Defeat and Decline

1970-1979

aval aviation began its seventh decade with the United States embroiled in the Vietnam War, but an uneasy truce resulted in disengagement from the war in 1973. Two years later, naval air power assisted in the evacuation of refugees who fled the North Vietnamese conquest of South Vietnam. During the subsequent years, naval aviation helped rescue thousands of Indochinese who set out in poor vessels to escape tyranny. Eastern Bloc naval expansion challenged Western control of the sea and Soviet cruise missiles threatened aircraft carriers. The Navy struggled to meet its commitments because of a diminishing and aging fleet that eroded through constant use, at the same time confronting declining budgets that hindered the acquisition of replacements; recruitment shortfalls and difficulties in retention; drug and alcohol abuse; and racial unrest. Americans faced recurring crises in the Middle East, and in 1979, Iranian militants captured the United States Embassy in Tehran. The decade concluded with Midway (CV 41) and Kitty Hawk (CV 63) deployed to the Indian Ocean.

The burden of naval air action in the Vietnam War fell upon the carriers and aircraft of the Seventh Fleet. To meet this responsibility, the service relied upon established weapons and material, but the war also witnessed the introduction of television-guided Walleye glide bombs designed to home automatically to their targets. Helicopters served in combat and land-based patrol aircraft scoured the South Vietnamese coastline in search of infiltrating enemy vessels during Operation Market Time. Operations Linebacker I and II waged heavy interdiction and bombing campaigns against the North Vietnamese. Aircraft carried out extensive aerial minelaying to blockade the enemy's main avenues of supply.

During his tenure, Chief of Naval Operations Adm. Elmo R. Zumwalt Jr. issued mandates, known as "Z-Grams," to change the quality of life for sailors and

Marines and improved racial and gender situations in the fleet. During the 1960s and 1970s, U.S. domestic consumption of oil tripled but surplus production capacity disappeared, which made the country increasingly dependent upon foreign energy sources. In 1973, the Organization of the Petroleum Exporting Countries cut off shipments to the United States and reduced the availability of petroleum worldwide in response to President Richard M. Nixon's support of the Israelis during the Yom Kippur War. Their action only removed 10 percent of the available petroleum from the global market, but produced speculative buying by consumer countries that led to a worldwide recession. The crisis generated an acute consciousness among leaders of the position of the United States as a two-ocean nation that reemphasized the reliance upon the Navy to keep sea lanes open and commerce moving unhampered, although the American people largely failed to appreciate the shift until the 1980s.

Naval aviation nevertheless made headway in research and development. The 1970s witnessed the decommissioning of most of the remaining Essex (CV 9)-class carriers, the commissioning of nuclear-powered carriers *Nimitz* (CVN 68) and Dwight D. Eisenhower (CVN 69), and the launch of Carl Vinson (CVN 70). The introduction of F-14A Tomcats and AV-8A vertical and/or short takeoff and landing (V/STOL) Harriers, and the flight trials of F/A-18A Hornets took place. The addition of the Light Airborne Multipurpose System (LAMPS) combined shipboard electronics with SH-2D helicopters to confront the growing threat from submarines. The decade drew to a close with LAMPS testing in new SH-60B Seahawks, while the latest heavy-lift CH-53E Super Stallions reached readiness. Naval aviation began its eighth decade by continuing to integrate aircraft with the fleet to provide the United States with strong and flexible naval power.



Lt. j.g. William Belden safely ejects from A-4E Skyhawk, BuNo 150117, as it rolls into Shangri-La's (CVS 38) port catwalk after suffering a brake failure following recovery, 2 July 1970. The A-4E was assigned to VA-152 of Carrier Air Wing 8.

1970

15 JANUARY • Bennington (CVS 20), Valley Forge (LPH 8), and aviation base ship Tallahatchie County (AVB 2) were decommissioned. The authorization for the decommissioning in 1971 of Bon Homme Richard (CVA 31) and Shangri-La (CVS 38) also occurred during 1970.

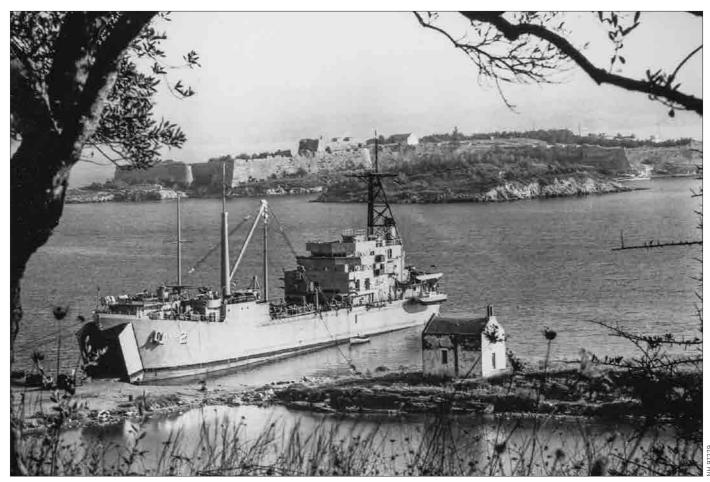
31 JANUARY • Midway (CVA 41) recommissioned after a four-year conversion-modernization at San Francisco Bay Naval Shipyard, Calif.

10 FEBRUARY • As part of the U.S. withdrawal from Vietnam, VMFA-542 and VMA-223 returned to MCAS El Toro, Calif. During the same month, Marine Aircraft Group 12 and VMA-211 were reassigned to Japan. In September, VMFA-122 and -314, VMA(AW)-242, Marine Aircraft Base Squadron 13, and Headquarters and Maintenance Squadron 13, returned to the United States. On 13 October, the last Marines departed from Chu Lai.

13 FEBRUARY • Amphibious assault ship *Princeton* (LPH 5) was decommissioned.

16 MARCH • The crash of an EC-121 Constellation took the lives of 23 sailors at Da Nang AB, South Vietnam.

28 MARCH • Pilot Lt. Jerome E. Beaulier and radar intercept officer Lt. j.g. Stephen J. Barkley of VF-142, embarked on board Constellation (CVA 64), made the first kill of a North Vietnamese MiG since the 1 November 1968 bombing halt. They shot down a MiG-21 Fishbed with an AIM-9 Sidewinder missile while escorting an unarmed Navy reconnaissance plane in an F-4J Phantom II near Thanh Hoa, North Vietnam.



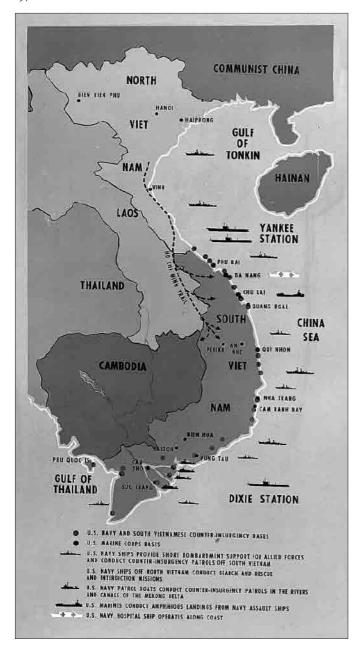
Advanced aviation base ship Tallahatchie County (AVB 2) can beach near existing airfields and support aerial operations, such as here, at Souda Bay, Crete, in November 1968.

1 APRIL • Carrier Air Wing Reserve (CVWR) 20 and CVWR-30 were established, followed on 1 May by the establishment of Carrier Anti-Submarine Air Group Reserve (CVSGR) 70 and CVSGR-80. This move continued a program initiated in July 1968 to improve the combat readiness of the Naval Air Reserve. The reorganization placed all carrier-type squadrons in two Reserve carrier air wings and two carrier antisubmarine groups. Twelve VP and three VR squadrons joined the carrier squadrons under the control of Commander Naval Air Reserve Force.

10 APRIL • An A-4M made the first flight of the improved Skyhawk dedicated to the Marine Corps at the Douglas Aircraft Company plant, Palmdale, Calif. The aircraft included a brake parachute and an engine with 45 percent more thrust than that of the original 1954 Skyhawk design, which made the jets suitable for operations from short airfields in forward areas.

11 APRIL • Apollo 13 crewed by Capt. James A. Lovell Jr., John L. Swigert Jr., USAF, and Fred W. Haise Jr., USMCR, launched from John F. Kennedy Space Center, Fla. On 13 April, the crew reported, "Okay, Houston, we've had a problem here." A loss of oxygen and primary power in Command and Service Module 109 Odyssey required an immediate abort of the moon mission. On 17 April, Odyssey splashed down in mid-Pacific about four miles from the primary recovery vessel, amphibious assault ship Iwo Jima (LPH 2). An SH-3D Sea King of HS-4, Aircraft No. 407, recovered and transported the astronauts to *Iwo Jima*.

2 MAY • ALM (Antilliaanse Luchtvaart Maatschappij) Flight 980, a Douglas DC-9, crashed because of fuel exhaustion 35 miles east of St. Croix, Virgin Islands. Pilot Lt. Cmdr. James E. Rylee, copilot Lt. j.g. Donald Hartman, and aircrewmen MMC William Brazzell and MMAN Calvin Lindley of VC-8 manned an SH-3A Sea King from NS



The disposition of Navy forces and bases in Southeast Asia virtually lines the coast of South Vietnam.

Roosevelt Roads, P.R., and rescued 26 of the 63 people on board. Two Coast Guard HH-52A Seaguards rescued 11 others while a Marine CH-46A Sea Knight picked up the remaining three survivors. Searchers recovered seven bodies, but failed to locate the remaining 16 victims because of harsh weather. The Sea King flew survivors to Alexander Hamilton Airport near Frederiksted, St. Croix. Rylee and Hartman received the Distinguished Flying Cross.

- 9 MAY Helicopters, OV-10A Broncos, and about 30 Navy craft participated with the combined South Vietnamese/U.S. Riverine Force in strikes into the Mekong River corridor to neutralize People's Liberation Armed Forces and North Vietnamese sanctuaries in that area. These operations followed the initial series of raids by combined U.S. and South Vietnamese troops against sanctuaries in Cambodia during the first week of May.
- **31 MAY** An earthquake in Peru took 50,000 lives, injured 100,000 people, and rendered 800,000 homeless. Amphibious assault ship *Guam* (LPH 9), with four CH-53D Sea Stallions, ten CH-46F Sea Knights, and two UH-1E Iroquois of HMM-365 embarked, sailed from Panama and on 12 June arrived off Peru. The ship provided victims with more than 200 tons of relief supplies, and her aircraft made more than 800 mercy flights transporting medical teams into remote areas and evacuating more than 1,000 people. Guam departed on 21 June.
- 1 JUNE Carrier Air Wings 4 and 12 were disestablished, followed on 30 June by the disestablishment of Carrier Anti-Submarine Air Group 51.
- **9 JUNE** Sikorsky pilot James R. Wright and copilot Col. Henry Hart, USMC, established a downtown New York, N.Y., to downtown Washington, D.C., record in a CH-53D Sea Stallion for helicopters at 156.43 mph, with an elapsed time of 1 hour, 18 minutes, 41.4 seconds. The next day they established a New York to Boston, Mass., record for helicopters of 162.72 mph, with a city-to-city time of 1 hour, 9 minutes, 23.9 seconds.
- 9 JUNE Jordanian King Hussein bin Talal survived an assassination attempt. In addition, terrorists from the Popular Front for the Liberation of Palestine seized 32 hostages including 14 Americans in a hotel in Amman, Jordan. Forrestal (CVA 59) sailed to the eastern Mediterranean to provide air cover for a potential rescue of the hostages and evacuation of Americans endangered elsewhere within the country. The situation in Jordan calmed, but terrorists then attacked the Jordanian Embassy in Beirut, Lebanon, and the United States extended the carrier's deployment. On 15 June, the crisis abated, and two days later U.S. forces returned to normal operations.



The crew of amphibious assault ship Guam (LPH9) and Marines of HMM-365 assist victims of the 31 May 1970 Peruvian earthquake where more than 66,000 people died.

20 JUNE • Amphibious assault ship *Inchon* (LPH 12) was commissioned.

26 JUNE • Hornet (CVS 12) was decommissioned, followed the next day by the decommissioning of *Yorktown* (CVS 10).

1 JULY • NAVAIR Liaison Office, Dayton, Ohio, was disestablished. The move marked the end of an office that traced its beginning to October 1920 and the detail of an aviation officer to McCook Field to observe and report on experimental work.

17 JULY • P-3C Orions began deployed operations when VP-49 assumed patrol responsibilities at NAS Keflavik, Iceland.

15 AUGUST • The keel was laid for *Dwight D. Eisenhower* (CVN 69) at Newport News Shipbuilding and Dry Dock Company, Va.

3 SEPTEMBER • Rising tensions in the Middle East triggered an alert of the Sixth Fleet. Three days later, terrorists from the Popular Front for the Liberation of Palestine attempted to hijack four civilian airliners. The terrorists diverted two of the planes to Zarqa, Jordan, and seized and rerouted another to Cairo, Egypt, where they released the hostages and destroyed the airliner. On 8 September, the Joint Chiefs of Staff directed *Independence* (CVA 62) to a position about 100 nautical miles from the Israel-Lebanon coast. The next day, an additional hijacking brought a third aircraft to Zarqa, and on 12 September, the terrorists blew up all three (empty) airliners. On 17 September, fighting erupted between the Jordanians and terrorists, and the next day, the Syrians intervened on behalf of the Palestinians.

On 17 September, John F. Kennedy (CVA 67) received orders to make speed for the Mediterranean. By 22 September, Independence and Saratoga (CVA 60) steamed south of Cyprus and off the coast of Lebanon, and five



An A-6A Intruder, BuNo 155668, of VA-85 drops a brace of Snakeye bombs over Vietnam. The squadron was on its single cruise with Constellation (CVA 64), August 1969 to May 1970.

P-3 Orions patrolled from NS Rota, Spain. Independence operated off the coast of Lebanon until 6 October. Saratoga sailed there from 17 to 25 September, and John F. Kennedy arrived on 24 September. Amphibious assault ship Guam (LPH 9), with HMM-365 embarked, reinforced these vessels from late September to 30 October. Saratoga departed and, on 28 September, hosted a visit by President Richard M. Nixon. The same day, Egyptian President Gamal A. Nasser died, and overnight Saratoga provided the president communications and intelligence support with Secretary of Defense Melvin R. Laird, Secretary of State William P. Rogers, and the joint chiefs. From 5 to 18 October, Saratoga returned to the eastern Mediterranean. The hijackers released their hostages, by 6 October the Sixth Fleet reduced operations to one carrier, and by July 1971 the Jordanians drove the Palestinians into Lebanon.

8 SEPTEMBER • The Department of Defense modified its basic space policy (established in March 1961) by providing for the consideration of functional responsibilities of the services in the assignment of programs for development and acquisition of space systems.

14 SEPTEMBER • Combat store ship *Niagara Falls* (AFS 3), with a UH-46A Sea Knight of HC-7 Detachment 112 embarked, rescued artist Julian Ritter and crewmembers

Winifried Heiringhoff and Lauren Knox and their ketch Galilee, about 400 nautical miles west/northwest of Hawaii. Niagara Falls towed Galilee 150 miles to rendezvous on 16 September with Coast Guard cutter Cape Corwin (WPB 95326), which took the castaways and their sailboat to Oahu.

25 SEPTEMBER • An A-6A launched a Condor television-guided air-to-surface missile at a standoff distance of 56 miles from its target at NWC China Lake, Calif. The missile made a direct hit.

25 OCTOBER • Amphibious assault ship Okinawa (LPH 3), dock landing ship Anchorage (LSD 36), amphibious transport dock Duluth (LPD 6), and sailors and Marines from shore establishments completed four days

of assistance to thousands of people following Typhoon Joan, which left 600 people dead and 80,000 without shelter across southern Luzon and Catanduanes Island, Philippines. CH-46D Sea Knights of HMM-164 lifted more than 300 tons of rice, flour, blankets, and fuel in more than 70 sorties. Naval medical teams treated more than 1,000 patients ashore.

29 OCTOBER • After the ravages of Typhoon Kate and flood waters that inundated 140 square miles of South Vietnam south of Da Nang AB, helicopters of 1st Marine Aircraft Wing performed rescue and relief operations for more than 9,000 South Vietnamese. The initial rescues began the first day when Marine Aircraft Group 16 evacuated about 900 people during floods that observers termed the most severe since 1964.

21 NOVEMBER • Aircraft flew 14 diversionary sorties from Oriskany (CVA 34) that included dropping flares along the North Vietnamese coast, in order to divert enemy attention from an Army-Air Force attempt to rescue U.S. prisoners from a vacated prisoner-of-war compound at Son Tây, 22 miles from Hanoi. Oriskany launched an additional 48 retaliatory strikes. Into 22 November, about 200 Navy and Marine aircraft from Hancock (CVA 19), Oriskany, and Ranger (CVA 61), together with approximately 200 Air Force aircraft also flew protective reaction air strikes—retaliation in response to enemy attacks or radar tracking—against North Vietnamese missile and

antiaircraft sites south of the 19th parallel that fired on unarmed reconnaissance aircraft. President Richard M. Nixon and Assistant to the President for National Security Affairs Henry A. Kissinger thus used protective reaction raids as part of a strategy to pressure the enemy toward peace negotiations and to cover U.S. withdrawal from the war.

24 NOVEMBER • North American Rockwell test pilot Edward A. Gillespie flew a T-2C Buckeye modified with a supercritical wing configuration at Columbus, Ohio. The wing design was derived from theoretical development by Dr. Richard T. Whitcomb of NASA and promised to delay the onset of transonic shock separation, buffeting, and other aerodynamic phenomena, thus giving greater flexibility to aircraft intended for operation in the sonic speed regime.

25 NOVEMBER • The chief of Naval Material established the Navy Space Project Office with responsibility for the integration and coordination of space activities within the purview of the Naval Material Command, and responsibility for management of designated space projects.

21 DECEMBER • Grumman test pilots Robert Smyth and William Miller made the first flight of an F-14A Tomcat at Grumman's Calverton, Long Island, N.Y., plant. The aircraft's design emphasized fighter missions including air-to-air combat and fleet defense, and they became the first variablesweep-wing fighters accepted into Navy squadron inventory.

1971

1 JANUARY • Hancock (CVA 19) and Ranger (CVA 61) continued operations with Task Force 77 from Yankee Station off Vietnam by launching interdiction missions against the Ho Chi Minh Trail in Laos, air support for allied ground forces in South Vietnam, photographic reconnaissance, combat air patrol, and electronic warfare sorties.

6 JANUARY • Maj. Gen. Homer S. Hill, USMC, accepted the first AV-8A Harrier for the Marine Corps at Dunsfold, England.



A Marine AV-8A Harrier lands on board amphibious assault ship Guadalcanal (LPH 7) in the Atlantic, 22 March 1971.



Apollo 14 astronauts Capt. Alan B. Shepard Jr. (left) and Maj. Stuart A. Roosa, USAF, await recovery after their splashdown in the Pacific, 9 February 1971. They, along with fellow astronaut Cmdr. Edgar D. Mitchell, and the capsule were brought on board New Orleans (LPH 11).

19 JANUARY • Enterprise (CVAN 65) completed sea trials with eight newly designed nuclear reactor cores that contained enough energy to power the ship for ten years.

22 JANUARY • Pilot Cmdr. Donald H. Lilienthal established a world record in the heavyweight turboprop class for long-distance flight in a production model P-3C Orion with a flight of 6,857 statute miles over the great circle route from NAS Atsugi, Japan, to NAS Patuxent River, Md. The 15-hour, 21-minute flight topped the Soviet Ilyushin Il-18 turboprop record of 4,761 miles set in 1967.

26 JANUARY • An AV-8A arrived to commence Board of Inspection and Survey trials for Harriers at NATC Patuxent River, Md.

27 JANUARY • Aircraft commander Cmdr. Donald H. Lilienthal established a world speed record in the

heavyweight turboprop class in a P-3C Orion of 501.44 mph over a 15/25 kilometer course at NATC Patuxent River, Md.

27 JANUARY • NAVAIR directed the expedited procurement of TCW-33P VWS (ventilated wet suits) to permit their issuance to VS and VP squadrons during the winter of 1971–1972. The evaluation of 3,100 VWSs began in 1969, and enthusiastic acceptance by flight crews led to the decision to procure them for early issue rather than phased in.

29 JANUARY • EA-6B Prowlers entered service with VAQ-129 at NAS Whidbey Island, Wash. The carrierbased electronic warfare aircraft were derived from two-place A-6 Intruders and lengthened to accommodate a four-place cockpit, replacing EKA-3B Skywarriors. VAQ-129 (redesignated from VAH-10 in 1970) became the replacement training squadron when it began instructing aircrew and ground support replacement sailors for all the Navy's Prowler squadrons.

31 JANUARY • Hancock (CVA 19), Ranger (CVA 61), and Kitty Hawk (CVA 63) alternated on Yankee Station off Vietnam and launched a total of 3,214 sorties during January, of which 3,128 bombed in Laos. The enemy operated a seasonally high amount of road transport averaging close to 1,000 trucks per day, and A-6 Intruders and A-7 Corsair IIs proved particularly effective attacking this traffic.

31 JANUARY • Apollo 14, manned by Capt. Alan B. Shepard Jr., Cmdr. Edgar D. Mitchell, and Maj. Stuart A. Roosa, USAF, launched from John F. Kennedy Space Center, Fla. Shepard and Mitchell in Lunar Module 8 Antares landed on the moon. On 9 February, the trio in Command Module 110 Kitty Hawk splashed down in mid-Pacific, four miles from the primary recovery vessel, amphibious assault ship New Orleans (LPH 11). SH-3A Sea Kings of HS-6 operating from the ship recovered the astronauts.

4 FEBRUARY • Aircraft commander Cmdr. Donald H. Lilienthal set a world altitude record in horizontal flight for the heavy turboprop class in a P-3C Orion of 45,018.2 feet from NATC Patuxent River, Md.

5 FEBRUARY • Panamanian-flagged ore ship *Flamingo* lost power and drifted about 100 miles east of Sicily. Sixth Fleet destroyers attempted to take her in tow, but rough seas prevented the endeavor. Forrestal (CVA 59), operating in the Ionian Sea, dispatched four SH-3D Sea Kings from HS-3 through winds gusting up to 60 knots to rescue all 20 crewmembers and passengers.

5 FEBRUARY • The Navy announced the successful test firing of a Condor air-to-surface missile armed with a live warhead. An A-6 launched and guided the missile by television to score a direct hit on a target ship sailing out of sight of the Intruder.

8 FEBRUARY • Cmdr. Donald H. Lilienthal established a world altitude record for unlimited weight turboprop planes in a P-3C Orion of 46,214.5 feet, and also time-toclimb records of 3,000 meters in 2 minutes, 51.7 seconds; 6,000 meters in 5 minutes, 46.3 seconds; 9,000 meters in 10 minutes, 26.1 seconds; and 12,000 meters in 19 minutes, 42.2 seconds.



An SH-3A Sea King, BuNo 152121, of HS-6 hoists an Apollo 14 astronaut aloft from command module Kitty Hawk during recovery operations approximately 760 miles south of American Samoa.

17 FEBRUARY • The Weapons Systems Explosive Safety Review Board approved the service use of WMU-1/B pyrotechnic rain and snow seeding devices. These consisted of a silver iodide (catalyst) generator, and the system became the first weather modification type released for production and general use by the Navy. Later in 1971, aircraft used the device over Okinawa to enhance rainfall to help replenish the island's water reserves.

24 FEBRUARY • The Navy disclosed the deployment since June 1967 of acoubuoys—modified submarine-detecting sonobuoys—along trails in Southeast Asia to broadcast passing sounds to aircraft up to 20 miles away. The Naval Air Development Center designed the devices at Warminster, Pa.

28 FEBRUARY • Throughout February, two carriers remained on station off Vietnam as strike sorties rose to an average of 122 per day. This was the result of a 40 percent increase in enemy truck movements from the previous month that averaged more than 1,400 vehicles a day. A-7 Corsair IIs flew night all-weather minelaying missions heretofore flown exclusively by A-6 Intruders.

1971 continued

- 9 MARCH Construction began on a joint Anglo-American naval air and radio communications station on Diego Garcia, British Indian Ocean Territory. Later in the month, Naval Mobile Construction Battalion 40 initiated the main construction effort.
- 10 MARCH On Yankee Station, Ranger (CVA 61) and Kitty Hawk (CVA 63) set a record of 233 strike sorties for one day. During the ensuing six-day period, the ships scored a strikeeffectiveness record that exceeded record performances by Task Force 77 during the previous three-year period.
- 16 MARCH The first SH-2D LAMPS (Light Airborne Multi-Purpose System) helicopter test flight took place at the Kaman Aircraft Corporation, Bloomfield, Conn. This flight followed testing on board escort Sims (DE 1059) to determine deck strength for helicopter operations. Later in the month, the Navy announced the service's intention to commit 115 H-2 Seasprites to the LAMPS program.
- 29 MARCH An NUH-2H Seasprite launched the first active AIM-9G Sidewinder air-to-air missile by the Weapons System Test Division of NATC Patuxent River, Md.
- 31 MARCH Carriers sailing on Yankee Station launched 4,535 strike sorties in the Vietnam War during March of which 4,479 dropped bombs. These figures increased from February by 1,074 and 1,065, respectively. Aircraft flew more than 680 acoubuoy seed and interdiction missions during March with unknown results. About 75 percent of the interdiction packages, however, obtained one or more road cuts while emplacing acoubuoys.
- 1 APRIL HM-12 was established at NAS Norfolk, Va., as the Navy's first helicopter squadron devoted exclusively to mine countermeasures. Squadron helicopters towed specially designed magnetic and acoustic minesweeping equipment to activate enemy mines. HM-12 flew CH-53A Sea Stallions until the deployment of RH-53D Sea Stallions built specifically for mine countermeasures.
- **5 APRIL** The modernization of the Naval Air Reserve continued when VA-303 received the first Reserve A-7A Corsair IIs at NAS Alameda, Calif. By the end of June, the squadron received its full complement of 12 aircraft. Less than four months later, VA-303 made the initial Reserve Corsair II

- deployment and marked the first extended deployment of a Reserve squadron on other than annual active duty training.
- **16 APRIL** A-4M Skyhawks entered squadron service with VMA-324 and -331 at MCAS Beaufort, S.C. The advanced aircraft featured a new self-contained starter, twice the 20mm ammunition load of previous Skyhawks, and 20 percent more thrust (11,200-pounds) than the latest F-variant. These M-models marked the seventh major version of the Skyhawk.
- 16 APRIL VMA-513 at MCAS Beaufort, S.C., took delivery of three AV-8A Harriers, becoming the first operational U.S. high-performance vertical and/or short takeoff and landing (V/STOL) squadron.
- **30 APRIL** Throughout April, Hancock (CVA 19), Ranger (CVA 61), and Kitty Hawk (CVA 63) provided a constant two-carrier posture for Task Force 77 on Yankee Station off Vietnam with one working daylight missions and the other on a noon-to-midnight schedule. During the month, 3,648 strike sorties were flown along with an additional 12 into North Vietnam. The strikes focused on the interdiction of major Laotian entry corridors to South Vietnam.
- 10 MAY Midway (CVA 41) relieved Hancock (CVA 19) off Vietnam. On 18 May, Midway began single-carrier operations, which had not been in effect since January when Kitty Hawk (CVA 63) served a solo two-week tour, on Yankee Station until the end of the month. This allowed Kitty Hawk and Ranger (CVA 61) to undergo maintenance in Japan.
- 21 MAY Technical evaluation of a new fire control system with a helmet-mounted sight began at NATC Patuxent River, Md.
- 28 MAY The Secretary of Defense announced measures to strengthen the Sixth Fleet by noting his intention to improve Fleet readiness by the almost continuous presence of a helicopter carrier, and by a substantial increase in the hours flown by maritime air patrols and the ship-operating days of sea patrols. The move followed an earlier announcement by the Pentagon on 24 May of the strengthening of the Sixth Fleet in response to growing Soviet naval power.
- 31 MAY May strikes during the Vietnam War emphasized interdiction of Laotian entry points to South Vietnam,

Southern Laotian routes leading to Cambodia, as well as corridors throughout the South. Although weather cancellations remained at a comparatively low level, the Seventh Fleet conserved strike sorties by limiting carrier flights to 60-70 per day, resulting in a total of 2,645 sorties that delivered ordnance during the month. North Vietnamese surface-to-air missile (SAM) coverage south of 20°N continued at a high level and the increased SAM threat required additional aircraft in support of strike and reconnaissance flights. Two protective reaction strikes—retaliation in response to enemy attacks or radar tracking—occurred in North Vietnam.

28 JUNE • A proposal by the Naval Training Command Board to consolidate all naval training was approved. The board had convened under the direction of the Chief of Naval Operations on 8 February. Major recommendations included the establishment of a single training command as the chief of Naval Training with headquarters at NAS Pensacola, Fla. The chief of Naval Technical Training was established at Memphis, Tenn. The command of education and programs formerly under the chief of Naval Personnel shifted to the director of Naval Education and Training. The scheme also included the consolidation of three former air training staffs into a single staff with eight training wings to be located at major pilot training bases. Public announcement of the new single training command occurred on 21 July and became effective on 1 August.

29 JUNE • MIL-C-18263F (AS) directed the replacement of matt Light Gull Gray, Federal Standard Color No. 36440, applied to carrier aircraft with glossy Light Gull Gray, Federal Standard Color No. 16440.

30 JUNE • The southwest monsoons with attendant clouds and rain affected the operations of carriers sailing off Vietnam during June, but the realignment of the ships continued. On 5 June, Kitty Hawk (CVA 63) relieved Midway (CVA 41), and on 16 June, Oriskany (CVA 34) began strike operations. A total of 14 two-carrier days and 16 single-carrier days during the month resulted in a monthly strike sortie count of 2,431. The Navy's count for Fiscal Year 1971 totaled 32,230 sorties or 172 under the annual ceiling.

7 JULY • The retirement of the last active duty Skyraider, an NA-1E (BuNo 132443), occurred at NATC Patuxent River,

Md. The aircraft had participated in test programs including slow speed and ordnance release. The plane was restored and hangared at Tyler, Texas.

13 JULY • Deputy Secretary of Defense David Packard issued a new directive defining the policy for acquisition of major defense systems. He sought to return authority to the military departments, subject to approval by the Secretary of Defense at key points in the development acquisition process. The policy included an increased emphasis on the project manager (called program manager in the Department of Defense directive), the reiteration of the importance of maintaining a strong technology base, and the definition of the entire development-acquisition process as three distinct phases: program initiation, full-scale development, and production/deployment.

The new directive emphasized the importance of making accurate cost predictions and realistic schedule forecasts, and of relating the military benefits anticipated from a new technology to the cost of the technology. Prototyping as part of the advanced development effort was to reduce the magnitude of risk, and the operational suitability of a system was to be tested and evaluated before commitment to large-scale production. The policy later acquired the popular description "fly before buy."

24 JULY • Carrier Anti-Submarine Air Group Reserve 80 began antisubmarine operations from *Ticonderoga* (CVS 14). This marked the first time in U.S. Navy history that the Naval Air Reserve demonstrated the capability for immediate employment of fleet-size wings and groups, fully manned, properly equipped, and operationally ready to perform all phases of carrier operations.

26 JULY • Apollo 15 crewed by Col. David R. Scott, USAF; Lt. Col. Alfred M. Worden, USAF; and U.S. Naval Academy graduate, class of 1951, Lt. Col. James B. Irwin, USAF; launched from John F. Kennedy Space Center, Fla. On 30 July, Scott and Irwin in Lunar Module 10 Falcon landed on the moon. On 7 August, one of the three main parachutes of Command Module 112 Endeavor failed and caused a hard splashdown north of Hawaii and six miles from the primary recovery vessel, amphibious assault ship Okinawa (LPH 3). A helicopter carried the astronauts to the ship and Okinawa retrieved Endeavor. Apollo 15 achieved all primary mission objectives.

- 28 JULY HC-7 became the second Navy helicopter squadron to receive the Presidential Unit Citation for duty during the Vietnam War. HAL-3 had previously received the award. The Navy credited HC-7 search and rescue detachments operating from ships at sea on Yankee Station with rescuing 76 aviators. During the early stages of the war, the squadron made several overland rescues in North Vietnam under intense enemy fire.
- 30 JULY During July, Oriskany (CVA 34), Midway (CVA 41), and Enterprise (CVAN 65) served intermittently off Vietnam over a total of 22 two-carrier days and nine single-carrier days that resulted in a monthly strike sortie count of 2,001. On three different occasions, Typhoons Harriet, Kim, and Jean disrupted operations. A slight increase in strike sorties into South Vietnam occurred during the month, consisting mainly of visual strikes against enemy troop positions.
- **30 JULY** The Navy accepted the first operational supersonic BQM-34E Firebee II aerial target. Ryan Aeronautical Corporation developed the aircraft under contract to NAVAIR to maneuver at greater speeds and altitudes than the Firebee variants previously in use. The jetpowered, remote-controlled target system offered sub- and supersonic capabilities up to Mach 1.5.
- 3 AUGUST Pilots of VMA-142, -131, and -133 began qualification landings in A-4L Skyhawks on board Independence (CVA 62). During a three-day period, four active duty and 20 Reserve pilots operated on board the carrier, marking the first time that Marine Aircraft Reserve squadrons qualified for carrier duty.
- 26 AUGUST VAW-124 flew a carrier-based early warning E-2B nonstop across the Atlantic. The Hawkeye left NAS Norfolk, Va., and flew over Newfoundland, Canada, and Lajes, Azores, to reach America (CVA 66) while she sailed with the Sixth Fleet in the Mediterranean.
- **31 AUGUST** Dual carrier operations in the Vietnam War occurred only during the first week of August. Beginning on 16 August, Enterprise (CVAN 65) operated alone on station. Thus, a total of eight two-carrier days and 23 single-carrier days represented a near reversal of July's carrier mix and produced a strike sortie count for the month of 1,915.

- **30 SEPTEMBER** One day of two carriers operating simultaneously marked the only exception to single-carrier operations on Yankee Station throughout September in the Vietnam War. During the first four days, Enterprise (CVAN 65) launched raids, replaced through the middle of the month by Oriskany (CVA 34), and during the last four days, by Midway (CVA 41). The single-carrier posture combined with the low intended sortie rate produced 1,243 strike sorties during the month. On 21 September, Oriskany fliers participated in a joint Air Force-Navy protective reaction strike—retaliation in response to enemy attacks or radar tracking—into southern North Vietnam.
- **5 OCTOBER** HC-4 accepted its first SH-2D LAMPS at NAS Lakehurst, N.J. The squadron became the first command in the fleet to use the new light airborne multipurpose system-configured Seasprites. One week later, HC-5 became the first West Coast squadron to receive the Seasprites at NAS Imperial Beach, Calif.
- **8 OCTOBER** C-5A Galaxys of the 437th Military Airlift Wing airlifted four CH-53 Sea Stallions and about 100 men of the Mobile Mine Countermeasure Command from NAS Norfolk, Va., and Charleston, S.C., to the Sixth Fleet at Souda Bay, Crete. The operation demonstrated a global quick reaction mine countermeasures capability. A detachment of four HM-12 CH-53As recorded the first overseas deployment of the new helicopters. The detachment began sweeping operations upon arrival, and from 2 to 7 November, the squadron participated in the first integration of airborne minesweeping operations into an amphibious assault exercise conducted from amphibious transport dock Coronado (LPD 11).
- 29 OCTOBER HS-15 at NAS Lakehurst, N.J., was established as the first sea control ship squadron. Tactically, the unit was to protect convoys and vessels not operating with or within the protective range of carriers. The HS-15 SH-3H Sea Kings and VMA-513 AV-8A Harriers subsequently carried out tests along these lines on board amphibious assault ship Guam (LPH 9). The evaluations included V/STOL and helicopter compatibility, antisurface tactics, bow and cross-axial landings, night operations, and shipboard control of airborne intercepts.
- 31 OCTOBER Single-carrier operations dominated Yankee Station activity off Vietnam during October

except for the last day. On 10 October, Midway (CVA 41) completed her final line period and the next day Enterprise (CVAN 65) renewed her operations for the remainder of the month with Oriskany (CVA 34) joining the final day. Together the three carriers recorded a monthly total of 1,024 ordnance delivering strike sorties, including 30 into South Vietnam and the balance over Laos. On 20 October, the deployment of two MiGs each south of 20° N at Bai Thuong, Quan Lang, and Vinh, altered the air war in North Vietnam.

8 NOVEMBER • The first S-3A antisubmarine warfare jet was rolled out at Lockheed-California Company, Burbank, Calif. The Vikings were to replace S-2 Trackers.

17 NOVEMBER • The office of the Assistant Secretary of Defense reported the designation of the Navy as the lead service in making aircraft ready for use in Project Grass Catcher—the interception of drug smugglers. During January and February 1972, four OV-10 Broncos operated with the Bureau of Customs.

30 NOVEMBER • A team from NATC Patuxent River, Md., carried out preliminary evaluations of a prototype F-14A Tomcat at the Grumman Corporation's Calverton, N.Y., facility.

30 NOVEMBER • Carriers launched 1,766 ordnancebearing strike sorties including 12 and nine into North and South Vietnam, respectively, and the balance into Laos. Two reconnaissance missions were flown over the airfield at Vinh, and escort aircraft on both missions expended ordnance in a protective reaction role against antiaircraft artillery sites near the field that opened fire. Aircraft also executed other protective reaction strikes during November.

2 DECEMBER • NAF Cam Ranh Bay, South Vietnam, was disestablished. Patrol squadron detachments, which had routinely rotated at NAF Cam Ranh Bay then deployed to NAS Cubi Point, Philippines. At Cam Ranh Bay, the patrol squadrons served as part of the Vietnam Air Patrol Unit under the operational control of Commander Fleet Air Wing 8 or 10. Operational tasking also originated from Commander Task Force 77 on Yankee Station or Commander Seventh Fleet. The patrol squadrons worked closely with Commander Vietnam Coastal Surveillance Force, Task Force 115. Their missions included air patrol

coverage for South Vietnam along the coastline during Operation Market Time—the detection and interdiction of infiltration by North Vietnamese trawlers that smuggled men and supplies into South Vietnam. Patrol squadrons also provided aerial reconnaissance and antisubmarine patrols for ships operating in Yankee Station and other areas of the Gulf of Tonkin and the South China Sea.

2 DECEMBER • Cmdr. George W. White at NATC Patuxent River, Md., became the first Navy test pilot to fly an F-14A Tomcat. By the end of 1971, nine of the jets operated within various flight test programs. Purchase plans called for an eventual total of 313 aircraft—301 for operations and 12 for research and development.

8 DECEMBER • Amphibious Group Alpha, formed around amphibious assault ship Tripoli (LPH 10), received orders to move from Okinawa to the vicinity of Singapore in anticipation of a possible deployment to the Indian Ocean. This action followed indications by the head of the UN relief mission at Dacca, East Pakistan (Bangladesh), of the possible evacuation of foreign civilians as a result of the Indo-Pakistani War of 1971, which began on 3 December. On 10 December, Enterprise (CVAN 65) formed Task Force 74 and departed Yankee Station off Vietnam for the Indian Ocean. Two days later, the Royal Air Force evacuated Westerners from East Pakistan, thereby eliminating the requirement for an American evacuation, but on 15 December, Task Force 74 entered the Indian Ocean as a show of force. On 7 January 1972, Enterprise received orders to sail from the Indian Ocean, and the next morning turned for the Strait of Malacca. On 12 January, she arrived at Subic Bay, Philippines.

8 DECEMBER • Commander-in-Chief, U.S. Pacific Fleet confirmed a requirement previously enunciated by AirPac for a system of video coverage of the entire launch and recovery sequence of carrier operations.

12 DECEMBER • VX-4 reported on an extensive series of evaluations that had begun in 1969 of the visual target acquisition system—a helmet-mounted sight—in F-4 Phantom IIs. The report cited a number of shortcomings but concluded that the sight proved superior to operational equipment used by fighter pilots in air-to-air combat.

- 15 DECEMBER The A-6A Intruders and KA-6D tankers of VMA(AW)-224, embarked on board Coral Sea (CVA 43), reached Yankee Station off Vietnam. Their arrival marked the first Marine Corps squadron to fly combat missions from a carrier into North Vietnam.
- 31 DECEMBER During 1971, the helicopters of HAL-3, the only light attack helicopter squadron in the Navy, flew 34,746 hours in support of their mission to provide quick-reaction armed helicopter close air support for all naval forces and South Vietnamese forces operating in the southern part of South Vietnam. Over the course of this action, HAL-3 lost six aircraft.
- 31 DECEMBER Constellation (CVA 64) and Enterprise (CVAN 65) operated on Yankee Station together during part of the month. After Enterprise was directed on 10 December to sail to the Indian Ocean for the possible evacuation of Americans from East Pakistan (Bangladesh) in connection with the Indo-Pakistani war, the tour of Constellation was extended to the end of the month. On 15 December, Coral Sea (CVA 43) arrived on the line. During December the carriers launched 2,462 ordnance delivery sorties.
- **31 DECEMBER** By the end of the month, the North Vietnamese increased the number of surface-to-air missile launches against allied aircraft, and incursions by MiGs into Laos prompted the Air Force and Navy to develop new tactics and combine efforts to suppress these threats. On 26 December, a major combined effort protective reaction strike began, ending on 30 December. Task Force 77 A-6A Intruders, led by A-7E Corsair II pathfinders, flew 423 strike sorties against targets near Dong Hoi, Quang Khe, and Vinh, North Vietnam. In addition, aircraft flying from Constellation introduced laser-guided bombs (LGB) to battle. The initial 16 trial LGB drops cut roads and were followed by attacks on antiaircraft artillery sites. During 1972, Air Force aircraft dropped LGBs effectively against heretofore indestructible targets such as heavy steel bridge structures built into solid rock.

1972

- **JANUARY** The Greek government approved in principle the concept of homeporting Commander Task Force 60 at Athens. Secretary of Defense Melvin R. Laird recommended Independence (CVA 62) and CVW-7 as the primary commands of the force, and the operation of a satellite airfield at the Greek station of Elefsis to supplement the existing facilities at Souda Bay, Crete.
- 1 JANUARY The area of responsibility assigned to Commander-in-Chief, Pacific was shifted westward to include the Indian Ocean and the Persian Gulf. Construction continued on the U.S. naval communications, refueling, and logistical airstrip facilities on Diego Garcia, British Indian Ocean Territory, to provide communications and logistical support for U.S. forces operating in the Indian Ocean and Persian Gulf.
- 6 JANUARY TraWing-5 was established at NAS Whiting Field, Fla. The new wing, the first established under the reorganization of the Naval Air Training Command, consisted of NASs Whiting and Ellyson Fields, VT-2, -3, and -6, and HT-8. It coordinated and supervised training activities that had previously been the responsibility of each of the stations and squadrons.
- 18 JANUARY Enterprise (CVAN 65) joined Constellation (CVA 64) on Yankee Station off Vietnam after her brief tour in the Indian Ocean.
- **18 JANUARY** Amphibious assault ship *Guam* (LPH 9) began the first in a series of tests to analyze the sea control ship (SCS) concept. The SCS was to operate a smaller complement of aircraft than large carriers (CVA) and to maintain control of the sea lanes in low-threat areas of the world. They were to carry V/STOL aircraft as well as helicopters to protect underway replenishment groups, mercantile convoys, amphibious assault forces, and task groups without aircraft carriers in company.
- 19 JANUARY Pilot Lt. Randall H. Cunningham and radar intercept officer (RIO) Lt. j.g. William P. Driscoll of VF-96 shot down a MiG-21 Fishbed with an AIM-9 Sidewinder missile from an F-4J Phantom II, embarked with CVW-9 on board Constellation (CVA 64). Their victory accounted for

the Navy's 33rd MiG shoot-down in the Vietnam War since 17 June 1965, when pilot Cmdr. Louis C. Page and RIO Lt. John J. Smith Jr., of VF-21 embarked on board Midway (CVA 41), downed a MiG-17 Fresco with an AIM-7 Sparrow missile from an F-4B.

- 21 JANUARY An S-3A Viking made the type's maiden test flight at Lockheed-California Company, Palmdale, Calif. Vikings met the Navy's requirement for aircraft capable of flying in excess of 400 knots to replace aging S-2s, and their enhanced speed, range, and sensors enabled them to search nearly three times the area covered by Trackers.
- **31 JANUARY** The withdrawal of U.S. ground troops from the Vietnam War and light fighting ashore ensured a low level of air operations during January, a situation that continued generally throughout the first three months of the year. During the month, only eight Navy tactical air attack sorties occurred over South Vietnam and a handful of protective reaction strikes over North Vietnam.
- 11 FEBRUARY As a result of the shift from piston engine to jet aircraft, the Navy announced the closure of the Aviation Machinist's Mate Class B School on reciprocating engines at NATC Memphis, Tenn.
- 11 FEBRUARY The Navy announced that the development and installation of mufflers on engine test cells had eliminated 85 percent of the audible noise in testing jet engines for A-3 Skywarriors at Naval Air Rework Facility Alameda, Calif.
- **29 FEBRUARY** During the month, naval air attack sorties into South Vietnam rose to 733 because of allied preemptive operations in preparation for an expected large-scale enemy offensive during Tet, which did not materialize. Hancock (CVA 19), Coral Sea (CVA 43), and Constellation (CVA 64) served overlapping tours on Yankee Station to assure the availability of at least two carriers on station at a time.
- **10 MARCH** During the period from 5 January through this date, protective reaction strikes increased. Navy and Air Force aircraft flew 90 such strikes against surface-to-air missile and antiaircraft artillery installations, compared to 108 similar raids during all of 1971.

- 16 MARCH HAL-3 was disestablished.
- **23 MARCH** VMA-513 completed the Harrier Department of Defense sortie rate validation and demonstrated the capability of Harriers to respond rapidly and repeatedly to requests for close air support while operating from austere forward bases. During the ten-day test, the squadron flew 376 sorties with six operational AV-8As.
- 24 MARCH A QF-4B target aircraft arrived for testing at the Naval Missile Center Point Mugu, Calif. The Phantom II had undergone conversion from combat configuration at Naval Air Development Center, Warminster, Pa. The aircraft fulfilled the requirement for a full-size, high-altitude, supersonic, maneuvering aerial target capable of flying at altitudes in excess of 50,000 feet and at airspeeds exceeding twice the speed of sound.
- 29 MARCH The Atlantic Fleet Weapons Range used a supersonic BQM-34E for the first time during missile defense exercises with frigate Wainwright (DLG 28). A DP-2E Neptune launched the Firebee II from an altitude of 20,000 feet, and the target accelerated to Mach 1.52 to test the ship's ability to withstand penetrations by high-altitude, high-speed enemy aircraft.
- **29 MARCH** The Naval Air Technical Training Unit's Photographer's Mate Class "A" School renewed flight training as part of the course. Fleet demand for qualified aircrew drove the action after a 16-year suspension of the requirement.
- **30 MARCH** Naval air attack sorties over South Vietnam dropped to 113 during March. On 23 March, the United States canceled further peace negotiations in Paris, France, because of a lack of progress in the talks. On this date, the North Vietnamese launched the Nguyen Hue Campaign into South Vietnam, dubbed by journalists the "Easter Offensive." President Richard M. Nixon activated Tactical Air Command Operation Plan 100 known as Constant Guard—support for the remaining U.S. advisors in South Vietnam and the South Vietnamese forces. Hancock (CVA 19) and Coral Sea (CVA 43) sailed on Yankee Station when the offensive began, and during the month, Kitty Hawk (CVA 63) and Constellation (CVA 64) rotated through the fighting.

- 1 APRIL VAL-4 departed South Vietnam. The squadron, which flew OV-10A Broncos, primarily from Binh Thuy, comprised the last Navy combat force in that country.
- **5 APRIL** In reaction to the North Vietnamese invasion of South Vietnam, Operation Freedom Trail involved Navy tactical air sorties against enemy military and logistic targets in the southern part of North Vietnam between 17° and 19°N. At times, aircraft also bombed special targets above the 19th parallel. The magnitude of the North Vietnamese offensive required an extended logistics network and increased resupply routes to sustain their invasion. The Americans gradually lifted many target and geographical restrictions that had been in effect since October 1968 and expanded the list of authorized targets. By the end of April the revised directives permitted attacks throughout the region below 20°25'N and special strikes above the 20th parallel.
- **6 APRIL** VMFA-115 F-4B and VMFA-232 F-4J Phantom IIs arrived at Da Nang AB, South Vietnam, from MCAS Iwakuni, Japan. The Marines deployed as part of the reinforcements to support the South Vietnamese, particularly around An Loc, Kontum, Pleiku, and Quang Tri. On 14 April, VMFA-212 F-4Js arrived from MCAS Kaneohe, Hawaii. Targets for Marine sorties included enemy tanks, trucks, and troops, and enabled the South Vietnamese to regroup north and west of Hué.
- 6 APRIL An F-14A Tomcat arrived at NATC Patuxent River, Md., for a series of catapult launches, automatic carrier landing system checks, airspeed system calibrations, and weight and balance checks to determine the suitability of the fighters for naval operations.
- 7 APRIL During the week ending this date, Navy aircraft flew 680 sorties in South Vietnam to counter North Vietnamese troop concentrations and their equipment flow, and to assist the South Vietnamese with close air support, direct air support, and interdiction missions. This week marked a five-fold increase in naval air sorties since March.
- 11 APRIL A P-3 performed the first drop test of a BGM-84A Harpoon stand-off antiship missile from 20,000 feet over the Naval Missile Center Point Mugu, Calif. An AGM-84 air-to-ground version subsequently entered the fleet.

- 12 APRIL The P-3C Acoustic Sensor Operator Trainer (Device 14B44) became available for training aircrew at the Fleet Aviation Specialized Operational Training Group, Pacific Detachment. The simulator duplicated the real world conditions of underwater acoustical data and the detection, classification, and localization procedures of the Orion AQA-7 Jezebel system.
- 14 APRIL For the week ending this date, Navy aircraft averaged 191 sorties per day, primarily against targets to the west and north of Quang Tri, South Vietnam, a 97 percent increase over the previous week.
- **16 APRIL** Apollo 16, manned by Capt. John W. Young; Lt. Col. Charles M. Duke Jr., USAF; and Lt. Cmdr. Thomas K. Mattingly II; launched from John F. Kennedy Space Center, Fla. On 19 April, Young and Duke in Lunar Module 11 Orion landed on the moon. On 27 April, Command Module 112 Casper splashed down in the mid-Pacific several miles from primary recovery ship Ticonderoga (CVS 14). An SH-3G Sea King of HC-1, embarked on board *Ticonderoga*, retrieved the astronauts. Apollo 16 achieved all primary mission objectives of lunar and space exploration and experimentation.
- **16 APRIL** Aircraft from Coral Sea (CVA 43), Kitty Hawk (CVA 63), and Constellation (CVA 64), flew 57 sorties in the Haiphong area of North Vietnam in support of Air Force B-52 strikes on petroleum storage facilities during Operation Freedom Porch.
- 25 APRIL During the final six days of April, A-4F Skyhawks of VA-55, -164, and -211 flying from Hancock (CVA 19) struck the North Vietnamese and People's Liberation Armed Forces around Kontum and Pleiku. South Vietnam. A-6A Intruders from VA-165 and A-7E Corsair IIs of VA-146 and -147, embarked on board Constellation (CVA 64), attacked the enemy around An Loc in support of South Vietnamese troops, in some cases only 40 miles outside the capital of Saigon.
- 28 APRIL An F-14A Tomcat over the Naval Missile Center Point Mugu, Calif., launched an AIM-54A Phoenix air-to-air missile for the first time.
- **30 APRIL** The expansion of naval air operations in the Vietnam War led to a total of 4,833 Navy sorties over South

Vietnam and 1,250 sorties into North Vietnam during April. The Marines flew 537 sorties over South Vietnam. The increased effort included the deployment of four carriers. Hancock (CVA 19) and Coral Sea (CVA 43) had sailed to Yankee Station when the North Vietnamese spring offensive began. On 3 April, Kitty Hawk (CVA 63) arrived at Yankee Station, followed on 7 April by Constellation (CVA 64). Between 8 and 30 April, the Navy effort grew gradually from 240 sorties a day to a peak of more than 300, resulting in a monthly average of 270 sorties per day.

- 1 MAY Improved weather conditions during the first seven days of May facilitated a daily average of 97 Navy attack sorties into North Vietnam and 168 into South Vietnam. The first week also witnessed the enemy's deployment of SA-7 Grail infrared-seeker surface-to-air missiles.
- 4 MAY The Navy unveiled its first night carrier landing trainer, for A-7E Corsair IIs, at NAS Lemoore, Calif.
- **5 MAY** The P-3Bs of VP-9 departed NAS Moffett Field, Calif., for NAS Cubi Point, Philippines. The Orions subsequently augmented aircraft tasked with ocean surveillance patrols concerning the mining of North Vietnamese harbors and the corresponding movement of Eastern Bloc ships.
- **6 MAY** In the second most active Navy dogfight day of the Vietnam War, two F-4B Phantom IIs, crewed by pilot Lt. Gary L. Weigand and radar intercept officer (RIO) Lt. j.g. William Freckleton of VF-111, and pilot Lt. Cmdr. Jerry B. Houston and RIO Lt. Kevin T. Moore of VF-51, both jets embarked on board Coral Sea (CVA 43), each shot down a MiG-17 Fresco with an AIM-9 Sidewinder air-to-air missile. Two F-4Js manned by pilot Lt. Robert G. Hughes and RIO Lt. j.g. Adolph J. Cruz, and pilot Lt. Cmdr. Kenneth W. Pettigrew and RIO Lt. j.g. Michael J. McCabe, from VF-114 embarked on board Kitty Hawk (CVA 63), each shot down a MiG-21 Fishbed with a Sidewinder.
- 7 MAY A tank cart defueling Apollo 16 Command Module 112 Casper after its return from the lunar mission exploded because of overpressurization at NAS North Island, Calif. Forty-six people suspected of inhaling of toxic fumes underwent hospitalization but examination did not reveal symptoms of inhalation.

- 8 MAY For the first time in more than three weeks, U.S. air power, including 50 Navy sorties, attacked targets in the vicinity of Hanoi, North Vietnam. Naval aircraft flew another 96 sorties into southern North Vietnam between Hanoi and the Demilitarized Zone, while 99 sorties were directed against the enemy in South Vietnam.
- 9 MAY Operation Pocket Money—the mining of the principal North Vietnamese ports—began. An EC-121M Constellation from Da Nang Air Base and an EKA-3B Skywarrior of VAQ-135 Detachment 3 from Coral Sea (CVA 43) supported the minelaying. *Kitty Hawk* (CVA 63) launched 17 diversionary ordnance delivering sorties against a railroad siding at Nam Dinh, but poor weather compelled the aircraft to divert to secondary targets at Thanh and Phu Qui.

Cmdr. Roger E. Sheets, commander of Carrier Air Wing 15, led three A-6As from VMA(AW)-224, and Cmdr. Leonard E. Guiliani led six A-7Es of VA-22 and -94 from Coral Sea. Each Intruder and Corsair II carried four 2,000pound Mk 52-2 magnetic mines. Bombardier/navigator Capt. William R. Carr, USMC, flew in the lead Intruder to establish the critical attack azimuth and timed the release of the mines. The Marines dropped 12 mines in the inner channel of Haiphong Harbor and the Corsair IIs placed 24 in the port's outer channel. All the mines were set with 72-hour arming delays to permit merchant ships time for departure or a change in destination consistent with a public warning by President Richard M. Nixon. Supporting aircraft flew 150 fighter escort, bombing of surfaceto-air missile sites, diversionary strike, and electronic countermeasures sorties. The raiders surprised the North Vietnamese and met minimal resistance.

These missions initiated a campaign that sowed 108 Mk 52-2s and at least 11,603 Destructor (DST) mines in 1,149 sorties from ten carriers at Cam Pha and Hon Gay, and in the river estuaries of Cap Mui Ron, Cua Sot, Dong Hoi, Quang Khe, Thanh Hoa, and Vinh, along with Cua Day and Cua Lac Giang, south of Don Son and Haiphong. On Christmas Eve, an A-7E Corsair II from Ranger (CVA 61) was lost on a reseeding mission to Cam Pha. On 14 January 1973, a VA-35 Intruder from America (CVA 66) flew the last mining mission. The Air Force also dropped 2,048 DSTs to interdict trains and trucks. Pocket Money played a significant role in bringing about a peace arrangement, because the mining hampered the enemy's ability to receive war supplies.



In the VF-96 ready room on board Constellation (CVA 64), Lt. Randall H. Cunningham demonstrates how he and Lt. j.g. William P. Driscoll shot down three MiG-17 fighters over North Vietnam on 10 May 1972. Damage to their F-4J Phantom II forced them to eject after their combat, but they were quickly rescued by a helicopter from Okinawa (LPH 3).

10 MAY • On 9 May, President Richard M. Nixon announced an air campaign against the North Vietnamese named Operation Linebacker—subsequently designated Linebacker I. This counteroffensive emerged as an outgrowth of Operation Freedom Trail and the chief executive's mining declaration during Operation Pocket Money. Its three principal objectives were the destruction of military supplies within North Vietnam, the isolation of North Vietnam from external suppliers, and stoppage of the supply flow to their troops in South Vietnam. On this date, the Navy launched the first attacks of Linebacker I during a shift from targets in southern North Vietnam to the coastal region from Haiphong north to the Chinese border. Carriers launched 173 attack sorties into North Vietnam and 62 into South Vietnam.

Navy flyers shot down eight MiGs during a day of intense air-to-air combat. Pilot Lt. Randall H. Cunningham and radar intercept officer Lt. j.g. William P. Driscoll of VF-96, embarked on board Constellation (CVA 64), shot down three MiG-17 Frescoes with AIM-9 Sidewinder airto-air missiles from their F-4J Phantom II. These victories, combined with their claims of a MiG-21 on 19 January and a Fresco on 8 May, made Cunningham and Driscoll the first MiG aces of the Vietnam War.

Most of the raids consisted of armed reconnaissance flights against targets of opportunity within three main areas near Hanoi, Haiphong, and the Chinese border, and of preplanned strikes against fixed targets. During Linebacker I, the Navy contributed more than 60 percent of the total sorties into North Vietnam, with about 25 percent of them at night. A-6 Intruders and A-7 Corsair IIs comprised the principal Seventh Fleet bombers and accounted for roughly 15 and 60 percent of the naval attack sorties, respectively. The heaviest tactical air operations occurred from July to September with 12,865 naval sorties. On 22 October, the imposition of restrictions on operations above 20°N because of ongoing peace negotiations curtailed Linebacker I.

10 MAY • NAVAIR promulgated a plan for the management of advanced prototype development and demonstration of a thrust-augmented wing attack plane-fighter V/STOL aircraft. The planned establishment of a prototype development manager under the deputy commander for Plans and Programs was to be assisted by a small cadre of management and technical people located in the assistant commander for research and technology's organization and at the contractor's facility.

13 MAY • CH-46D Sea Knights and CH-53D Sea Stallions of HMM-164, embarked on board amphibious assault ship Okinawa (LPH 3), airlifted 1,000 members of the South Vietnamese 369th Marine Brigade from a landing zone near Hué to an area 24 miles northwest of the city behind North Vietnamese lines.

17 MAY • A-4E Skyhawks of VMA-211 and -311 arrived from Japan at the recently reactivated base at Bien Hoa, South Vietnam. The Marines concentrated air strikes against enemy troops surrounding An Loc and responded to calls from counterattacking South Vietnamese forces in adjacent areas.

18 MAY • The scope of the air war in Vietnam changed when aircraft bombed an electric power plant at Uong Bi near Haiphong, North Vietnam. This raid marked the beginning of strikes on a class of targets formerly avoided including power plants, shipyards, and a Haiphong cement plant. Over 60 of the more than 200 naval sorties into North Vietnam that day occurred in the Haiphong region, the first since 10 May.

25 MAY • Secretary of the Navy John W. Warner signed the Incidents at Sea Agreement between the United States and Soviet Union. There were 15 serious incidents of Eastern Bloc aircraft firing on U.S. Navy planes since 1945. This



Lt. Curt Dose explains how he and Lt. Cmdr. James McDevitt of VF-92 shot down a North Vietnamese MiG-21, 10 May 1972. Their victory was one of ten that day by Constellation (CVA 64) aircraft.

agreement was designed to help prevent unintentional incidents between the two navies and to reduce tension on and over the high seas.

31 MAY • During the month, Navy aircrew flew 3,949 attack sorties into North Vietnam as compared to 1,250 during April; those into the South numbered 3,290 for May compared to 4,833 the previous month. While naval sorties into South Vietnam dropped by more than 500 from the previous month, Marine missions over South Vietnam increased from 543 in April to 1,502 during May. Targets in North Vietnam hit by naval planes increased to 2,416 in May from 719 during April. Railroads accounted for 16 percent of the targets bombed, roads and trucks 14, storage areas 13, and bridges 10 percent. During May, naval flyers shot down 16 enemy jets including 11 MiG-17 Frescoes, two MiG-19 Farmers, and three MiG-21 Fishbeds over North Vietnam. The Navy lost six aircraft including two F-4 Phantom IIs and two A-7 Corsair IIs to SA-2 surface-to-air missiles, and one F-8 Crusader and one RA-5 Vigilante to unknown causes.

1972 continued

Saratoga (CVA 60) joined five other carriers on Yankee Station during the month to raise carrier strength to six ships—the greatest number since the war began. The fighting reached a stalemate as air power and the regrouped South Vietnamese halted the North Vietnamese forward thrust.

20 JUNE • The A-6A Intruders of VMA(AW)-533 arrived at Nam Phong, Thailand, as a reaction to the North Vietnamese attacks in the South Vietnamese highlands. A joint Navy/ Marine engineering team prepared the advance base by hacking roads and aircraft parking and storage areas from the jungle. Marine Task Force Delta, KC-130 Hercules of VMGR-152 Detachment D, CH-46 Sea Knights of H&MS-36 Detachment D, and VMFA-115 F-4B and VMFA-232 F-4J Phantom IIs arrived at the base from 23 May to 18 June.

21 JUNE • Pilot Cmdr. Samuel C. Flynn Jr. and radar intercept officer (RIO) Lt. William H. John of VF-31, embarked on board Saratoga (CVA 60), shot down a MiG-21 Fishbed with an AIM-9 Sidewinder air-to-air missile from an F-4J Phantom II. Their victory marked the third MiG downed by Navy pilots during June. Earlier, on 11 June, pilot Cmdr. Foster S. Teague and RIO Lt. Ralph M. Howell, and pilot Lt. Winston W. Copeland with RIO Lt. Donald R. Bouchoux, all of VF-51 embarked on board Coral Sea (CVA 43), shot down two MiG-17 Frescoes with Sidewinders from their F-4Bs in the Nam Dinh area of North Vietnam.

21 JUNE • The chief of Naval Material directed Commander, Naval Electronic Systems Command (ELEX) to assume the responsibility and authority for final decisions in development, acquisition, and support for equipment and capabilities that provided platform-to-platform command, control, and communications involving satellites, air, surface, and subsurface elements. The directive included a proposal to rename the ELEX to reflect this assignment and prohibited large-scale lateral movements between the systems commands.

Despite these qualifications, a dispute arose as to whether ELEX was to undertake the detailed management of most of the electronic material program or to apply control through broadly gauged decisions. The decision transferred project management offices for Space (PM-16) and Reconnaissance, Electronic Warfare, and Special Operations (REWSON PM-7) from the chief of Naval Material to Commander, ELEX (PME-107),

and redesignated NAVAIR's Electronic Warfare Project Management Office as REWSON, followed by the physical merging of the two REWSON project management offices with a double hatting of the incumbents.

23 JUNE • HS-2, -15, -74, and -75 aided flood victims in the Wilkes-Barre, Scranton, and Pottstown areas of Pennsylvania. The squadrons carried out evacuation, and medical, food, and clothing supply flights.

29 JUNE • NAVAIR announced the formation of a "Buddy-Up" program whereby Reserve officers attached to NAVAIR Reserve Units were to establish a working relationship with various NAVAIR activities. Planners envisioned the program as a means for Reserve officers to identify and undertake meaningful project work for the activities.

30 JUNE • Naval aircraft flew 2,021 tactical air attack sorties into South Vietnam during June, a decrease in comparison to the figures for April and May that reflected the stalemated fighting on the ground. The Navy launched 3,844 attack sorties in June against Operation Linebacker I targets in North Vietnam. Attacks against the road transport system, water transport craft, and storage targets increased from pre-June levels. The greatest number of Navy concentrated strikes that involved ten or more attack aircraft striking a compact cluster of targets took place from April through June, and comprised 40 percent of its total attack effort.

1 JULY • A reorganization of the Naval Air Training system occurred with the disestablishment of Naval Air Advanced Training Command and the relocation of chief of Naval Air Training to NAS Corpus Christi, Texas. This was part of the Navy's effort to consolidate training under the "single base training" concept—the assignment of pilots after their completion of primary training to a specific program training in jets, propeller-driven aircraft, or helicopters. The pilots were to complete this training at one specific base before receiving their wings. The new structure/organization fell under the control of the chief of the Naval Air Training Command.

1 JULY • Tactical Electronic Warfare Wing 13 was disestablished at NAS Whidbey Island, Wash. The wing had been established to introduce EA-6B Prowlers into the fleet. **15 JULY** • A three-day test demonstration of the ability of a UH-2C to fire Sparrow III air-to-air missiles configured to attack surface targets concluded at the Pacific Missile Range, Sea Test Range, Calif. The modified Seasprite carried a single missile mounted on a rail launcher, and fired a total of four Sparrow IIIs during the demonstration.

22 JULY • Typhoon Rita caused disastrous flooding that affected tens of thousands of people across the central Luzon valley between Manila and Lingayen Gulf, Philippines. Amphibious assault ship Tripoli (LPH 10), with HMM-165 embarked, arrived in Subic Bay to provide relief support. The Marine helicopters evacuated more than 2,000 flood victims to Tripoli.

31 JULY • On 24 May, the Navy began regular night operations in the Vietnam War. During June and July, night sorties constituted 30 percent of the total Navy attack effort into North Vietnam. These raids relied primarily on A-6 Intruders and A-7 Corsair IIs. The Intruders flew more night than day armed reconnaissance sorties during the summer months, and the Corsair IIs flew about as many night as day sorties. About 45 percent of the Navy armed reconnaissance effort took place at night during June and July. The total number of Navy night sorties during those months numbered 1,243 and 1,332, respectively. During the summer, an operational average of three to four carriers sailed on Yankee Station.

31 JULY • During the summer months, a dramatic change in the North Vietnamese air defense effort occurred. In April and May, the Navy air effort into the North involved intensive air-to-air combat and a large number of surface-toair missile (SAM) launches. In contrast, during June and July, the number of Linebacker I Navy attack sorties increased, but the number of air-to-air battles and SAM firings decreased. MiG kills by Navy aircraft decreased to three in June and zero in July compared to 16 in May. After mid-June, almost all North Vietnamese aircraft sighted or engaged consisted of MiG-21 Fishbeds. Navy aerial encounters took place primarily against Fishbeds and represented a considerable change from the 11 MiG-17 Frescoes of 16 Navy kills that occurred in May.

5 AUGUST • Amphibious assault ship New Orleans (LPH 11) relieved Tripoli (LPH 10) during Typhoon Rita flood relief

operations in the Philippines. HMM-165 transferred to New Orleans to continue support because of the Marines' knowledge of terrain and problems inherent in the operations.

6 AUGUST • A North Vietnamese surface-to-air missile shot down A-7A Corsair II, BuNo 153147, piloted by Lt. James R. Lloyd of VA-105 operating from Saratoga (CV 60), during a night armed reconnaissance mission about 20 miles northwest of Vinh. Pilot Lt. Harry J. Zinser, crew chief AE3 Douglas G. Ankney, and aircrewman AN Matthew Szymanski of HC-7 Detachment 110, manned an HH-3A that rescued Lloyd, supported by aircraft from Midway (CVA 41) and Saratoga. Zinser flew the Sea King inland over mountains the following day and used its searchlight to assist in locating and rescuing the downed man despite heavy ground fire. This retrieval marked the deepest penetration of a SAR helicopter into North Vietnam since 1968. Over all of 1972, the detachment completed 48 rescues including 35 under combat conditions.

17 AUGUST • The Naval Material Command and the Air Force Systems Command reached an agreement relating to Navy and Air Force responsibilities for aircraft engine production at the Pratt & Whitney Aircraft Divisions, East Hartford, Conn., and West Palm Beach, Fla. The memorandum of agreement provided the assignment of an Air Force deputy plant representative and staff to the Naval Plant Representative Office (NAVPRO) to represent the F-15 Eagle program director on F-15 matters and to advise the NAVPRO on the in-plant management of Air Force engine programs.

29 AUGUST • Vought Aeronautics test pilot John Konrad made the first flight of a modified A-7E Corsair II in a two-seat version under development by the company to demonstrate to the Air Force and Navy the advantages of the configuration for use as an advanced trainer or for such tactical duties as electronic countermeasures.

31 AUGUST • Navy aircraft flew 4,819 sorties into North Vietnam in August as the downward trend of Navy attack sorties over the South continued. A stepped-up campaign in the Mekong Delta accounted for a sharp rise in Marine Corps air activity in South Vietnam—from 8 percent of the total allied air effort during May to 43 percent during

1972 continued

August. In August, the Marines concentrated their air efforts in the South but contributed significantly to U.S. efforts in the North to prevent the offloading and transportation of supplies from Chinese merchant ships at Hon La and Hon Nieu. In late June, seven AH-1Js of HMA-369 operated from amphibious transport dock Denver (LPD 9) against water transport traffic, and in early August from Cleveland (LPD 7). In August, the operations of HMA-369 expanded to include night surveillance and attack, and the helicopters also served as air spotters for naval gunfire and as airborne tactical controllers.

11 SEPTEMBER • Pilot Maj. Lee T. Lassiter, USMC, and radar intercept officer Capt. John D. Cummings, USMC, in a VMFA-333 F-4J Phantom II operating from America (CVA 66), downed a MiG-21 Fishbed with an AIM-9 Sidewinder air-to-air missile near Phuc Yen, North Vietnam. This victory marked the only MiG kill for the Navy/Marine Corps during September, and brought the total of MiGs downed by naval aircrew since the beginning of the war to 55.

30 SEPTEMBER • The number of Navy tactical air attack sorties in the Vietnam War decreased during September from the level flown in August. Navy aircraft flew 3,934 sorties into North Vietnam, some 800 fewer that the previous month. During July and August, more than 45 percent of the Navy armed reconnaissance sorties occurred at night, but that figure dropped to 31 percent in September. There was a similar decline in sorties flown in the South— 1,708. About half the Navy's tactical air sorties consisted of close and direct air support missions in South Vietnam. Marine Corps activity stayed relatively high during the month—1,296 sorties—because of increased fighting in the Mekong Delta.

1 OCTOBER • VF-1 and -2 at NAS Miramar, Calif., were established as the first two F-14A Tomcat squadrons.

8 OCTOBER • VF-124, the lone training squadron that served all Tomcat fighter squadrons of the Atlantic and Pacific Fleets, received its first F-14A.

11 OCTOBER • A series of racially motivated disturbances occurred on board Kitty Hawk (CVA 63) while she operated in support of Operation Linebacker I off Vietnam.

Extended deployments and long line periods compounded the strain generated by the racial tension endemic throughout the armed forces. On this date, a series of incidents led to fighting between whites and blacks across a number of areas of the ship including the sick bay and hangar deck. Marines, officers, chief petty officers, and the ship's master-at-arms force helped restore order. Commanding officer Capt. Marland W. Townsend and African American executive officer Cmdr. Benjamin W. Cloud several times addressed rioters including African American sailors armed with aircraft tie-down chains. Cloud's efforts in particular helped defuse the situation, and the crowd dispersed and threw their weapons overboard. The Medical Department reported 47 injuries and, on 13 October, the ship resumed air strikes. The riot on board Kitty Hawk and conflicts during this period on several other ships including Constellation (CVA 64) caused the Navy to place more emphasis on equal opportunity and diversity.

23 OCTOBER • The United States ended all tactical air sorties into North Vietnam above the 20th parallel and brought to a close Operation Linebacker I raids as a goodwill gesture to promote the peace negotiations in Paris, France. From May through October, Navy aircraft flew a total of 23,652 attack sorties into North Vietnam, which helped stem the flow of supplies into South Vietnam.

31 OCTOBER • Navy aircraft flew 2,661 tactical sorties into North Vietnam and 2,097 into the South, along with 1,599 by Marines, during October. Air operations there followed the general pattern of the ground war. The North Vietnamese increased their small-scale attacks throughout the South in an apparent effort to gain territory before a cease-fire. The main objective of Navy and Marine tactical air sorties thus became close and direct air missions in support of allied ground troops.

22 NOVEMBER • Adm. Arthur W. Radford (Ret.) officiated at groundbreaking ceremonies for the new Naval Aviation Museum building at NAS Pensacola, Fla. The former chairman of the Joint Chiefs of Staff also served as the chairman of the Naval Aviation Museum Association, Inc.

30 NOVEMBER • Close and direct air support attacks comprised more than 75 percent of all known targets of the Navy tactical air sorties flown into South Vietnam during

October and November. The percentage of Navy sorties flown for interdiction purposes there decreased markedly during that period compared to the previous spring and summer months.

7 DECEMBER • The final manned lunar mission, Apollo 17, crewed by Capt. Eugene A. Cernan, Cmdr. Ronald E. Evans, and geologist Harrison H. Schmitt, launched from John F. Kennedy Space Center, Fla. On 11 December, Cernan and Schmitt in Lunar Module 12 Challenger landed on the moon. On 19 December, command module America splashed down in the mid-Pacific several miles from the primary recovery ship Ticonderoga (CVS 14). An SH-3G Sea King of HC-1 Detachment 3 recovered and returned the crew to Ticonderoga, the mission having achieved all the primary objectives. Naval aviation squadrons and ships performed all the recovery operations for the 11 Apollo missions, and 22 of the 33 astronauts involved in the Apollo program had Navy backgrounds.

13 DECEMBER • An SH-3G from HC-1 Detachment 5 rescued Lt. Thomas B. Scott of VFP-63 Detachment 4 when he crashed in an RF-8G Crusader, BuNo 144608, while launching from *Oriskany* (CVA 34) in the Gulf of Tonkin. Scott was the 15th pilot rescued by HC-1 detachments while operating on board Yankee Station carriers during 1972 and, over the year, the squadron rescued a total of 36 men including the 15 pilots.

17 DECEMBER • From 23 October through 17 December, the United States halted bombing above the 20th parallel in North Vietnam.

18 DECEMBER • President Richard M. Nixon attempted to force the communists into earnest peace negotiations by launching Operation Linebacker II. This intensified version of Linebacker I resumed strikes above the 20th parallel including raids against hitherto restricted areas near Hanoi and Haiphong. The Americans reseeded mine fields and carried out concentrated strikes against surface-to-air missile and antiaircraft artillery sites, army barracks, petroleum storage areas, naval and shipyard areas, and railroad and truck stations. The Navy flew 505 sorties centered on the coastal areas around Hanoi and Haiphong. Between 18 and 22 December, it conducted 119 Linebacker II strikes into North Vietnam with harsh weather limiting the number of

attacks flown. On 29 December, the operation concluded when the North Vietnamese returned to the Paris, France, peace table.

23 DECEMBER • VA-56 concluded its seventh line period while deployed with Carrier Air Wing 5 on board Midway (CVA 41). The squadron recorded 180 days on the line, flew 5,582.9 combat hours on more than 3,000 sorties, performed 2,090 day and 781 night carrier landings, and amassed 6,301 flight hours. The squadron lost four A-7B Corsair IIs to antiaircraft artillery fire and surface-to-air missiles, with two pilots taken prisoner-of-war, one listed as missing in action, and one rescued.

25 DECEMBER • Beginning at 2400 on Christmas Eve, none of the U.S. air services flew sorties in the Vietnam War during a 24-hour holiday bombing halt. The North Vietnamese used the truce to repair damage, draw lessons, and analyze tactics. Since the beginning of Operation Linebacker II, B-52s had carried out 420 raids, with 122 on 18 December, the highest number. Task Force 77 carrier strikes and tactical aircraft from Thailand supplemented the raids, mainly to suppress missile sites and confuse North Vietnamese air defense systems. Heavy attacks resumed on 26 December with 113 B-52 raids, the next highest sortie count.

28 DECEMBER • Pilot Lt. j.g. Scott H. Davis and radar intercept officer Lt. j.g. Geoffrey H. Ulrich, in an F-4J Phantom II of VF-142 embarked on board Enterprise (CVAN 65), downed a MiG-21 Fishbed with an AIM-9 Sidewinder air-to-air missile. Their victory marked the 24th MiG downed by Navy/Marine aircrews during 1972.

29 DECEMBER • Heavy raids around Hanoi, which had resumed the day after the Christmas bombing halt, eased when the North Vietnamese showed indications of returning to the conference table. More than 700 sorties by B-52 Stratofortresses during the 11 heavy-bombing days strongly influenced the communist decision to resume negotiations, which led to the peace agreement and the release of U.S. POWs. American bombing and electronic warfare virtually paralyzed North Vietnamese air defenses, which failed to shoot down a single B-52 during the 160 raids flown on 28 and 29 December. Only 2 percent—15 B-52s—were lost during more than 700 Operation Linebacker II raids.

30 DECEMBER • The United States called another bombing halt in North Vietnam and the Navy ended all tactical air sorties above the 20th parallel because of the resumed peace talks.

31 DECEMBER • In summary for 1972, the Navy conducted more than 60 percent or 28,093 of the tactical air attack sorties flown into North Vietnam where the Navy and Marine Corps lost 49 aircraft. Carriers spent a total of 1,403 on-line days at Yankee Station, with an average period of slightly more than 25 days for each ship. The Navy conducted 33.9 percent of all tactical air attack sorties flown into South Vietnam, where its fixed-wing aircraft flew 23,802 tactical air attack sorties and dropped 160,763 generalpurpose bombs, and Marine fixed-wing aircraft delivered 111,859 general-purpose bombs. The Navy and Marine Corps each lost five fixed-wing aircraft in the South.

1973

- 1 JANUARY A major reorganization in Naval Reserve affairs began as a result of the announcement two days earlier by the Secretary of the Navy of the consolidation of the Naval Surface and Air Reserve Commands into Commander Naval Reserve Force located in New Orleans, La.
- 8 JANUARY Representatives of the U.S. and Greek navies signed an accord in Athens formally granting the Sixth Fleet homeport facilities in the Athens vicinity. The arrangement provided for the stationing of one of the Sixth Fleet's two carrier task forces in the Athens area.
- 12 JANUARY Pilot Lt. Victor T. Kovaleski and radar intercept officer Lt. James A. Wise of VF-161, embarked on board Midway (CVA 41), shot down a North Vietnamese MiG-17 Fresco with an AIM-9 Sidewinder air-to-air missile from their F-4B Phantom II. Theirs was the last victory of the war, making a total of 62 enemy aircraft shot down by Navy and Marine Corps pilots during the Vietnam War.
- **27 JANUARY** The Vietnam cease-fire, announced four days earlier, came into effect. Oriskany (CVA 34), Ranger (CV 61), Enterprise (CVAN 65), and America (CVA 66) sailed on Yankee Station and cancelled all combat sorties into North and South Vietnam. During the major U.S.



The family of Cmdr. William R. Stark joyfully greets the freed POW upon his arrival at NAS Miramar, Calif., after nearly six years in captivity.

involvement in the Vietnam War from 1961 to 1973, the Navy lost 526 fixed-wing aircraft and 13 helicopters to hostile action and the Marine Corps lost 193 fixed-wing aircraft and 270 helicopters. Operation Homecoming—the repatriation of U.S. POWs between 27 January and 1 April 1973—began and the North Vietnamese and the People's Liberation Armed Forces released 591 prisoners. Sailors numbered 145 of the POWs freed during the operation, all but one of whom served within naval aviation.

27 JANUARY • Task Force 78 was formed to conduct Operation End Sweep—minesweeping operations in North Vietnamese waters stipulated by the Paris Peace Accords. An air mobile mine countermeasures command comprised the principal aviation strength of the force and consisted of elements of HM-12, HMH-463, and HMM-165.

On 3 February, amphibious assault ship New Orleans (LPH 11) and the flagship of Task Force 78 began a six-day mine countermeasures exercise at Subic Bay, Philippines, in preparation for End Sweep. Two days later, Commander, Task Force 78 and other Navy mine demolition experts met with North Vietnamese leaders in Haiphong to discuss the operation. Task Force 78 surface minesweepers swept for an anchorage in deep water off the approaches to Haiphong harbor on 6 February. The task force at this point included amphibious assault ships Inchon (LPH 12) and New Orleans.

On 27 February, a CH-53 Sea Stallion from HM-12 made two sweeps in the Haiphong shipping channel during the first U.S. airborne minesweeping of live mines. President Richard M. Nixon abruptly halted the operations and the minesweeping task force moved to sea, while the chief executive called for "clarification . . . on a most urgent basis" of North Vietnamese delays in releasing American POWs. After North Vietnamese overtures to release the prisoners, the withdrawal of U.S. troops from Vietnam and minesweeping resumed on 4 March. On 27 July, Operation End Sweep concluded and Task Force 78 was disbanded. Helicopters made 3,554 sweeping runs totaling 1,134.7 sweeping hours in 623 sorties. Three helicopters were lost in accidents. Minesweeping ships completed 208 sweeping runs over 308.8 hours.

28 JANUARY • On the first day of the Vietnam cease-fire, aircraft from Ranger (CV 61) and Enterprise (CVAN 65) flew 81 combat sorties against lines-of-communication targets in Laos. The corridor for their overflights stretched between Hué and Da Nang, South Vietnam. These sorties were flown because the Laotian government requested the assistance and the missions were not related to the Vietnam cease-fire.

1 FEBRUARY • The merger of the First Fleet and Anti-Submarine Warfare Forces, Pacific Fleet resulted in the activation of the Third Fleet at NS Pearl Harbor, Hawaii. The change took place to reduce fleet staffs and achieve economies while retaining control of operational units including 100 ships and submarines and 60,000 sailors and Marines that served a 50-million-square-mile area from the West Coast to beyond Midway Island.

6 FEBRUARY • NAVAIR established a policy stipulating the design of new avionics equipment for troubleshooting by the computerized general-purpose Versatile Avionics Shop Test (VAST) equipment with the capability to test the majority of avionics within the naval aviation inventory.

11 FEBRUARY • Aircraft from Oriskany (CVA 34) and Constellation (CVA 64) operating on Yankee Station flew strikes against targets in southern Laos. Combat sorties from carriers against Laotian targets had continued since the ceasefire in the Vietnam War, and the station's location was shifted to a position off the coast of the northern part of South Vietnam.

14 FEBRUARY • The Pentagon announced a step-up of U.S. air strikes in Laos from 280 to 380 daily sorties. On this date, aircraft from Oriskany (CVA 34) and Enterprise (CVAN 65) flew about 160 of these missions into Laos.



A helicopter tows a minesweeping sled off Haiphong, North Vietnam, during Operation End Sweep, which began in February 1973.

25 FEBRUARY • Aircraft from *Oriskany* (CVA 34) and Ranger (CV 61) flew combat support missions over Cambodia at the request of that country's government.

4 MARCH • America (CVA 66) received orders to sail from the Far East for the United States, as an initial move to reduce the number of carriers deployed off Southeast Asia from six to three by mid-June 1973.

21 MARCH • VXN-8 returned to NAS Patuxent River, Md., from a deployment to the Southern Hemisphere. The squadron completed the operation as part of Project Magnet under the direction of the Naval Oceanographic Office. Its aircraft completed two flights around the world within the hemisphere and, on 4 March, an RP-3D Orion flew over the South Pole—the first flight over the pole by that aircraft type.

29 MARCH • The Military Assistance Command, Vietnam was disbanded, and the remaining U.S. combat troops left South Vietnam. The last phase of Operation Homecoming concluded with the release of the final group of 148 American POWs.

29 MARCH • Forrestal (CVA 59) received orders to proceed to Tunisia at speed to assist victims of a flood in the Medjerda River Valley. The carrier led an amphibious assault 1973 continued

ship and a destroyer from the Sixth Fleet, and appeared off Tunis at first light 13 hours after receiving orders. SH-3D Sea Kings of HS-3 flying from Forrestal evacuated about 200 people and airlifted four tons of relief supplies to flood victims. French, Italian, Libyan, and Tunisian teams also supported the efforts of the Sixth Fleet into 31 March.

1 APRIL • Air Anti-Submarine Wing One with VS-22, -24, -27, -30, -31, and -32, and Helicopter Anti-Submarine Wing One with HS-1, -3, -5, -7, and -11 were established. The move completed the final phase of the functional wing concept in the reorganization of the AirLant community.

13 APRIL • The Secretary of the Navy announced an agreement with the British for an eight-month joint study of an enhanced V/STOL Harrier. The plan was to determine the feasibility of the joint development of the aircraft incorporating a Rolls-Royce Pegasus 15 engine and an advanced wing.

16 APRIL • The Cruise Missile Project Office was established within NAVAIR with the responsibility to develop both tactical and strategic versions of the weapons.

30 APRIL • MGySgt Patrick J. O'Neil, USMC, who had enlisted during World War II, retired as the last Marine enlisted naval aviation pilot.

3 MAY • The Palestinian Yarmuk Brigade entered Lebanon from Syria, leading to fighting between Lebanese soldiers and the Palestinian guerrillas and the declaration of martial law. The U.S. forces in the Mediterranean including Forrestal (CVA 59) and John F. Kennedy (CV 67) were alerted for possible contingencies. By 9 May, a cease-fire agreement stabilized the situation.

8 MAY • The Navy accepted the first C-9B Skytrain IIs, military versions of the DC-9, during a ceremony at Douglas Aircraft Division, Long Beach, Calif. VR-1 and -30 received the initial squadron deliveries.

18 MAY • A four-day trial of a prototype glide slope indicator concluded on board cruiser Truxtun (CGN 35). The Naval Air Engineering Center developed the device as one of several steps taken to achieve an all-weather capability with LAMPS helicopters.

25 MAY • The first production RH-53D Sea Stallion specially configured for airborne mine countermeasures arrived for weapons systems trials at NATC Patuxent River, Md. The Navy preliminary evaluation and the initial phase of the Board of Inspection and Survey trials had begun at Sikorsky Aircraft Division on 15 May.

25 MAY • The all-Navy crew of Capt. Charles Conrad Jr., and Cmdrs. Joseph P. Kerwin, MC, and Paul J. Weitz in Skylab II rendezvoused with the earth-orbiting Skylab workshop. The first tasks of the astronauts included the repair of the lab's solar shield and solar array system, which were damaged during launch from John F. Kennedy Space Center, Fla. On 22 June, Skylab II splashed down in the Pacific. An SH-3G Sea King of HC-1 Detachment 1, embarked on board primary recovery ship Ticonderoga (CVS 14), retrieved the astronauts.

7 JUNE • The Deputy Secretary of Defense directed the Navy to produce preliminary plans for a \$250-million prototype development plan for a jet fighter aircraft costing less than an F-14 Tomcat.

13 JUNE • The National Aeronautic Association presented the Robert J. Collier Trophy for 1972 jointly to the Navy's Task Force 77 and to the Seventh and Eighth Air Forces for their "demonstrated expert and precisely integrated use of advanced aerospace technology" during Operation Linebacker II against the North Vietnamese during December 1972.

30 JUNE • Fleet Air Wing 1 and 2 were redesignated Patrol Wings (PatWings) 1 and 2. The move marked the end of the use of the FAW (Fleet Air Wing) designation and the return of the PatWing designation.

28 JULY • Capt. Alan L. Bean; Maj. John R. Lousma, USMC; and civilian Dr. Owen K. Garriott launched with Skylab 3 from John F. Kennedy Space Center, Fla. Mission commander Bean set a new record for the most time in space by eclipsing that of naval aviator Capt. Charles Conrad Jr. of 49 days, 3 hours, 37 minutes, by more than 20 days, 12 hours. After a 59-day flight, Skylab 3 splashed down in the Pacific on 25 September. An SH-3G Sea King of HC-1 Detachment 4, embarked on board amphibious assault ship New Orleans (LPH 11), recovered the astronauts.

31 JULY • HSL-33 was established as the first squadron dedicated solely to providing LAMPS detachments for LAMPS-configured ships of the Pacific Fleet at NAS Imperial Beach, Calif.

15 AUGUST • The United States ended its combat involvement in Cambodia after six months of intensive bombing in adherence to a vote by Congress on 30 June. During February, aircraft from Oriskany (CVA 34) and Ranger (CV 61) had conducted combat sorties into Cambodia. From March 1973, aircraft from carriers operating on Yankee Station had flown air, electronic intelligence, surface, subsurface, and surveillance coordinator patrols; and training, tanker, communications relay, and reconnaissance sorties.

16 AUGUST • An F-14 demonstrated the Tomcat's quickreaction dogfight capability when the jet shot down a maneuvering QT-33 target drone with a Sparrow III air-toair missile from a distance of less than a mile at the Pacific Missile Range Point Mugu, Calif.

29 AUGUST • HM-12 received the first RH-53D Sea Stallions configured for minesweeping.

6 SEPTEMBER • A BQM-34E target drone equipped with a graphite-epoxy composite wing was test flown at the Point Mugu Sea Test Range, Calif. The Firebee II reached a speed of Mach 1.6 at an altitude of 40,000 feet. The Naval Air Development Center designed and fabricated the test wing at Warminster, Pa. Designers calculated that the composite saved 40 percent of the weight of metal counterparts.

7 **SEPTEMBER** • The Navy announced the intention to switch the F-4J Phantom IIs that the Navy Flight Demonstration Team—Blue Angels—had flown since 1969 with the slower, smaller, and less expensive A-4F Skyhawks.

1 OCTOBER • The Board of Inspection and Survey service acceptance trials of the S-3A Viking began at NATC Patuxent River, Md.

5 OCTOBER • *Midway* (CVA 41), with CVW-5 embarked, entered Yokosuka, Japan. This marked the first homeporting of a complete carrier task group in a Japanese port as a result of the of 31 August 1972 accord between the United

States and Japan. The forward deployment facilitated the continuous positioning of three carriers in the Far East at a time when the economic situation demanded the reduction of carriers in the fleet.

6 OCTOBER • The Yom Kippur (or October) War began between Arabs and Israelis. On 11 October, the ships of the Sixth Fleet available to respond to the crisis included Task Force 60.1 with *Independence* (CV 62) south of Crete, Task Force 60.2 with Franklin D. Roosevelt (CVA 42) in the vicinity of the Strait of Bonifacio, and Task Force 61/62 with amphibious assault ship Guadalcanal (LPH 7). On 13 October, John F. Kennedy (CV 67) sailed from Edinburgh, Scotland, to a holding area 100 miles west of Gibraltar.

One SH-2D Seasprite each embarked with HSL-32 Detachment 1 on board frigate Belknap (DLG 26) and Detachment 3 on board escort Edward McDonnell (DE 1043), and an SH-2F of HSL-32 Detachment 4, embarked on board escort W. S. Sims (DE 1059), provided additional aerial antisubmarine capabilities. Aircraft that supported the Sixth Fleet included nine VP-10 P-3B Orions operating from NS Rota, Spain; eight VP-45 P-3Cs flying from NAS Sigonella, Sicily; and two EC-121M Constellations, four (later six) EA-3B Skywarriors, three EP-3E Aries Is, and one P-3A from VQ-2 deployed to various locations. From 19 to 24 October, the United States provided 50 A-4Ns to the Israelis via the Azores and Franklin D. Roosevelt. Independence and John F. Kennedy assisted Israeli-bound Skyhawk IIs that suffered malfunctions. The Skyhawk pilots returned on board USAF C-5A Galaxys to Dover AFB, Del.

The Israelis rallied and drove the Arabs back and a cease fire ended the war on 23 October. Egyptian President Anwar as-Sadat asked the Americans and Soviets to dispatch forces to enforce the truce. The United States feared Soviet intervention and shifted to Defense Condition (DEFCON)-3 alert status early the next morning. On 24 October, amphibious assault ship Iwo Jima (LPH 2) entered the Mediterranean, and the next day John F. Kennedy reinforced the Sixth Fleet. By 28 October, Franklin D. Roosevelt, Independence, John F. Kennedy, Guadalcanal, and Iwo Jima steamed in the Mediterranean. Negotiations defused the tensions and, on 31 October, European Command (less the Sixth Fleet) returned to DEFCON-5. The Arabs and Israelis accepted the diplomatic arrangements, and on 17 November, the Sixth Fleet stood down.

29 OCTOBER • Prompted by the Yom Kippur War and the consequent Arab oil embargo, the Defense Department announced the deployment of Hancock (CVA 19) from the South China Sea to the Indian Ocean. She became the first of four carriers to sail in the Indian Ocean through 1974 to focus on such areas as the Strait of Hormuz entrance to the Persian Gulf and the Bab-al-Mandeb entrance to the Red Sea.

16 NOVEMBER • Mission Commander Lt. Col. Gerald P. Carr, USMC; Lt. Col. William R. Pogue, USAF; and civilian Edward G. Gibson launched in Skylab 4 from John F. Kennedy Space Center, Fla. The goals of their scheduled 56-day open-ended space flight included the study of the Comet Kohoutek, earth resources, and the sun. On 8 February 1974, Skylab 4 splashed down in the Pacific after a record-setting 84 days in space. An SH-3G Sea King of HC-1 Detachment 4, embarked on board the primary recovery vessel, amphibious assault ship New Orleans (LPH 11), recovered and returned the men to the ship. This event marked the 32nd astronaut retrieval by naval aviation since the beginning of the manned space program in 1961.

21 NOVEMBER • An F-14A Tomcat fired six AIM-54A Phoenix air-to-air missiles and guided them simultaneously to six separate targets 50 miles away over the Pacific Missile Sea Test Range, Calif. The Tomcat obtained four direct hits during this first test of its full Phoenix arsenal.

1 DECEMBER • The Blue Angels became the Navy Flight Demonstration Squadron (Blue Angels) and was designated a shore activity located at NAS Pensacola, Fla.

7 **DECEMBER** • The launching of *Tarawa* (LHA 1) at Pascagoula, Miss., heralded the first of a new class of amphibious assault ships.

17 **DECEMBER** • Amphibious assault ship *Iwo Jima* (LPH 2) departed Tunisia after three days of flood relief assistance by her helicopters that included the rescue of people and deliveries of equipment and other flood-associated missions to victims.

20 DECEMBER • Lts. Jane O. McWilliams and Victoria M. Voge became the first women naval flight surgeons upon their graduation from the Naval Flight Surgeon Training Program.

20 DECEMBER • The relocation of the Naval Air Engineering Center from Philadelphia, Pa., to NAS Lakehurst, N.J., occurred, and the authority and responsibility for the air station was reassigned to the chief of Naval Material to be exercised through NAVAIR. On 8 January 1974, the air station was placed under the Naval Air Engineering Center. This concluded the basic organization arrangements involving the relocation of the center from Philadelphia's League Island to NAS Lakehurst, although the physical transfer continued into 1974. The relocation was part of the shore establishment realignment announced by the Secretary of Defense in March 1973.

31 DECEMBER • Ellyson Field, NAS Pensacola, Fla., became the Naval Education and Training Program Development Center, responsible for the administration of the Navy's enlisted advancement system including the development of examinations as well as administering and conducting courses, studies, and training programs.

1974

4 JANUARY • On board John F. Kennedy (CV 67), VT-4 students conducted the final flights of TF-9J Cougars.

5 JANUARY • The Naval Aerospace Institute, NAS Pensacola, Fla., announced the scheduling of periodic checks of the physical and mental status of repatriated Navy and Marine prisoners-of-war from the Vietnam War.

18 JANUARY • The Secretary of the Navy named the fourth nuclear-powered carrier Carl Vinson (CVN 70), in honor of the Georgia congressman's contributions to national defense during his 50 years in the House of Representatives.

20 JANUARY • VS-41 accepted the first S-3A Vikings introduced to the fleet during ceremonies at NAS North Island, Calif.

22 FEBRUARY • Lt. j.g. Barbara A. Allen became the Navy's first designated female aviator during a ceremony at NAS Corpus Christi, Texas.



An F-14A of VF-1 lands on board Enterprise (CVAN 65) during the introduction of Tomcats to the fleet in 1974.

1 MARCH • The YCH-53E Super Stallion, a growth version of the CH-53D Sea Stallion that had been in service since 1965, made its first flight. The new helicopter had three turbine engines instead of two as fitted in Sea Stallions, carried mission loads of 16 tons compared to nine tons, used seven rotor blades in place of six, and accommodated up to 55 troops.

1 MARCH • John F. Kennedy (CV 67) began a year-long conversion to accommodate the new CV concept (an air wing capable of performing strike and antisubmarine operations and to operate F-14 Tomcats and S-3A Vikings) at Norfolk Naval Shipyard, Va.

2 MARCH • Two naval aircraft searched an area of 1,230 square miles southwest of the Azores for balloonist Thomas L. Gatch during his unsuccessful attempt to cross the Atlantic.

15 MARCH • Intrepid (CVS 11) was decommissioned and placed in the Reserve Fleet after 30 years of service. Since her commissioning on 16 August 1943, Intrepid had seen duty as a CV, CVA, and CVS. During World War II, aircraft flying from her flight deck claimed the destruction of 266 enemy planes in the air and 298 more on the ground, and the damage of 178 others. The ship subsequently served as the centerpiece of the nonprofit Intrepid Sea, Air & Space Museum, which opened in New York in 1982.

18 MARCH • The maiden F-14A Tomcat carrier landing was made by pilot Lt. Cmdr. Grover Giles and radar intercept officer Lt. Cmdr. Roger McFillen of VF-1 on board Enterprise (CVAN 65). Later that day, a pair of Tomcats also landed from NATC Patuxent River, Md. VF-1 and -2 of CVW-14 led the introduction of Tomcats to the fleet.



An RH-53D Sea Stallion of HM-12 using Mk 105 minesweeping gear sweeps the Suez Canal during Operation Nimbus Star in May 1974.

22 MARCH • Commander Task Force 65, Rear Adm. Brian McCauley, arrived with a small staff in Cairo, Egypt, to help plan the clearing of the Suez Canal of unexploded ordnance. The Americans, British, Egyptians, and French participated in this operation, Operation Nimbus Star.

2 APRIL • The last C-54Q in naval flying inventory was retired to storage. The Skymaster, BuNo 56501, had flown almost 15,000 hours and more than 2,500,000 nautical miles since its acceptance on 24 March 1945. Its last service was with the Naval Test Pilot School, NAS Patuxent River, Md.

11 APRIL • A P-3A fired the first BGM-84A Harpoon from an Orion at Naval Missile Center Point Mugu, Calif. The missile scored a direct hit on a remote-controlled SEPTAR target boat.

14 APRIL • The Navy donated *Yorktown* (CVS 10) to the National Naval Museum, Charleston, S.C. The carrier had operated with the Pacific Fleet for 25 years before her transfer to the Atlantic Fleet in 1969. She was decommissioned on 27 June 1970.

22 APRIL • A detachment of 12 RH-53D Sea Stallions from HM-12 began sweeping mines from the Suez Canal as part of Operation Nimbus Star.

20 MAY • VQ-4 received the first fleet EC-130G Hercules, BuNo 151889, later used in TACAMO (Take Charge And Move Out) IV low-frequency communication tests.

4 JUNE • NAVAIR established an aircraft survivability/ vulnerability branch, which answered the need for a thoroughly coordinated Navy technical program addressing better aircraft survivability in combat.

5 JULY • Majs. John H. Pierson, USMC, and David R. Shore, USMC, flew an OV-10A Bronco 4,480 kilometers from NAS Whidbey Island, Wash., to Homestead AFB, Fla. This set a new world record for distance in a straight line by a Class C-1-F, Group II aircraft, which was sanctioned by the National Aeronautic Association.

15 JULY • Greek Cypriot factions seeking union with Greece overthrew Archbishop Makarios III on Cyprus. On 22 July, U.S. Ambassador to Cyprus Roger Davies requested the evacuation of American citizens. America (CVA 66) augmented the Sixth Fleet, and Forrestal (CV 59) provided air cover while HMM-162 CH-46F Sea Knights, embarked on board amphibious assault ship Inchon (LPH 12), evacuated 466 people including 384 Americans from Dhekelia to amphibious transport dock Coronado (LPD 11). Additional evacuation ships included amphibious transport dock Trenton (LPD 14) and dock landing ship Spiegel Grove (LSD 32). Trenton and British carrier Hermes (R 12) then proceeded to Akrotiri, Cyprus. On 24 July, they evacuated an additional 286 people including 114 Americans, using medium landing craft and Westland Sea King HAS.1/2 helicopters from No. 814 Squadron and Westland Wessex HU.5s from a detachment of No. 845 Squadron operating from Hermes. Coronado and Trenton disembarked the evacuees in Beirut, Lebanon. The Sixth Fleet forces were released on 2 September.

5 AUGUST • The world's largest unmanned balloon launched from Fort Churchill, Manitoba, Canada. The Office of Naval Research and NASA's Office of Space Science sponsored the flight, which used the Navy's Skyhook program facilities. The entire flight train—balloon, an 800pound instrument package, and a parachute—lifted to an altitude of 155,000 feet. As the balloon rose, it assumed a fully inflated form of 512 feet in diameter with a volume of 50.3 million cubic feet. A DC-3 of Project Skyhook tracked the balloon during its 500-mile westerly flight.

10 AUGUST • Sikorsky's YCH-53E, designated Aircraft No. 1, flew in a hover at a gross weight of 71,700-pounds. The helicopter carried an external load of 17.8 tons and hovered at a height of 50 feet. This was the heaviest gross weight ever flown and the heaviest payload ever lifted by a helicopter in the Western world.

18 AUGUST • After major flooding in Central Luzon in the Philippines, HMM-164 CH-46D Sea Knights and CH-53D Sea Stallions, embarked on board amphibious assault ship *Tripoli* (LPH 10), and Navy and Marine helicopters operating from combat stores ship San Jose (AFS 7) and NAS Cubi Point, together with Air Force aircraft from Clark AFB, flew rescue missions and airlifted emergency food supplies during 244 sorties through 24 August.

28 AUGUST • The Chief of Naval Operations released a formal advanced experimental fighter aircraft (VFAX) operational requirement directing NAVAIR to solicit bids and oversee full-scale development. The VFAX concept resulted in the F/A-18 Hornet.

8 SEPTEMBER • TWA Flight No. 841, a Boeing B-707-331B, from Athens, Greece, en route from Tel Aviv, Israel, to Rome, Italy, crashed into the Ionian Sea, 50 nautical miles west of Cephalonia, Greece. All 88 people on board perished. The National Transportation Safety Board determined that the probable cause of the loss was the detonation of a bomb within the aft cargo compartment. Independence (CV 62) and frigate Biddle (DLG 34) diverted to the scene and, despite 15- to 20-foot swells, located 24 bodies. SH-3D Sea Kings of HS-5 operating from Independence and Greek and Italian sailors assisted boat crews from *Biddle* in the recovery of 12 of the bodies from the shark-infested water. The SAR concluded on 10 September.

10 SEPTEMBER • A boiler explosion ripped through Liberian registered tanker *Eliane* in the Atlantic. *Forrestal* (CVA 59) responded and evacuated two crewmembers.

12 **SEPTEMBER** • A fire erupted on board liner Ambassador in the Caribbean. Oiler Tallulah (T-AO 50) rescued 256 crewmembers from the burning ship, and aircraft from NAS Key West, Fla., and three Coast Guard cutters also supported the firefighting efforts.

14 SEPTEMBER • The SEU-3/A Lightweight Ejection Seat manufactured by Stencel Aero Engineering Co. primarily for AV-8A Harriers was approved for service use.

17 **SEPTEMBER** • VF-1 and -2 began the initial deployment of F-14As Tomcats while embarked on board Enterprise (CVAN 65), when she sailed from NAS Alameda, Calif.

- 17 **SEPTEMBER** The prototype LAMPS Mk III H-2/ SR helicopter arrived for flight certification tests at Kaman Aircraft Corporation. The aircraft received extensive design modifications to incorporate the LAMPS Mk III avionics package at Naval Air Development Center, Warminster, Pa.
- **2 OCTOBER** The joint logistics commanders signed an agreement making Dupont's HT-4 the standard fabric for all naval flight suits.
- 19 NOVEMBER The Central Treaty Organization exercise Midlink 74 began in the Arabian Sea. Constellation (CVA 64) and seven U.S. ships joined British, Iranian, Pakistani, and Turkish vessels during the large-scale training problem.
- **2 DECEMBER** The Navy's advanced low volume ramjet (ALVRJ) successfully completed its first free flight at Pacific Missile Range Point Mugu, Calif. LTV developed the engine for use by NAVAIR in high performance missiles.

1975

- **3 JANUARY** The Association of Naval Aviation was founded "to stimulate and extend appreciation of Naval Aviation . . . past, present and future." The nonprofit organization was opened to officers, enlisted persons, or civilians who contributed to, or were interested in, U.S. naval aviation.
- 17 JANUARY VX-1 received the first production model of an updated P-3C Orion with new avionics and software at NAS Patuxent River, Md.
- **18 JANUARY** After violent demonstrations on Cyprus that included disturbances outside the U.S. Embassy in Nicosia, the joint chiefs ordered the Sixth Fleet to deploy Saratoga (CV 60) to a position southwest of the island for possible assistance in the evacuation of Americans. On 21 January, the situation quieted and the chiefs released Saratoga from her contingency response.
- **28 JANUARY** Escort Meyerkord (DE 1058), with an SH-2F Seasprite from HSL-35 Detachment 4 embarked, rescued all 31 crewmembers from Panamanian-flagged

- freighter Gulf Banker when she sank in the South China Sea. Meyerkord returned the survivors to Subic Bay, Philippines.
- 28 JANUARY The AIM-54A Phoenix air-to-air missile was approved for service use.
- **6 FEBRUARY** Cyclone Gervaise killed at least nine people as it cut a path of destruction across Mauritius. The island's Prime Minister Sir Seewoosagur Ramgoolan accepted U.S. offers of aid, and, on 9 February, combat support ship Camden (AOE 2) began disaster relief operations at the capital of Port Louis, followed on 12 February by the arrival of Enterprise (CVAN 65) and cruiser Long Beach (CGN 9). Combat store ship Mars (AFS 1) sent two HC-3 Detachment 104 CH-46D Sea Knights to the carrier, which enabled sailors to transport heavy loads including large sections of water pipe into inaccessible remote areas. On 15 February, Enterprise sailed from Mauritius.
- 15 FEBRUARY The Sikorsky YCH-53E completed Navy preliminary evaluation conducted by HMX-1 and NATC Patuxent River, Md.
- 2 MARCH The F-14A Tomcat and AIM-54A Phoenix airto-air missile received approval for integrated service use.
- 17 MARCH The S-3A Viking was approved for service use.
- 18 MARCH NAVAIR established an assistant commander for Test and Evaluation (T & E). This came from a mid-1960s Secretary of Defense decision that stressed the need for adequate T & E data to help determine the level of development of new equipment to warrant procurement.
- 23 MARCH Hancock (CVA 19) embarked HMH-463 at NS Pearl Harbor, Hawaii, while en route from Subic Bay, Philippines, to relieve *Enterprise* (CVAN 65) in the South China Sea. The squadron was to support the potential evacuations of Americans and others from Southeast Asia. Meanwhile, the North Vietnamese continued their southward advance and prepared to cut off the entire northern quarter of South Vietnam, 300 miles north of Saigon.
- 1 APRIL Chief Aviation Pilot Eugene T. Rhoads died at Veterans Hospital, San Diego, Calif. In May 1919, Rhoads



An S-3A catapults from Forrestal (CVA 59) during the Viking's initial carrier suitability tests.

had served as a crewmember in the NC-4 during the first transatlantic flight.

12 APRIL • Operation Eagle Pull—the extraction of Americans and allied Cambodians from Cambodia—was activated. Marines of the 31st Marine Amphibious Unit established a perimeter from which to rescue the evacuees within the capital of Phnom Penh. Twelve HMH-462 CH-53D Sea Stallions, embarked on board amphibious assault ship Okinawa (LPH 3), evacuated 287 people including U.S. Ambassador John G. Dean and Cambodian President Saukhm Khoy. Upon completion of these flights, HMH-463 CH-53Ds embarked on board Hancock (CVA 19), retrieved the Marines.

13 APRIL • The Naval Aviation Museum, NAS Pensacola, Fla., was dedicated, and the Naval Aviation Museum Foundation, Inc. presented the building to the Navy. It replaced the small temporary museum set up in 1962. Seventy-two vintage aircraft were displayed, including the NC-4, the first airplane to fly the Atlantic Ocean.

19 APRIL • Hancock (CVA 19), Midway (CVA 41), Coral Sea (CVA 43), Enterprise (CVAN 65), and amphibious assault ship Okinawa (LPH 3) deployed to Vietnam for possible evacuation of Americans and allied nationals trapped by the North Vietnamese invasion of South Vietnam. The enemy pronounced the presence of these ships a brazen challenge and violation of the 1973 Paris Peace Accords. During a brief period at NAS Cubi Point, Philippines, *Enterprise* hosted CVW-21 from *Hancock*, thus making possible the use of *Hancock* as a helicopter platform for the evacuations.

29 APRIL • Navy and Marine helicopters from the Seventh Fleet and Army and South Vietnamese helicopters carried out Operation Frequent Wind—the evacuation of Americans and allied nationals from Saigon, South Vietnam. North Vietnamese and People's Liberation Armed Forces mortar and rocket fire compelled the closure of Tan Son Nhut airport. President Gerald R. Ford Jr. consequently ordered the evacuations by helicopter. Marines of the 9th Amphibious Brigade established a perimeter around the



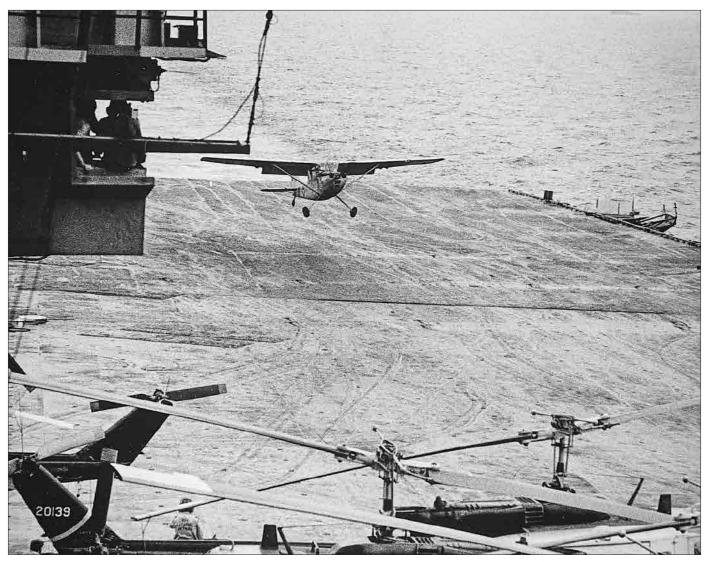
At least nine Vietnamese Air Force UH-1 Huey helicopters packed with people frantically fleeing the communist conquest of South Vietnam approach Midway (CVA 41) during Operation Frequent Wind, the evacuation of Saigon, 29 April 1975.

main helicopter landing zone at Tan Son Nhut, and Hancock (CVA 19) launched the first evacuation helicopter from a position about 17 miles off Vung Tau.

Aircraft from Coral Sea (CVA 43) and Enterprise (CVAN 65) flew 173 sorties that covered 638 Air Force and Marine fixed-wing and about 250 CIA rotary-wing missions. Frequent Wind evacuated 395 Americans and 4,475 South Vietnamese and others from Tan Son Nhut as well as 978 Americans, including Ambassador Graham A. Martin and his family, and 1,120 South Vietnamese and allied nationals from the embassy. Helicopters recovered on board vessels including Midway (CVA 41) and command ship Blue Ridge (LCC 19), but to reduce top hamper and to make room for more aircraft, sailors heaved helicopters

overboard. Aircraft from Coral Sea, Enterprise, and Hancock covered the exodus of a floating city totaling almost 80,000 people, including those who had already reached the ships, en route to the Philippines and Guam.

30 APRIL • VW-4 was disestablished as the Navy's last squadron specifically detailed for hurricane reconnaissance. VJ-2 was established on 15 November 1952 and redesignated VW-4 in 1953. The squadron made major contributions to meteorological science, oceanographic research, the National Weather Service, and the Naval Weather Service Command.



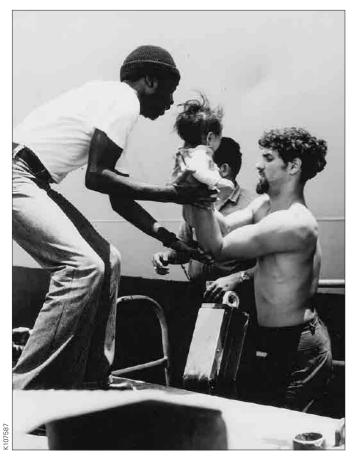
South Vietnamese Air Force Maj. Buang-Ly lands an O-1B Bird Dog carrying his wife and five children on Midway (CVA 41) during Operation Frequent Wind, 29 April 1975.

2 MAY • Midway (CVA 41) at U'Tapao, Thailand, off-loaded more than 40 Air Force helicopters used in the evacuation of South Vietnam. Crewmembers assisted in the recovery and loading there of more than 95 South Vietnamese Air Force aircraft including F-5A Tigers and A-37B Dragonflies that had been flown there during the fall of Saigon. Midway transported the aircraft to Guam.

2 MAY • NAVAIR announced the development of a new carrier-based fighter by the McDonnell Douglas and Northrop aircraft corporations with emphasis on improved maneuvering performance, reliability, and maintainability. The design criteria included speed in excess of Mach 1.5,

a combat ceiling of more than 45,000 feet, and a radius of action greater than 400 nautical miles.

5 MAY • The first training class for a new type of physician designated aviation medical officer (AMO) commenced at the NAS Pensacola, Fla., Naval Aerospace Medical Institute. An acute shortage of flight surgeons prompted the program. The AMOs were not scheduled to undergo flight training nor assignment to duty involving flying, but instead were to augment the efforts of flight surgeons during heavy aeromedical workloads, performing flight physicals, and providing routine medical care.



Sailors from amphibious cargo ship Durham (LKA 114) lend a hand with people evacuated from Saigon.

12 MAY • Soldiers from a Khmer Rouge gunboat illegally seized U.S. flagged container ship Mayaguez in international waters. The communists held her master, Charles T. Miller, and 39 sailors captive near the island of Koh Tang. On 15 May, Coral Sea (CVA 43) and Air Force aircraft operating from Thailand launched protective air strikes against Cambodian naval and air installations on the mainland. Air Force helicopters carried 288 Marines of Battalion Landing Teams 2 and 9 from U'Tapao, Thailand. They assaulted Cambodian troops on Koh Tang, and 60 Marines and sailors from escort Harold E. Holt (DE 1074) boarded the deserted merchantman. The Americans freed Mayaguez but the Khmer Rouge had already released their hostages. The battle cost the lives of 18 Marines and sailors, the wounding of 50, and the loss of three helicopters and damage to two. *Hancock* (CVA 19) received orders to support the rescue by operating as a helicopter platform with amphibious assault ship Okinawa (LPH 3), but neither ship participated.

- 1 JULY The termination of all naval gunfire training activities at Culebra Island, P.R., occurred through a joint U.S.-Puerto Rican Commonwealth agreement. Air-toground weapons training at Culebra Cays would continue for a limited time because of previously scheduled activities.
- 1 JULY The aircraft carrier designation CVA was replaced with CV to improve the accuracy of designations. By removing the letter A, which stood for attack, the new CV designation denoted a multipurpose air, surface, and antisubmarine role, depending on the type of aircraft carried.
- 23 JULY The Department of Defense announced the conclusion of U.S. participation in mine-clearing operations in the Suez Canal. From August to October, however, aircraft and ships of the Sixth Fleet assisted the Egyptians in clearing additional mines from Damietta.
- **24 JULY** Astronauts Col. Thomas P. Stafford, USAF; Vance D. Brand, a former Navy pilot; and Capt. Donald K. Slayton, USAF; splashed down in their Apollo spacecraft after participating in the joint U.S.-Soviet Apollo-Soyuz space mission. Helicopters from HS-6, embarked on board amphibious assault ship New Orleans (LPH 11), recovered the astronauts and their spacecraft. This event marked the conclusion of the Apollo-Soyuz mission, the end of the Apollo Program, and the final planned at-sea recovery in the U.S. space program.
- **28 JULY** The Senate cleared the way for construction at Diego Garcia by voting to expand the U.S. support facility on the British Indian Ocean Territory. The action ended a long dispute over construction at the installation, and permitted the Navy to begin an \$18.1 million expansion to include aircraft runway extension, petroleum-oil-lubricants storage areas, a pier, and additional power plant facilities.
- **29 JULY** The Navy created the lighter-than-air project office at the Naval Air Development Center, Warminster, Pa., to enhance expertise in lighter-than-air technology within the fleet.
- 1 AUGUST A KA-3B attached to VAQ-208 completed the longest nonstop flight to date by a carrier-based tactical aircraft. The Skywarrior took off from NS Rota, Spain, and after a 13-hour flight that covered approximately 6,100 miles, landed at NAS Alameda, Calif.

2 AUGUST • The Commandant of the Marine Corps announced that the 12 Marine fighter/attack squadrons were to continue to operate only F-4 Phantom IIs until their replacement by F/A-18 Hornets, beginning in the early 1980s. The Marines had originally intended to equip four squadrons with F-14A Tomcats.

8 AUGUST • Frigate Capodanno (FF 1093), with an SH-2F Seasprite of HSL-32 Detachment 4 embarked, rescued all 18 crewmembers of Liberian freighter Brilliant when the merchantman sank 35 miles east of Sicily. Capodanno returned the survivors to Augusta Bay, Sicily. Additional ships involved in the rescue included destroyer Stribling (DD 867), frigate Donald B. Beary (FF 1085), and salvage ship Hoist (ARS 40).

14 AUGUST • The newly commissioned *Nimitz* (CVN 68) completed refresher training at NS Guantánamo Bay, Cuba, before beginning her cruise with a nuclear task force to northern European waters. The Navy's second nuclearpowered carrier was named in honor of former Chief of Naval Operations Flt. Adm. Chester W. Nimitz.

26 SEPTEMBER • The Chief of Naval Operations approved the popular name Tomahawk for the Navy's sea/ surface-launched cruise missile.

3 OCTOBER • VMGR-352 took delivery of the first fleet KC-130R Hercules refueler/transport.

27 OCTOBER • As increased fighting among rival Lebanese political factions led to U.S. concerns for Americans within the country, on this date the State Department advised Americans to evacuate their dependents from Lebanon. The Sixth Fleet dispatched amphibious assault ship Inchon (LPH 12) as a contingency evacuation ship, supported by John F. Kennedy (CV 67).

1 NOVEMBER • Effective on this date, Naval Aerospace Recovery Facility was disestablished at NAF El Centro, Calif. The National Parachute Test Range at El Centro absorbed the facility's functions. The NAF was assigned to Chief of Naval Operations for command and support.

8 NOVEMBER • Aircraft and more than 100 sailors and Marines from amphibious assault ship *Inchon* (LPH 12) and amphibious transport dock Shreveport (LPD 12)



Nimitz (CVAN 68), the second nuclear-powered carrier to be commissioned, steams in Chesapeake Bay, 28 February 1975.

extinguished a fire on board Spanish freighter Cuidad de Valencia at Palma de Mallorca, Spain.

22 NOVEMBER • At 2159, John F. Kennedy (CV 67) and guided missile cruiser Belknap (CG 26) collided during maneuvers, approximately 70 nautical miles east of Sicily. The carrier's firefighters controlled her fires, but heavy smoke forced the temporarily evacuation of the fire rooms and she went dead in the water. Embarked HS-11 SH-3D Sea Kings rescued survivors, and the ship diverted her other flights to NAF Sigonella. John F. Kennedy's angled deck sliced into Belknap's superstructure from her bridge aft as the cruiser passed beneath, and fuel from the carrier's ruptured lines ignited an inferno on board the cruiser. One man died on board John F. Kennedy and seven on board Belknap. The cruiser was later rebuilt at Philadelphia Naval Shipyard, Pa.

25 NOVEMBER • The first launch in the XJ521 program took place at Point Mugu, Calif. The XJ521 medium-range air-to-air missile resulted from British modifications to U.S. AIM-7E-2 Sparrows. An F-5A Tiger fired the missiles at QT-33 targets.

6 DECEMBER • CH-46s from NAS Whidbey Island, Wash., began search and rescue operations in areas of northwestern Washington flooded by heavy rains. The sailors evacuated 113 people during four days of this humanitarian work.

8 DECEMBER • The production prototype CH-53E Super Stallion made its first flight—about 30 minutes of lowaltitude hovering and limited maneuvering—at the Sikorsky Aircraft Division's Stratford, Conn., plant.

- 28 JANUARY The Navy awarded a contract for an initial funding of \$16 million to McDonnell Douglas Corporation to begin full-scale development of the F/A-18 Hornet.
- 11 FEBRUARY The first flight of a terrain contour matching (TERCOM) guidance test vehicle using a modified Navy Firebee drone occurred. TERCOM was subsequently introduced into Tomahawk cruise missiles.
- 18 FEBRUARY The night attack weapons system scored a direct hit on a moving M-48 tank during a test at NWC China Lake, Calif. The system, which consisted of a modified AGM-65 Maverick air-to-surface missile, was designed to enhance the performance of tactical and strike aircraft during night operations.
- 2 MARCH Two VS-22 S-3As completed the first Atlantic crossing by Vikings when they landed on board Saratoga (CV 60) off the coast of Italy. The aircraft departed NAS Cecil Field, Fla., and made stops at NAS Bermuda, NAS Lajes in the Azores, and NS Rota, Spain. The flight validated rapid long-range augmentation by Vikings.
- **15 APRIL** Offshore drilling platform *Ocean Express* capsized and sank while moving in 15-foot seas in the Gulf of Mexico east of NAS Corpus Christi, Texas. Lexington (CVT 16) assisted Coast Guard rescue efforts, hoisted on board a collapsed survival capsule, and recovered the bodies of 16 victims.
- **6 MAY** An earthquake rocked the Tagliamento River valley northeast of Venice, Italy. Navy C-130 Hercules flew more than ten tons of relief supplies to victims of the disaster.
- 20 MAY An AH-1T Sea Cobra made its first flight. The next week, a Sea Cobra flew at 120 knots indicated airspeed, and performed mild sideslips, climbs, and descents.

- **26 MAY** A contract for a new Navy multi-engine aircraft trainer to be designated T-44A and replace TS-2A Trackers was awarded to Beech Aircraft.
- 28 MAY Following the devastation caused by Typhoon Olga across Central Luzon, Philippines, helicopters from HS-4 operating from Ranger (CV 61), detachments from HC-3 flying from Camden (AOE 2), combat store ships Mars (AFS 1) and White Plains (AFS 4), and others from NAS Cubi Point and the Air Force assisted in disaster relief efforts. The sailors and airmen evacuated more than 1,900 people, and delivered over 370,000 pounds of disaster relief supplies and 9,340 gallons of fuel.
- 29 MAY Amphibious assault ship Tarawa (LHA 1) was commissioned at Ingalls Shipbuilding, Pascagoula, Miss.
- **5 JUNE** The Navy launched the first fully guided Tomahawk cruise missile over the White Sands Missile Range, N.M. An A-6 Intruder of Pacific Missile Test Center launched the missile at an altitude of 11,500 feet and it flew for 61 minutes. This was the first in a series of flights to test the weapon's capability to perform navigation, guidance updates, and lowterrain following maneuvers. It was also the first flight using a turbofan engine; previous tests used a turbojet.
- 6 JUNE An A-6 Intruder successfully test fired the tactical version of a Tomahawk cruise missile using the terrain contour matching navigation system.
- **24 JUNE** The Navy accepted its first T-34C Mentor. The new planes were to replace aging T-34B Mentors and T-28B/C Trojans used in primary and basic flight training. They were also to be the first training command aircraft to have maintenance and supply support provided by civilian contractors.
- 24 JUNE The Navy's air-launched low volume ramjet set a distance record traveling more than 100 nautical miles at sustained speeds of over 1,700 miles per hour. This was the fifth flight for the ramjet at Pacific Missile Test Center, Point Mugu, Calif.
- 30 JUNE A new major caliber lightweight gun mounted in destroyer Hull (DD 945) successfully fired an 8-inch laser-guided projectile developed jointly by the Navy and the Marines.



Tarawa~(LHA~1)~is~the~first~of~a~new~class~of~five~amphibious~assault~ships.~These~combined~in~one~ship~type~the~functions~previously~performed~by~four~different~types:~the~amphibious~assault~ship~(LPH),~amphibious~transport~dock~(LPD),~amphibious~cargo~ship~(LKA),~and~dock~landing~ship~(LSD).



 $An F-4J\ Phantom\ II,\ BuNo\ 153088,\ of\ VX-4\ awaits\ the\ final\ touches\ on\ its\ colorful\ 1976\ bicentennial\ markings.\ Its\ final\ scheme\ included\ a\ blue\ stripe\ down\ the\ fuselage\ side\ with\ U.S.\ Navy\ and\ VX-4\ in\ gold\ lettering.$



The radome of an E-2B Hawkeye, BuNo 149819, of VAW-116, embarked on board Nimitz (CVN 68), displays the "Spirit of 76" in honor of the nation's 1976 bicentennial.



An SH-3D Sea King, BuNo 154111, of HS-8 bears the squadron's celebratory markings during the nation's 200th anniversary. The American Bicentennial Committee honored HS-8 as a bicentennial command.

30 JUNE • A naval aviation tradition came to an end when the Navy struck brown shoes from the uniforms of officers and chiefs. The practice initially distinguished the brown shoes of naval aviators from the black shoes of surface officers. On 20 October 1986, however, the Navy authorized the restoration of the tradition.

1 JULY • The Navy's Sea-Air Operations Gallery within the new National Air and Space Museum of the Smithsonian Institution opened to the public. This featured depictions of naval aviation history events and contained a mock-up of an aircraft carrier hangar deck, bridge, and preflight operations room. The bridge areas included audio/visual presentations of takeoffs and landings from a carrier, and the hangar deck included Navy aircraft past and present.

9 JULY • The delivery of the first two CH-46Es extended the effectiveness and useful life of the Sea Knight program.

The major addition and modifications to CH-46A, D, and Fs to E standards included T-58-GE-16 engines, an Omega-Doppler navigation system, crashworthy pilot and copilot seats, a combat crashworthy fuel system, rescue hoist, and an infrared engine exhaust suppressor.

12 JULY • On 3 July, Israeli commandoes rescued more than 100 hostages held by Palestinian terrorists at the Entebbe, Uganda, airport. Ugandan President Idi Amin lashed out at the Israelis and anyone he perceived as supporting them. On this date, Ranger (CV 61) of Task Group 77.7 entered the Indian Ocean from the South China Sea and made for the coast of Kenya in response to a threat of military action by Amin. A VP-17 P-3A Orion that visited the Kenyan capital of Nairobi and the visit of a Middle East Force ship to Mombassa further demonstrated U.S. friendly ties and support for Kenya during the crisis. The United States released Ranger from this tasking on 27 July.



An F-4J Phantom II, BuNo 155752, of VF-21 slams into the barricade on board Ranger (CVA 61) during Carrier Air Wing 2's Vietnam War operations between 14 October 1969 and 1 June 1970. Both crewmen were uninjured and the aircraft received minimal damage.

12 JULY • The Navy retired the last C-117 Skytrain.

27 JULY • America (CV 66) and other elements of Task Force 61 supported the evacuation of 160 Americans and 148 other nationals from Beirut, Lebanon. Amphibious transport dock Coronado (LPD 11) removed the evacuees from Lebanon and, on 29 July, arrived in Athens, Greece. *Nimitz* (CVN 68) stood ready to support the evacuations. From January through July 1976, contingency evacuation forces for the Lebanese Civil War involved at different intervals America, Independence (CV 62), Nimitz, and Saratoga (CV 60), and amphibious assault ships Guadalcanal (LPH 7) and Iwo Jima (LPH 2).

27 JULY • The Department of Defense approved the first phase of a program to develop the AV-8B Harrier II, with improved payload and range over the AV-8A.

13 AUGUST • An HU-16 Albatross, the Navy's last operational seaplane, made its final water landing in Pensacola Bay, Fla.

18 AUGUST • North Korean border guards murdered two U.S. Army officers and wounded four other officers and five South Korean soldiers during the so-called Korean Tree Incident. Midway (CV 41) received orders to sail from Yokosuka, Japan, and from 21 August to 8 September made a show of force in the Korea Strait.

20 AUGUST • Frigate Ainsworth (FF 1090) became the first ship to undergo the installation of a production version of the Harpoon command and launch missile system.

29 AUGUST • The Navy withdrew from VS-37 the last S-2 Tracker in active service. The type entered service with VS-26 in February 1954.

- **15 SEPTEMBER** Test flights began on the Air Combat Maneuvering Range (ACMR) under construction off the coast of Cape Hatteras, N.C. The range provided air combat training for East Coast squadrons and followed a Navy ACMR at Yuma, Ariz.
- 17 SEPTEMBER NASA publicly unveiled the new space shuttle program. Twelve of the 28 astronauts in the program had Navy or Marine Corps aviation backgrounds.
- **29 SEPTEMBER** The ship-deployable, tactical airborne remotely-piloted vehicle (RPV) made the first automatically closed-loop recovery of an RPV into a net arresting assembly at the National Parachute Test Range, NAF El Centro, Calif.
- 30 SEPTEMBER Oriskany (CV 34) was decommissioned as the last Essex-class carrier at San Francisco, Calif. The ship then entered the Mothball Fleet.
- **4 OCTOBER** The first overseas operational commitment for the AV-8A on a carrier began when the Harriers of VMA-231, embarked with CVW-19 on board Franklin D. Roosevelt (CV 42), sailed for a deployment to the Sixth Fleet in the Mediterranean.
- **5 NOVEMBER** The Marine Corps received an AH-1T from Bell Helicopter Textron for further testing. This version of the Sea Cobra offered an improved payload of 4,392 lbs over previous versions' 2,739 lbs.
- 13 NOVEMBER Cruiser Wainwright (CG 28) completed the first at-sea firing tests of RIM-66 SM-2 (extended range) guided missiles. Wainwright used a modified Terrier fire control system to control the flight of a Standard missile, and the test capped a five-year program that demonstrated its accuracy.
- 1 DECEMBER NAF China Lake, Calif., was disestablished after more than 30 years of operation as a separate facility and became part of the Naval Weapons Center.
- 1 DECEMBER Naval Auxiliary Air Station Saufley Field, Fla., was disestablished.

- **6 JANUARY** The first General Electric F404 development engine underwent testing at the company plant in Lynn, Mass.
- 13 JANUARY NAS Jacksonville, Fla., announced that two AV-8A Harriers had made a bow on approach and landing on board Franklin D. Roosevelt (CV 42). The event marked the first time in U.S. naval history that fixed-wing aircraft made a bow-on, downwind landing on board a carrier at sea. The Harriers completed their landings and demonstrated the capabilities of V/STOL aircraft to land on board carriers without many of the conditions necessary for fixed-wing conventional aircraft.
- **14 JANUARY** The simultaneous operations of *Enterprise* (CVN 65) within the Seventh Fleet and Nimitz (CVN 68) within the Sixth Fleet marked the first all-nuclear-powered task group operations in both deployed fleets.
- **31 JANUARY** The Navy accepted delivery of twoseat TA-7C Corsair IIs converted from earlier models and designated combat crew and instrument trainers for replacement pilots of the light attack squadrons that flew Corsair IIs at NAS Cecil Field, Fla., and NAS Lemoore, Calif.
- 25 FEBRUARY Ugandan President Idi Amin criticized the United States and directed that all Americans living in Uganda were to meet with him personally. The issue caused concern for the safety of these people, and the joint chiefs ordered Enterprise (CVN 65) to maintain station 300 nautical miles east of Kenya. Negotiators persuaded Amin to lift the travel restrictions on Americans, and on 3 March the chiefs released Enterprise.
- 1 MARCH NARF and NAS Lakehurst, N.J., were disestablished. The modification of the mission of the Naval Air Engineering Center, Lakehurst, enabled the center to absorb their functions.
- **1 MARCH** The F/A-18 was officially named Hornet.
- **24 MARCH** The initial service acceptance trials for the CH-53E Super Stallion concluded at NATC Patuxent River, Md.

1977 continued

- 25 MARCH NAVAIR announced the testing of the Aerocrane lighter-than-air craft by the Advanced Concepts Division and the Naval Air Development Center, Warminster, Md. The project represented the first government-sponsored study of lighter-than-air flight in several years.
- **5 APRIL** The Navy took delivery of T-44A Pegasus (King Air 90) trainers at NAS Corpus Christi, Texas.
- 8 APRIL VAW-121 received the first fleet E-2C automatic radar processing system (ARPS)-equipped Hawkeye at NAS Norfolk, Va. The new aircraft was designed to improve the radar capability in its airborne early warning mission.
- 12 APRIL An operational requirement was established for night vision capability in Marine Corps transport helicopters.
- **21 APRIL** Franklin D. Roosevelt (CV 42) returned to the United States from the Mediterranean after her final overseas deployment prior to decommissioning on 1 October 1977.
- 22 JUNE An OV-10D Bronco equipped with a forwardlooking infrared (FLIR) imaging system underwent testing and evaluation at NATC's Strike Aircraft Test Directorate, Patuxent River, Md. FLIR allowed the two-man crew to pinpoint targets obscured by dark, camouflage, dust, smoke, haze, and light fog by detecting thermal radiation they emitted compared to their surroundings. The system also proved useful for navigation, terrain avoidance and surveillance, target detection, recognition and tracking, gun laying, and as a landing aid.
- 13 JULY A pilot in an F-4J Phantom II from NATC Patuxent River, Md., made the first landing using the microwave landing system (MLS) at the FAA Test Facility, Atlantic City, N.J. The system was designed to reach out electronically, catch target aircraft, and fly them to safe landings without the pilots touching the controls.
- 23 JULY The National Aviation Hall of Fame, Dayton, Ohio, inducted Rear Adm. Alan B. Shepard Jr.
- 11 AUGUST Marine Corps pilots flew the first of 400 CH-46E Sea Knights retrofitted with newly developed

- fiberglass rotor blades that were less susceptible to corrosion and fatigue damage.
- **26 AUGUST** The Navy unveiled the XFV-12A V/STOL research aircraft at the Rockwell International facility in Columbus, Ohio. The single-engine single-seat thrustaugmented wing prototype high-performance fighter was designed to operate from small ships.
- 29 AUGUST The first production model P-3C Update II arrived for technical evaluation at NATC Patuxent River, Md. The upgraded Orions incorporated enhanced avionics and weapons systems including a turret-mounted infrared detection device to identify targets day or night, and AGM-84 Harpoon air-to-ground missiles.
- 1 SEPTEMBER The Navy selected LAMPS Mk III helicopter contractors; Sikorsky Aircraft Division to build the aircraft and General Electric's Aircraft Engine Group to provide the engines.
- **30 SEPTEMBER** The Joint Cruise Missile Project Office was established in the Naval Material Command. The Navy and Air Force shared responsibility for developing cruise missiles. The Cruise Missile Project Office had been a NAVAIR project.
- 1 OCTOBER The Naval Aviation Logistics Center became fully operational at NAS Patuxent River, Md. It was responsible for the implementation, coordination, and management of Navy-wide depot-level aviation maintenance programs.
- 31 OCTOBER The Department of Defense directed a significant relocation of the essential mission of the National Parachute Test Range, El Centro, Calif. The range had been responsible for research, development, training, and evaluation (RDT&E) for parachute systems and for providing common airfield support to aviation units. The RDT&E mission shifted to NWC China Lake, Calif., while the airfield support mission remained at NAF El Centro.
- 14 NOVEMBER The chief of Naval Air Training formally accepted turboprop T-34C Mentor trainers. The planes subsequently were renamed Turbomentors.

- 7 JANUARY A fire erupted on board Indian freighter Jagat Padmini 30 miles southeast of Sicily, Italy. An HS-9 SH-3H Sea King, embarked on board Nimitz (CVN 68), spotted the blaze and alerted rescuers. Nimitz, cruiser South Carolina (CGN 37), and destroyer Bigelow (DD 942) battled exploding oil drums, heavy seas, and 25- to 30-knot winds to rescue 43 crewmembers and extinguish the blaze. A Sea King struck an obstruction and crashed, but the four crewmembers survived. Italian tug Monte Priolo took the stricken ship in tow.
- 2 FEBRUARY Submarine Barb (SSN 596) successfully launched a Tomahawk cruise missile that flew a fully guided land attack test flight that terminated at Edwards AFB, Calif. This was the first launch of a Tomahawk from a submarine.
- 9 FEBRUARY The first satellite of the Navy Fleet Satellite Communications System was launched. The system satisfied the need for worldwide tactical command, control, and communications for the entire fleet.
- 27 FEBRUARY A contract for full-scale production of the CH-53E Super Stallion was awarded to Sikorsky Aircraft.
- 28 FEBRUARY The Department of Defense authorized the full-scale development of the SH-60B LAMPS Mk III Seahawk.
- **FEBRUARY** During the latter part of the month, ships began surveillance operations of the Somali invasion of the Ogaden region of Ethiopia. The invasion quickly collapsed and Kitty Hawk (CV 63) received orders to a holding point north of Singapore until 23 March.
- 17 MARCH NASA selected four two-man crews for early flights of the space shuttle. The first scheduled orbital test included Navy Capt. John W. Young as commander and Cmdr. Robert L. Crippen as pilot, while Col. Joe H. Engle, USAF, and Cmdr. Richard H. Truly comprised the backup crew. The first group of two-man crews also included Lt. Col. John R. Lousma, USMC.

- 10 APRIL The first TA-7C Corsair II attack trainer arrived for Board of Inspection and Survey trials at NATC Patuxent River, Md.
- **14 APRIL** The first of 12 C-2A Greyhounds rolled off the service life extension program (SLEP) line at NARF North Island, Calif. SLEP added seven to ten years of service to the carrier-on-board-delivery planes.
- 9 JUNE Commander NWC Rear Adm. William L. Harris accepted the Daedalian Weapons Systems Award in San Antonio, Texas. The Order of Daedalians, a national fraternity of military pilots, selected NWC and NAVAIR as co-winners in recognition of the success of the commands in working as a team on the Sidewinder family of heat-seeking guided missiles.
- JULY During growing unrest in Afghanistan, Enterprise (CVN 65) operated until 31 July in the vicinity of Diego Garcia, British Indian Ocean Territory.
- 8 JULY The Naval Air Test and Evaluation Museum opened its doors to the public at NAS Patuxent River, Md.
- **21 JULY** The final flight of the service acceptance trials for the AH-1T Sea Cobra took place at NATC Patuxent River, Md.
- 22 JULY Capt. Holden C. Richardson, CC (Naval Aviator No. 13), was inducted into the National Aviation Hall of Fame, Dayton, Ohio. He was the first naval aviation engineering officer so honored.
- 25 JULY Through the following day, a mock-up of an SH-60B Seahawk underwent shipboard compatibility trials on board frigate Oliver Hazard Perry (FFG 7). On 2 and 3 August, evaluators carried out additional similar trials with destroyer Arthur W. Radford (DD 968).
- 3 AUGUST NAVAIR announced that testing of a verticalseeking ejection seat took place during the summer at NWC China Lake, Calif. While carrying a dummy crewmember, the seat was fired downward from a suspended test module. The seat traveled less than 45 feet before reversing direction and traveling upward, and then parachuted safely to the ground. These tests demonstrated the capabilities of vertical-

seeking seats to safely eject while upside down within 50 feet of the surface, and thus increase the safety envelope of ejection seats.

- 14 SEPTEMBER A 60-hour technical test of CH-53Es undertaken to determine if changes made since the initial trials had altered the performance of the Super Stallions ended successfully.
- 15 SEPTEMBER A test bed P-3C for the Update III program arrived at Naval Air Development Center, Warminster, Pa. The Orion featured an advanced signal processor developed by IBM, which provided a four-fold improvement in isolating sounds of submerged targets from ocean background noise.
- 9 NOVEMBER An AV-8B Harrier II flew for the first time at McDonnell Douglas Corporation, St. Louis, Mo.
- **18 NOVEMBER** An F/A-18A Hornet flew for the first time at McDonnell Douglas Corporation, St. Louis, Mo.
- 18 DECEMBER Commander NAVAIR established the undergraduate Jet Pilot Training System Project. This was designed to provide naval aviation with an integrated intermediate and advanced jet training program consisting of aircraft, simulators, academics, and training management.
- 27 DECEMBER The United States directed Constellation (CV 64) to the vicinity of Singapore in response to the Iranian hostage crisis and because of vital U.S. interests in the Persian Gulf area. On 2 January 1979, President James E. Carter Jr. ordered the ship to remain in the South China Sea. On 16 January, the crisis temporarily abated when Iranian Shah Mohammad R. Pahlavi departed for exile. The ongoing situation nonetheless prompted the State Department to order the evacuation on 30 January of all U.S. government dependents and nonessential Americans from the country. On 28 January, Constellation was released from her tasking, and on 18 and 21 February, the British evacuated many Westerners from Iran.

- 2 JANUARY A Soviet Aeroflot Ilyushin Il-14FKM Crate crashed near Molodezhnaya, Antarctica, killing four of the seven crewmembers. An LC-130 Hercules of VXE-6 rescued the survivors.
- **16 JANUARY** The first F/A-18 Hornet arrived for evaluation trials at NATC Patuxent River, Md. Testing was to include in-flight refueling, land-based catapult launchings and arrested landings, speed tests, and at-sea carrier takeoffs and landings on board America (CV 66).
- 25 JANUARY The Navy's YAV-8B Harrier II prototype arrived to test its aerodynamic improvements at NATC Patuxent River, Md.
- 9 FEBRUARY Secretary of the Navy W. Graham Claytor Ir. announced the decision to name the helicopter portion of the Navy's SH-60B LAMPS Mk III program as the Seahawk. The name honored the Curtiss F7C and SC-1 Seahawks.
- 14 FEBRUARY Submarine Guitarro (SSN 665) launched a Tomahawk missile from off the California coast. This successful evaluation was part of a planned series of three submarine launches and flight tests of Tomahawks conducted in February and June that demonstrated the overthe-horizon capability of the missiles to carry out simulated searches of, and attacks on, target ships at sea.
- 22 FEBRUARY The Chinese invaded Vietnam in retaliation for the Vietnamese invasion of China's ally Kampuchea (Cambodia). On 25 February, Constellation (CV 64) entered the South China Sea to monitor the crisis and increased Soviet naval deployments to the region.
- 27 FEBRUARY The Navy took delivery of the last A-4 an A-4M assigned to VMA-331—from McDonnell Douglas Corporation. The delivery ended a continuous Skyhawk production run of 2,960 aircraft over 26 years.
- 7 MARCH The United States directed Constellation (CV 64) from the South China Sea to the Gulf of Aden to monitor fighting between North and South Yemen. Tankers carrying oil to the United States and its allies passed through the gulf. An aircraft carrier operated in the area until 6 June.



A P-3A Orion, BuNo 152170, of VP-17 patrols over a Soviet Boris Chilikin-class replenishment oiler in the Sea of Japan, c. 1976.

11 MARCH • A P-3B Orion from NATC Patuxent River, Md., flew the first transoceanic flight guided by the spacebased NavStar radio navigation system on a six-hour mission from NAS Barbers Point, Hawaii, to NAS Moffett Field, Calif. The NavStar system comprised 24 satellites in earth orbit providing radio navigational information.

20 MARCH • The last variant of the P-2 Neptune rolled off the production line during ceremonies in Japan. This concluded a manufacturing run of 34 years.

26 MARCH • An AV-8A at NATC Patuxent River, Md., tested a ski jump ramp developed by the British to reduce Harrier takeoff distance. The 130-foot-long ramp with a 12 degree inclination reduced the total takeoff distance for Harriers from 930 to 230 feet.

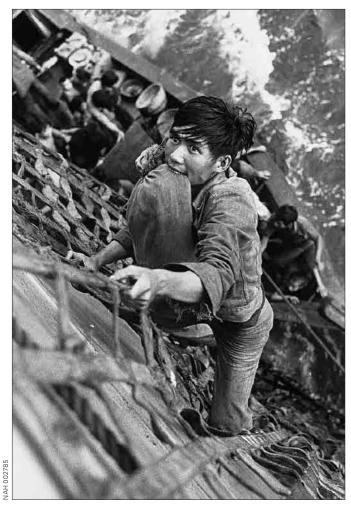
16 APRIL • *Midway* (CV 41) relieved *Constellation* (CV 64) as the Indian Ocean contingency carrier. Ongoing crises involving Iran and Yemen prompted the carrier deployments.

21 APRIL • The Navy's supersonic tactical missile test vehicle made its first flight at the Pacific Missile Test Center.



Naval officers examine one of two Northrop YF-17 lightweight fighters, c. 1974-1975, most likely 72-1570, the second aircraft, which was painted in Navy colors. The design served as the basis for the later F/A-18 Hornet.

Vought developed this advanced integral rocket/ramjet test vehicle, which the designers intended as a major step toward development of a new generation of high performance, airto-surface tactical standoff missiles.



With his sole possessions clasped in his teeth, a Vietnamese refugee climbs netting to combat store ship White Plains (AFS 4). He and 28 other Vietnamese boat people were found floating in a 35-foot wooden boat in the South China Sea, 30 July 1979.

23 APRIL • Vice Adm. Forrest S. Petersen transferred ownership of the sole remaining Kawanishi H8K2 flying boat to the Japanese Museum of Maritime Science during a ceremony at NAS Norfolk, Va. The Navy brought the Emily to the United States late in 1945 to undergo tests at Patuxent River, Md. After test completion, the plane was stored at Norfolk and outlasted all its sister aircraft. In July 1979, the museum transported the Emily to Tokyo.

30 APRIL • Lt. Rodney M. Davis of HM-12 set a transcontinental long-distance, non-stop flight record by piloting an RH-53D, Aircraft No. 430, from NAS Norfolk, Va., to San Diego, Calif. Davis flew the Sea Stallion 2,077 nautical miles in 18.5 hours, refueling in the air from an Air National Guard HC-130 Hercules.

5 MAY • After pirates repeatedly attacked a vessel packed with Vietnamese refugees in the South China Sea, on this date Robert E. Peary (FF 1073) rescued the 442 survivors adrift about 400 miles south of Thailand. Three days later, the frigate transferred the refugees to amphibious assault ship Tarawa (LHA 1). On 12 May, Tarawa put the people ashore in Thailand.

22 MAY • The first of two AV-8Cs arrived for service acceptance trials at NATC Patuxent River, Md. Improvements in these Harriers included a new UHF radio, a chaff and flare dispensing system, lift improvement devices, a radar warning system, and secure voice equipment.

30 MAY • The United States released *Midway* (CV 41) from contingency operations in the Arabian Sea and the ship sailed for the Pacific.

12 JUNE • The Deputy Secretary of Defense approved the mission element need statement for the Jet Pilot Training System Project. The system facilitated the provision of undergraduate pilot training for student naval aviators and transition students of the Navy and Marine Corps.

20 JUNE • Lt. Donna L. Spruill of VRC-40 became the first female naval aviator to carrier qualify in a fixed-wing aircraft. Spruill and copilot and squadron commanding officer, Cmdr. Jerry L. Wright, made ten landings and three catapult launches in a C-1A Trader on board Independence (CV 62) in the Atlantic.

1 JULY • The deactivation of the Army's Executive Flight Detachment left HMX-1 as the single source of helicopter support for the White House.

17 JULY • Amphibious assault ship Saipan (LHA 2) operated off the coast of Nicaragua for possible evacuation of Americans because of the turmoil surrounding the fall of that government to the Marxist Sandinistas.

18 JULY • A P-3C Orion of VP-23 fired an AGM-84 Harpoon air-to-ground missile. VP-23 was the first operational fleet patrol squadron to receive, fire, and make an operational deployment with Harpoons. On 17 August, the announcement of the entry of Harpoons into operational service as air-launched weapons occurred during a ceremony at NAS Brunswick, Maine.

19 JULY • President James E. Carter Jr. announced that he had instructed the Seventh Fleet to aid Vietnamese refugees, dubbed "boat people" by the media, and assist them to safety. Aircraft and ships of the Seventh Fleet thus stepped up patrolling, assistance, and rescue efforts.

21 JULY • The National Aviation Hall of Fame in Dayton, Ohio, inducted Neil A. Armstrong. He served as a Navy

pilot during the Korean War and later, as commander of the Apollo 11 mission, became the first man to step on the moon.

24 JULY • The Bell XV-15 successfully transitioned in flight from helicopter- to fixed-wing mode. The joint Navy/Army/ NASA XV-15 flight test program evaluated the tilt-rotor concept.

27 JULY • A turbojet-powered Northrop BQM-74C aerial target successfully completed its first flight over the Pacific Missile Test Center, Point Mugu, Calif. The 33-minute flight also marked the first airborne launch of the type from an A-6 Intruder.

30 AUGUST • The first prototype of an SH-60B Seahawk was unveiled at the Sikorsky Aircraft Division, Stratford, Conn.

30 AUGUST • A CH-53D Sea Stallion of VR-24 lifted a 12-foot bronze statue of the Madonna and Child to the top of Mt. Tiberius on Capri, Italy. Lightning had destroyed the original statue and the replacement proved too large for overland transportation.

15 SEPTEMBER • The first naval UC-12B Huron arrived for preliminary evaluation tests at NATC Patuxent River, Md.



Vietnamese refugees displaying an SOS sign from their fragile craft signal the crew of a VP-22 P-3B Orion in the Western Pacific, August 1979.

18 SEPTEMBER • The circulation control rotor made its first flight using the airframe and propulsion system from an HH-2D helicopter. The Navy's advanced rotor system project was to improve performance, reduce maintenance requirements, and reduce vibration levels over extant rotor systems.

28 SEPTEMBER • RVAH-7 was disestablished as the last RA-5C Vigilante squadron. The Navy planned to use some of the Vigilantes as drones.

1 OCTOBER • AV-8A shipboard trials began on board amphibious assault ship Saipan (LHA 2). The testing consisted of 33 flights involving short and vertical takeoffs, and vertical landings by the Harriers through 8 October.

2 OCTOBER • In the wake of reports concerning a possible build-up of Soviet troops in Cuba, the joint chiefs ordered the establishment of a Caribbean contingency task force. On 11 October, amphibious assault ship Nassau (LHA 4) and other amphibious ships made for NS Guantánamo Bay, Cuba. President James E. Carter Jr. ordered the ships to make a show of force in response to maneuvers by Soviet troops on the island. On 17 October, 1,800 Marines landed in Guantánamo Bay as a demonstration of naval power in the wake of the Soviet refusal to withdraw their combat brigade.

1979 continued

Later in the month, Forrestal (CV 59) transited close to Cuba in conjunction with the U.S. policy of an increased presence in the Caribbean.

- 14 OCTOBER A-6E target recognition attack multisensorequipped all-weather Intruders began fleet operations at NAS Oceana, Va.
- **26 OCTOBER** South Korean President Park C. Lee was assassinated. On 28 October, Kitty Hawk (CV 63) received orders to operate in the East China Sea off Cheju Do in the Korean Strait. Aircraft from the ship completed flight operations within the detection envelope of North Korean early warning radars to demonstrate U.S. support of the South Koreans. Kitty Hawk left the area on 5 November.
- **30 OCTOBER** An F/A-18 made the first landing of a Hornet at sea on board America (CV 66). The plane completed 32 catapult and arrested landings during five days of sea trials.
- 4 NOVEMBER A mob of revolutionaries seized 66 Americans including one naval aviator and 14 Marines at the U.S. Embassy and the Iranian Foreign Ministry in Tehran, Iran. Their demands included the return to Iran from the United States of deposed Shah Mohammad R. Pahlavi.
- **18 NOVEMBER** *Midway* (CV 41), which had been operating in the Indian Ocean, arrived in the northern Arabian Sea in connection with the ongoing hostage crisis in Iran.
- **20 NOVEMBER** The last RA-5C in the Navy departed on its final flight from NAS Key West, Fla. The mission completed the phase-out of the entire reconnaissance inventory of 156 Vigilantes.
- **21 NOVEMBER** The United States directed *Kitty Hawk* (CV 63) to sail to the Indian Ocean to join *Midway* (CV 41) in the northern Arabian Sea in response to the Iranian hostage crisis. On 3 December, Kitty Hawk arrived, marking the first time since World War II that the United States had deployed two carriers in the Indian Ocean in response to a crisis situation. Kitty Hawk recorded continual Soviet surveillance by Antonov An-12 Cubs flying from Aden, Yemen, supplemented at three-day intervals by Il-38 Mays.

- On 21 and 22 January 1980, Soviet spy trawler No. 477 conducted what Kitty Hawk reported as "provocative maneuvers close aboard." Kitty Hawk left the area on 24 January.
- 12 DECEMBER The development program for SH-60B LAMPS Mk IIIs reached a milestone when one of the Seahawks completed its first flight at Sikorsky's West Palm Beach, Fla., test facility.
- 17 DECEMBER The first two-seat F/A-18B Hornet arrived for armament and stores separation testing at NATC Patuxent River, Md. During 1979, the center conducted 416 F/A-18 flights for a total of 555 hours testing. On 12 December, it completed a successful live firing of an AIM-9 Sidewinder air-to-air missile from a Hornet.
- 21 DECEMBER The Department of Defense announced the deployment of Nimitz (CVN 68) from the Sixth Fleet in the Mediterranean to the Indian Ocean to relieve Kitty Hawk (CV 63).
- **24 DECEMBER** The Soviets airlifted 5,000 airborne troops into Kabul, Afghanistan. The United States protested the move, which the Soviets claimed had been conducted at the request of the Afghan government. On 27 December, a Soviet-backed coup installed a new regime in the country. The Soviet invasion reinforced the U.S. decision to maintain two carriers in the region, and Kitty Hawk (CV 63) and Midway (CV 41) extended their contingency operations in the northern Arabian Sea.
- **31 DECEMBER** Ships and aircraft of the Seventh Fleet continued their patrols and rescue assistance efforts connected with the Vietnamese boat people. During the final six months of 1979, Navy ships rescued more than 800 Vietnamese refugees, and P-3 Orions directed merchant vessels to the rescue of more than 1,000 others.