shifted his flag to *Randolph* (CV 15) and *Enterprise* sailed to Puget Sound for repairs. On 6 June, a Zeke crashed *Natoma Bay* (CVE 62) and she made for San Diego, Calif.

On 27 May, a change in command from the Fifth Fleet, Adm. Raymond A. Spruance commanding, to the



A Marine F4U Corsair fires a full salvo of eight rockets at a target on Okinawa, 1945.

Third Fleet, Adm. William F. Halsey Jr. commanding, took place that adjusted all task number designations from the 50s to the 30s—the first designations are used throughout this campaign narrative. On 18 June, Japanese artillery on Okinawa killed Commander Tenth Army Lt. Gen. Simon B. Buckner Jr., USA. Pilot Maj. Gen. Roy S. Geiger, USMC, assumed temporary command of the Tenth Army until his relief on 23 June by Gen. Joseph W. Stilwell, USA.

On 21 June, the Americans declared Okinawa secured but the aerial counterattacks continued. A *kamikaze* damaged seaplane tender *Curtiss* (AV 4) and she retired for repairs. A second *kamikaze* damaged *Kenneth Whiting* (AV 14). Carrier air support—more than 40,000 combat sorties, the claimed destruction of 2,516 Japanese aircraft, 8,500 tons of bombs dropped, and 50,000 rockets fired—ensured the success of Iceberg. Marine squadrons ashore claimed the destruction of another 506 Japanese aircraft and expended 1,800 tons of bombs and 15,865 rockets. Many ships fought for long periods with *Essex* logging 79 consecutive days in battle. The fighting cost the Navy 763 aircraft and 36 ships and craft sunk and 368 damaged. At least 4,907 men on board these ships were killed or missing and 4,824 wounded.

21 MARCH • BUAER awarded a contract for 100 experimental liquid-fueled anti-*kamikaze* Lark missiles to the Ranger Engine Division of Fairchild, initiating the development of rocket-powered surface-to-air guided missiles.

27 MARCH • Ninety-four USAAF B-29 Superfortresses dropped mines provided by the Navy in Shimonoseki Strait and the waters of Suo Nada, Japan, to begin Operation Starvation—an aerial minelaying campaign to reduce the flow of merchant shipping that supplied the Japanese home islands. This operation and the six raids that followed into 12 April also supported the fighting for Okinawa, and additional minelaying runs then continued until the end of the war.

14 APRIL • The commander of Fleet Air Wing 10 arrived at Puerto Princessa, Palawan, Philippines, to direct patrol plane operations against Japanese ships in the South China Sea and along the Indochina coast.

20 APRIL • A typhoon damaged *Corregidor* (CVE 58) while she hunted Japanese submarines as part of Task Group 12.3 east of the Marianas.



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A Bat radar-guided glide bomb is mounted under the wing of a PB4Y-2 Privateer. The weapon carried an internal 1,000-pound bomb.

23 APRIL • Squadron skipper Lt. Cmdr. George L. Hicks of VB-109 led PB4Y-2 Privateers that launched two Special Weapons Ordnance Device (SWOD) Mark 9 Bat glide bombs against Japanese ships in Balikpapan Harbor, Borneo, Netherlands East Indies (Indonesia). The attack marked the first combat employment of the only automatic homing bomb used by the Navy in World War II. Both devices proved defective and missed their targets. Five days later, Hicks led two Privateers in a second foray against Balikpapan. The bombers released three Bats against a large transport. Two of the bombs dove to either side of the vessel and sank two smaller freighters, while the third executed a sharp right turn to strike a large oil storage tank a quarter mile away in the Pandanseri Refinery. The squadron changed bases several times during the remainder of the war and continued to launch Bats with varying degrees of success.

1 MAY • CVBG-74 was established at NAAF Otis Field, Mass. This, the Navy's first large carrier air group, later served on board *Midway* (CVB 41).

2 MAY • Lt. August Kleisch, USCG, flying an HNS-1 Hoverfly made the first U.S. helicopter rescue when he saved 11 Canadian airmen marooned in Northern Labrador about 125 miles from Goose Bay.

4 MAY • Fleet Air Wing (FAW) 18, Rear Adm. Marshall R. Greer commanding, was established at Guam. The wing took over the operational responsibilities in the Marianas area previously held by FAW-1.

8 MAY • The Allies celebrated V-E (Victory in Europe) Day.

9 MAY • German submarine *U-249* raised the black surrender flag to a PB4Y-2 Privateer of Fleet Air Wing 7 near the Scilly Islands off Lands End, England. The incident marked the surrender of the first U-boat after the end of combat in Europe.

10 MAY • In a crash program to counter Japanese MXY7 *Ohka* (Cherry Blossom) Model 11 flying bombs, the Naval Aircraft Modification Unit received authorization to develop a ship-to-air guided missile—dubbed Little Joe—powered by a standard JATO unit.

19 MAY • The Office of Research and Inventions was established in the Office of the Secretary of the Navy to coordinate and disseminate to all bureaus full information with respect to all naval research, experimental, test, and developmental activities. The office also supervised and administered all Navy Department action relating to patents, inventions, trademarks, copyrights, and royalty payments. The directive transferred the Naval Research Laboratory and the Special Devices Division of BUAER to the newly established office.

28 MAY • The Commander, Kodiak Sector, Alaskan Sea Frontier, dispatched three PB4Ys from Fleet Air Wing 1 and one Catalina from NAS Kodiak via Anchorage to Fairbanks to assist in evacuating people threatened by rising floodwaters of the Yukon River. The Catalinas returned from their humanitarian mission on 31 May.

5 JUNE • Off Okinawa, a typhoon struck the Third Fleet, Adm. William F. Halsey Jr. commanding. The heavy seas damaged 36 ships including *Hornet* (CV 12), *Bennington* (CV 20), *Belleau Wood* (CVL 24), *San Jacinto* (CVL 30), *Windham Bay* (CVE 92), *Salamaua* (CVE 96), *Bougainville* (CVE 100), and *Attu* (CVE 102). Inadequate weather reporting and communications hampered the admirals' responses; however, a court of inquiry found Halsey, Vice Adm. John S. McCain, and Rear Adms. Donald B. Beary and Joseph J. Clark negligent in their implementation of precautions learned as a result of the 18 December 1944 typhoon, noting a "remarkable similarity between the situations, actions and results" of the admirals concerning the two storms.

5 JUNE • Orders resulting from the end of the war in Europe called for the disestablishment of 4 patrol wings and 23 patrol, 5 inshore patrol, and 7 composite squadrons operating in the Atlantic, and for the redeployment of 7 patrol squadrons from the Atlantic to the Pacific.

10 JUNE • Following the German surrender in Europe, Fleet Air Wing 15 departed from NAS Port Lyautey, Morocco, for NAS Norfolk, Va.

10 JUNE • During May and June, raids by PB4Y-1 Liberators, PB4Y-2 Privateers, and PBM Mariners forced Japanese ships sailing in Korean waters to operate only by night and shelter by day in small protected anchorages. On this date, PB4Y-2s of VPB-118 from Okinawa flew the first aerial minelaying mission by Privateers. The planes were to drop mines in Pusan (Busan) harbor to drive Japanese vessels into the open sea to facilitate attacks against them and to overextend Japanese minesweeping efforts. Heavy flak from enemy warships in Tsushima Strait persuaded aircrews to shift their minelaying to the coastal waters between Seigan-To and Shinchi-To. The raids continued through 1 July with varying degrees of success.

12 JUNE • The Tenth Fleet was disestablished.

13 JUNE • A ramjet engine produced power in supersonic flight in a test conducted by the Applied Physics Laboratory at Island Beach, N.J. A booster of four 5-inch high-velocity aircraft rockets launched the ramjet unit that flew a range of 11,000 yards.

15 JUNE • Fleet Airship Wing 2 was disestablished at NAS Richmond, Fla.

15 JUNE • Experimental Squadrons XVF-200 and XVJ-25 were established at NAS Brunswick, Maine. The squadrons provided flight facilities for evaluating and testing tactics, procedures, and equipment for use in special defense tasks under the direct operational control of COMINCH, particularly those concerned with defense against Japanese suicide planes.

16 JUNE • Naval Air Test Center, Patuxent River was established to be responsible for the aviation test functions formerly assigned to NAS Patuxent River, Md.

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20 JUNE • Task Group 12.4, Rear Adm. Ralph E. Jennings commanding, including *Lexington* (CV 16), *Hancock* (CV 19), and *Cowpens* (CVL 25), sailed from NS Pearl Harbor, Hawaiian Islands, to Leyte, Philippines. On this date, Jennings launched five strikes against Japanese positions on Wake Island, marking the fifth carrier raid there since the Japanese overran the island.

27 JUNE • Fleet Air Wing 16 was disestablished at Recife, Brazil.

30 JUNE • Three escort carriers of Task Group 78.4, Rear Adm. William D. Sample commanding, supported landings by the Australian 7th Division at Balikpapan, Borneo, in the Netherlands East Indies (Indonesia). On 1 July, the Australians landed and, through 3 July, the carriers launched close air support missions, local combat air patrols, and strikes against Japanese installations.

10 JULY • Task Force 38, Vice Adm. John S. McCain commanding, initially composed of 14 carriers, launched a series of raids against Japanese airfields, ships, and installations from Kyūshū to Hokkaido, Japan. A replenishment group and an antisubmarine group each included escort carriers. After 16 July, Task Force 37, Vice Adm. Sir H. Bernard Rawlings, RN, commanding, including British carriers *Victorious* (38), *Formidable* (67), and *Implacable* (86) reinforced the Americans. *Indefatigable* (10) arrived eight days later.

The attack began with strikes on airfields in the Tōkyō plains area. The Japanese camouflage and dispersal of most of their aircraft reduced the aerial opposition encountered but also diminished the results obtained. On 14 and 15 July, harsh weather compelled the shift of attacks to airfields, vessels, and rail targets in northern Honshū and Hokkaido. These strikes wrought havoc with the vital shipment of coal across the Tsugaru Strait. On 17 July, the planes returned to bomb targets around Tōkyō, and night combat air patrols of planes from *Bon Homme Richard* (CV 31) protected U.S. and British ships that bombarded the industrialized Mito-Hitachi area of Honshū. The following day, the carriers launched aircraft against the naval station at Yokosuka and airfields near Tōkyō, sinking eight Japanese ships including training cruiser *Kasuga* and escort destroyer *Yaezakura*, and damaging five vessels including battleship *Nagato*. On 19 July, planes damaged battleship *Haruna* and carriers *Amagi* and *Katsuragi*.

13 JULY • Capt. Ralph S. Barnaby, commanding officer of the Johnsville Naval Aircraft Modification Unit, Pa., reported to BUAER that an LBD-1 Gargoyle air-to-surface missile completed five satisfactory runs in a series of 14 test flights including two at service weight.

14 JULY • Fleet Air Wing 12 was disestablished at NAS Key West, Fla.

14 JULY • Commander Fleet Air Wing 7 embarked on board seaplane tender *Albemarle* (AV 5) at Avonmouth, England, to transfer the wing's headquarters to NAS Norfolk, Va.

14 JULY • Commander Fleet Air Wing 1, embarked on board seaplane tender *Norton Sound* (AV 11), set up the wing's headquarters at Chimu Wan, Okinawa, and directed patrol plane operations over the East China Sea, Yellow Sea, and Japanese coastal waters from there until the end of the war.

15 JULY • Fleet Airship Wing 4 was disestablished at Recife, Brazil.

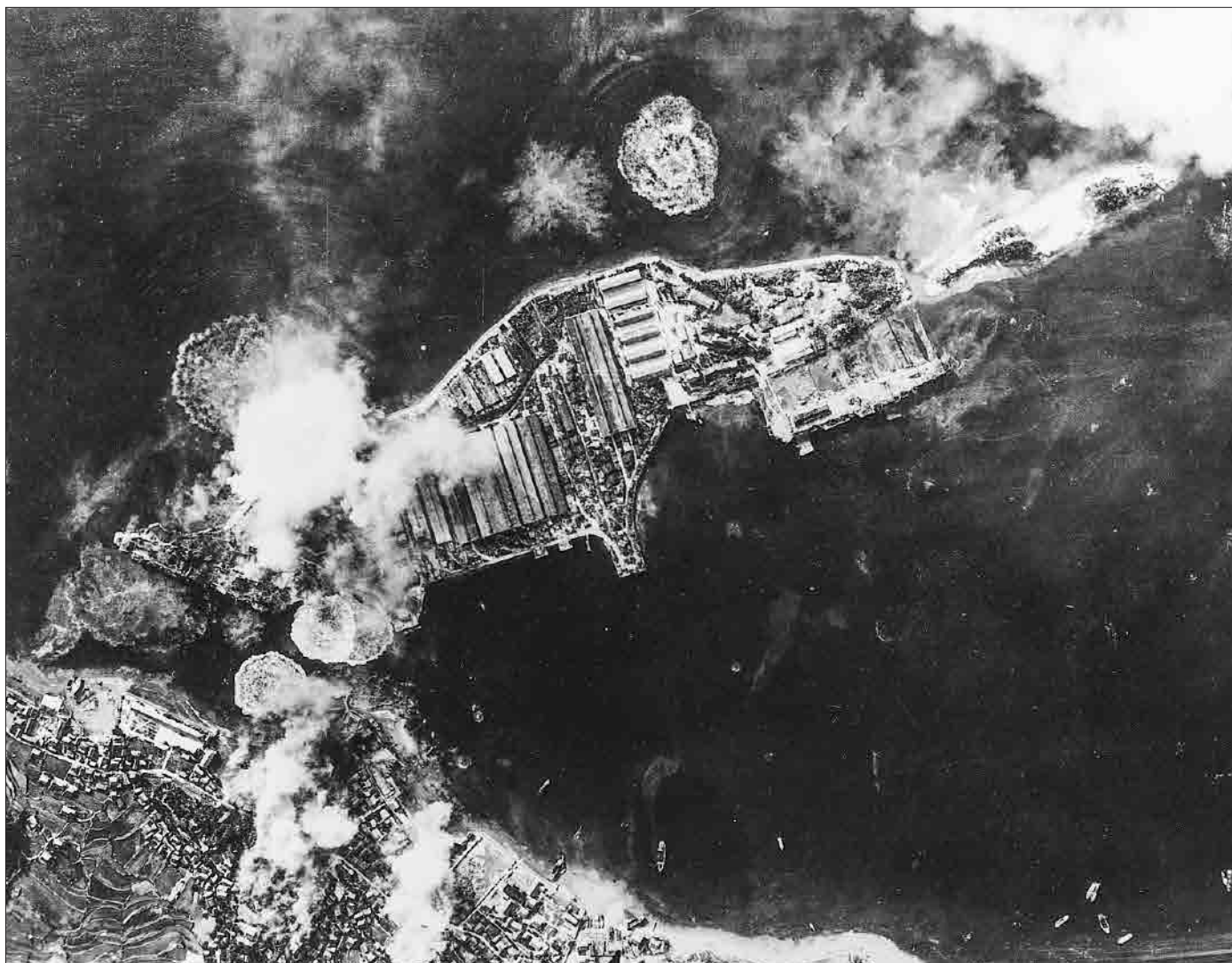
18 JULY • *Wasp* (CV 18) returned to action after repairs and overhaul by launching air strikes against Japanese targets on Wake Island, marking the sixth carrier raid there since the Japanese overran the island.

19 JULY • Fleet Air Wing 9 was disestablished at NAS New York, N.Y.

20 JULY • A rocket-propelled surface-to-air missile dubbed Little Joe made two successful flights at the Applied Physics Laboratory at Johns Hopkins University test station, Island Beach, N.J.

20 JULY • Fleet airborne electronics training units were established to train airborne early warning sailors in the theory, operation, and maintenance of their equipment.

20 JULY • The first of 16 PB-1W Flying Fortresses began training operations with the establishment of VPB-101 at NAS Willow Grove, Pa., under Project Cadillac II. Japanese suicide plane attacks convinced the Navy of the need for aircraft of adequate range and size to operate as flying combat information centers for airborne early warning



Planes of the Third Fleet savage Japanese ships at Kure during a sweep along the Inland Sea of Japan, July 1945.

and air control. The introduction of the modified bombers initiated the Navy's contribution toward what later became airborne warning and control systems (AWACS).

24 JULY • Task Force 38, Vice Adm. John S. McCain commanding, attacked Japanese airfields and shipping along the Inland Sea and northern Kyūshū, supported by USAAF long-range strikes. Carrier planes flew 1,747 sorties and sank 21 ships including battleship-carrier *Hyūga*, heavy cruiser *Tone*, training cruiser *Iwate*, and target ship *Settsu*, and damaged 17 vessels. The carriers repeated the sweep on 25, 28, and 30 July. Also, on 28 July, planes struck targets between Nagoya and northern Kyūshū. Ships sunk included battleship *Haruna*, battleship-carrier *Ise*, training ship *Izumo*, heavy cruiser *Aoba*, light cruiser *Oyodo*, escort

destroyer *Nashi*, submarine *I-404*, and submarine depot ship *Komahashi*. Additional vessels sustained damage.

Task Force 32, Rear Adm. Jesse B. Oldendorf commanding, including four escort carriers, covered minesweeping operations in the East China Sea. Planes attacked vessels off the mouth of the Yangtze River but failed to locate lucrative targets. On 29 July, night combat air patrols and spotters from *Bon Homme Richard* (CV 31) supported U.S. and British ships during a two-day bombardment of Hamamatsu, Honshū.

On 1 August, the carriers sailed southward to evade a typhoon. They launched raids on 9 and 10 August against the Honshū-Hokkaido area and, on 13 August, against Tōkyō. These raids were intended to defeat enemy attempts to concentrate planes for further suicide attacks and to

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repel an Allied invasion. On 15 August, Commander Third Fleet Adm. William F. Halsey Jr. announced the end of the war. McCain cancelled follow-up strikes and recalled the attackers. The first raid of the day had hit Tōkyō and 15 to 20 Japanese fighters intercepted six F6Fs of VF-88, embarked on board *Yorktown* (CV 10), over an airfield at Tokurozama. The Americans claimed nine enemy planes and lost four Hellcats. The second wave approached the coastline, but heeded McCain's recall, jettisoned their ordnance and returned.

24 JULY • Marine planes flying from *Vella Gulf* (CVE 111) attacked Japanese positions on Pagan Island in the Mariana Islands, and two days later hit Rota in the same island group.

28 JULY • Fleet Air Wing 15 was disestablished at NAS Norfolk, Va.

1 AUGUST • Task Group 12.3 including *Cabot* (CVL 28) bombed and bombarded Wake Island. This was the seventh carrier raid there since the island fell to the Japanese on 23 December 1941.

4 AUGUST • Fleet Air Wing 7 was disestablished at NAS Norfolk, Va.

6 AUGUST • *Intrepid* (CV 11) sailed en route from NS Pearl Harbor, Hawaiian Islands, to Task Force 38 off Japan. On this date, she launched a strike against Japanese installations on Wake Island, marking the eighth carrier raid on the island since it fell to the Japanese.

6 AUGUST • Task Group 95.3, Rear Adm. Calvin T. Durgin commanding, including *Makin Island* (CVE 93), *Lunga Point* (CVE 94), and *Cape Gloucester* (CVE 109), covered cruisers operating in the East China Sea by launching raids on Japanese vessels in the harbor at Tinghai (Qinghai), China.

9 AUGUST • Naval aviator Cmdr. Frederick L. Ashworth participated in dropping the second atomic bomb, *Fat Man*, on the Japanese from a USAAF Boeing B-29 Superfortress named *Bockscar*. Ashworth had supervised and coordinated the field tests of the bomb. Dense smoke rising from a bombing raid two days previously shrouded the original target of Kokura and the strike diverted to the secondary target of Nagasaki on Kyūshū.

14 AUGUST • Japan accepted the terms of unconditional surrender and the Allies celebrated V-J (Victory in Japan) Day—15 August in the Western Pacific. On 27 August, ships of the Third Fleet, Adm. William F. Halsey Jr. commanding, steamed into Sagami Wan outside the entrance to Tōkyō Bay, Japan. Aircraft carriers launched reconnaissance missions over the Japanese homeland from outside the bay. On 2 September, the Japanese formally surrendered on board battleship *Missouri* (BB 63) in Tōkyō Bay. During the final carrier actions of World War II, naval aviation claimed the destruction of 1,223 Japanese aircraft, including more than 1,000 on the ground, and sank 285,000 tons of shipping.

21 AUGUST • The Asiatic Wing, Naval Air Transport Service, was established at NAS Oakland, Calif., Capt. Carl F. Luethi commanding. The service operated and maintained air transport support of establishments and units in the Western Pacific and Asiatic theaters. Early in September, the wing's headquarters was established on Samar, Philippines, and on 15 November shifted to NAB Agana, Guam.

10 SEPTEMBER • *Midway* (CVB 41), Capt. Joseph F. Bolger commanding, was commissioned as the first of the 45,000-ton class aircraft carriers at Newport News, Va.

11 SEPTEMBER • Operation Magic Carpet commenced the return of servicemembers from the war zones by ships and aircraft.

3 OCTOBER • BUAER established the Committee to Evaluate the Feasibility of Space Rocketry as an initial attempt to establish an earth satellite program. On 29 October, the committee recommended the introduction of detailed studies to determine the feasibility of an earth satellite vehicle. The proposal led BUAER to issue contracts to one university and three companies for theoretical study and preliminary design of a launch vehicle, and for determining by actual test the specific impulse of high-energy fuels including liquid hydrogen.

10 OCTOBER • The reorganization of the Office of Chief of Naval Operations included the establishment of four new deputy chiefs for personnel, administration, operations, and logistics on the same level as the existing Deputy CNO (Air). The reorganization occurred by direction of the Secretary of the Navy and in accord with an executive order,

and abolished COMINCH and transferred command of the operating forces to CNO.

17 OCTOBER • The basic aircraft type designation system received the addition of the letter K for pilotless aircraft to replace the previous class designation VK. Classes A, G, and S, within the type were assigned for pilotless aircraft intended for attack against aircraft, ground targets, and ships, respectively.

27 OCTOBER • *Franklin D. Roosevelt* (CVB 42) was commissioned at New York Naval Shipyard, N.Y., Capt. Apollo Soucek commanding. The event marked the first exception to the traditional naming of fleet carriers for battles or famous ships.

1 NOVEMBER • The reorganization of the Naval Air Training Command included the assignment of its headquarters to NAS Pensacola, Fla., and the following subordinate commands: Naval Air Advanced Training, Naval Air Basic Training, Naval Air Technical Training, and the newly formed Naval Air Reserve Training. By this change, the titles Naval Air Operational Training and Naval Air Intermediate Training ceased to exist, and basic training or the reserve program absorbed the facilities of the former Naval Air Primary Training Command.

5 NOVEMBER • Ens. Jake C. West of VF-41, embarked for carrier qualifications on board *Wake Island* (CVE 65), lost power in the forward radial engine of an FR-1 Fireball shortly after take-off. The mishap compelled him to start his aft jet engine and he returned to the ship to make the first jet landing on board a carrier.

15 NOVEMBER • A Soviet fighter attacked a PBM-5 Mariner about 25 miles south of Port Arthur (Darien), Manchuria. The PBM investigating six Soviet transports and a beached seaplane in the Gulf of Chihli in the Yellow Sea escaped without damage.

29 NOVEMBER • The Special Weapons Test and Tactical Evaluation Unit was redesignated Pilotless Aircraft Unit. In December, it shifted to MCAS Mojave, Calif., receiving direction to operate detachments as necessary at NAF Point Mugu, Calif.

1 DECEMBER • Fleet Air Wing 6 was disestablished at NAS Whidbey Island, Wash.

5 DECEMBER • At 1410, Lt. Charles C. Taylor, USNR, of VTB-1 led Flight 19, consisting of five Avengers—TBM-1Cs BuNos 45714, 46325, and 73209; TBM-1E, 46094; and TBM-3, 23307—on an overwater navigation training mission from NAS Ft. Lauderdale, Fla. Within two hours Ft. Lauderdale intercepted messages between the planes that indicated the flight was lost in the vicinity of the Bahamas. At about 1800, an approximate high frequency direction-finder fix placed 23307 within a 100-mile radius of 29°15'N, 79°00'W. Lt. j.g. Walter G. Jeffrey of VPB-2 ATU-3 piloted a search PBM-5, BuNo 59225, from NAS Banana River, Fla., but the Mariner also vanished. A search-and-rescue operation to 10 December failed to recover wreckage, the 14 men from the Avengers, or the 13 of the Mariner. The mysterious losses occurred near an area subject to atmospheric variances, which later became popularly known as the “Bermuda Triangle,” although the likely explanation stems from a combination of navigational errors and fuel exhaustion.

28 DECEMBER • President Harry S. Truman directed the transfer of the Coast Guard from the operational control of the Navy and its return to the jurisdiction of the Treasury Department.