

July-August 1993



1992 The Year in Review

Page 10

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COVERS – Front: This Bob Lawson photo captures a VMFA(AW)-225 FA-18D flown by Capt. Steve Ganyard and WSO Capt. Todd Kemper as they begin a pop-up, roll-in maneuver in their missile-laden *Hornet* over Owens Valley, Calif. **Back:** ANA Photo Contest winner by David Skepner (see page 40).

RAdm. Riley D. Mixson
Director, Air Warfare

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By RAdm. Riley D. Mixson, Director, Air Warfare

On Glide Slope, On Glide Path ...

Things change ... Perhaps never before in its history has Naval Aviation undergone such rapid change spanning such a broad spectrum of issues. These are indeed exciting times as we mold a force structure to meet the new threats of the world. While the global threat has diminished, we don't need to look far for examples of the threat in the littorals: Bosnia, Persian Gulf, Somalia ... and it is these areas that uniquely require the use of strong, ready, flexible naval forces.

Amidst large personnel cuts and budget reductions, we are working hard to ensure that the Navy of the future is well manned, well trained, and well equipped. It will be a new Navy in terms of personnel strength, increased opportunity for women, and budgetary authority. But what hasn't changed is our requirement for well-trained, efficient people – with effective state-of-the-art equipment that gains from our advantage in technology, and a strong, economical support system to make it all work. Our Navy must be a high-quality, ready force, forward deployed in a volatile world which still can be a dangerous place.

What's changing ...

Primary fixed wing pilot training will eventually be joint. It will be conducted in the airframe that wins the JPATS competition. The Department of Defense is studying consolidation of helicopter training, as

well as that of Naval Flight Officers with Air Force navigators and weapons systems operators.

We are demanding multimission capability and flexibility from our ships, planes, and people. The carrier air wings are being restructured for joint littoral warfare. Fighter pilots are learning to drop bombs. Marine squadrons are regulars in the pattern around the boat. Operating with our Air Force and Army counterparts is becoming the rule rather than the exception. Fleet carriers pull duty as the training carrier, qualifying the fledgling aviator of tomorrow.

Women will serve in combat aircraft (see article in this issue). Women are joining VP flight crews, and we will soon have two carrier air wings with women in the ready rooms and maintenance shops. When Congress changes the law restricting women from serving in combatant ships, we will have women in ships' companies as well.

In Washington, big decisions are pending on the aircraft of the future. The FA-18E/F is now under development and is our bridge to the new technology aircraft represented by AFX. By summer's end, we should have a clearer picture of the future's air wing. They remain an impressive source of offensive power projection with the ability to steam within miles of any country's littoral, a highly flexible capability required for tomorrow's threat.

To one degree or another, everyone in



JO1 (SW) Eric Seest

RAdm. R. D. Mixson

Naval Aviation is affected by these changes. They tend to divert our attention from the mission, safety, and readiness of our Naval Aviation units. Solid leadership in the ready rooms and shop spaces is needed to recognize the stress that change produces. We have been in turbulent times before and prevailed; this is not a new challenge, just another challenge. I am confident that we will become a somewhat smaller yet even more efficient fighting force – represented by the best weapons systems our aerospace industry can build and replete with the finest men and women Naval Aviation has ever sent to sea.

Keep 'em flying – **safely!**

PH2 Stover



A Marine Corps AV-8B Harrier II hovers over an amphibious ship.

Scissors and Stalls

A section of A-7 Corsair IIs was performing tactics as part of fleet replacement squadron training. The instructor pilot (IP) felt the replacement pilot (RP) needed additional work in the "rolling scissors," so the flight set up for a repeat maneuver.

The Corsairs were at 20,000 feet with the IP on the left, RP on the right. The IP pulled up and rolled into the RP to begin the maneuver. Shortly, the IP's aircraft was in a nose-high attitude. The A-7, he recalled, became "unresponsive to control inputs." The IP bunted the nose slightly forward to avert a departure because "it felt strange."

Then, recognizing a departure, the IP disconnected the automatic flight control system and released the controls. "I've departed," he transmitted.

Believing he had adequate airspeed for the maneuver he was performing, the IP assumed an aircraft malfunction had caused the departure. The A-7 pitched nose down to about 90-120 degrees nose low. The IP experienced a "weightless" sensation, followed by negative G, with helmet pressed against the top of the



canopy. He pulled aft on the stick, watching the angle of attack (AOA) gauge but noted no change in AOA and no aircraft

response. He pushed himself back into the seat, still believing the Corsair had suffered a malfunction, and deselected yaw stab. He tried to determine his AOA, airspeed, and altitude and recalled the AOA "approaching zero" units, airspeed "increasing," and altitude "above 10,000 feet mean sea level." A moment later, the altitude warning alerted the pilot that he was descending through 10,000 feet. Convinced he was in uncontrolled flight, he decided to eject.

The pilot tried to reposition himself for ejection by pushing off the canopy with one hand and grasping the ejection handle with the other. Just prior to initiating ejection, he used both hands to pull the handle. He felt "weightless" at the time of ejection, and off the seat.

The seat started up the rails but seat motion was arrested at the canopy. Instead of the immediate fracturing of the glass, there was an excessive acceleration in the vertical axis with the pilot's body out of the seat. As the seat left the aircraft, eight of 28 parachute suspension lines were partially cut by canopy glass and subsequently parted when the parachute opened.

The pilot had no recollection of ejection, parachute opening or ground impact, although he vaguely recalled that his chute was a "streamer" and seemed "rectangular, not round."

The pilot lived but sustained fracture-dislocation of the spine, resulting in paraplegia.



Grampaw Pettibone says:

Great jumpin' jets! Where were the supervisors here? This pilot hadn't flown a tactics flight in two months, which mighta had somethin' to do with his gettin' into a departure. The squadron shoulda done a better job of scheduling. The tragic lesson here for pilots: if things turn to worms and you must punch out, get firmly positioned in the seat, otherwise the consequences can be dark indeed. This flyer gave it all he had but he was in a vertical stall flight situation - which was not yet described in NATOPS (Naval Air Training and



Operating Procedures Standardization), by the way – and couldn't press himself into the seat before pulling the handle. He had to leave the machine while in a negative-G condition.

We're not flyin' A-7 tactics anymore, but in any ejection seat aircraft, the message is clear: ejection without being firmly seated is out of the envelope. Tight belts and harnesses may be uncomfortable, but the possible consequences are worse.

Command Decisions

A C-12 departed NAS Overseas for NAS Destination on an overwater flight with an island refueling stop. En route the crew experienced difficulties maintaining cabin pressure. A lower altitude was selected and the *King Air* completed the flight. The C-12 was to return to home base next day.

NAS Destination Beechcraft (BASI) technicians troubleshot the system and discovered foreign object damage to both bleed-airflow packages. Replacement parts would arrive in five to six days. The transport plane commander (TPC) was reluctant to make the return flight before repairs were made due to forecast seasonal weather and the higher fuel consumption expected at lower altitude flight. Home Base ops concurred the crew should wait for the parts.

By the fifth day, Home Base grew impatient and directed the crew to return by any available means if the parts did not arrive within 24 hours. BASI techs, meanwhile, told the TPC that another three to four days' wait for parts/repairs was required.

At Home Base, the decision was made to reinstall the damaged parts with the condition that the TPC sign a statement releasing BASI of all liability for the aircraft's safety of flight.

The Home Base CO asked the TPC if he had any reservations about flying the aircraft home. The TPC agreed to make the return trip.

En route the TPC maintained 21,000 feet but had to divert to a civilian field 300 miles short of Home Base due to high fuel consumption. Because of weather and

crew flight-hour limits, the crew remained overnight and safely completed the journey next day.



Grampaw Pettibone says:

This one lights my fire, gents. Nobody got hurt, but I bet the stress levels of the TPC, BASI techs, and Home Base CO were toppin' the scales before this sorry episode ran its course. Turns out that in the past, the TPC had been intimidated by the CO. The TPC had 2,000 hours in the C-12; the CO held no qualification in the *King Air*.

What ifs don't mean an awful lot, but "what if" something had gone wrong on that return flight and it was discovered that damaged parts had been removed, then reinstalled? "What

if" the crew became hypoxic? "What if" all day. One of my old skippers (God rest his soul) always asked, "How will" the accident report read? Soberin' thinkin' that always seemed to put the right amount of top rudder on every decision.

Gramps appreciates the pressures endured by our COs, but I've never been partial to leadership by intimidation and fear. It kills morale, confidence, and sometimes, even people.



TR Enforces "Deny Flight"

Carrier Air Wing (CVW) 8 embarked in *Theodore Roosevelt* (CVN 71) continues to enforce Operation Deny Flight, the establishment of a no-fly zone over embattled Bosnia-Herzegovina.

When the NATO operation began on April 12, 1993, CVW-8 provided 12 FA-18C *Hornet* strike-fighters to NATO command to enforce the zone. Other aircraft and ships from the *Roosevelt* Battle Group are providing support for the operation as well. CVW-8 is operating with USAF F-15C and KC-135 aircraft, as well as fighters from other NATO countries.

According to Capt. Stan Bryant, CO of *Theodore Roosevelt*, the carrier is controlling "25 percent of the combat air patrol over Bosnia-Herzegovina."

More Bases Eyed for Closure

Several more Naval Aviation facilities were added in May to the list for consideration for closure by the Defense Base Closure and Realignment Commission. They will be considered along with the bases nominated for closure or realignment by the Department of Defense last March. (See *NANews*, May-June 1993, p. 4.)

The facilities added for consideration include NAS Corpus Christi, Texas; NAS Memphis, Tenn.; NAS Miramar, Calif.; NAS Oceana, Va.; and MCAS Beaufort, S.C., as well as the three Naval Aviation Depots left off the original list: North Island, Calif.; Jacksonville, Fla.; and Cherry Point, N.C. In addition, two planned reserve facilities, NAF Martinsburg, W.V., and NAF Johnstown, Pa., were added to the list.

MCAS Tustin, Calif., approved for closure by the commission

two years ago, is being considered for retention.

USMC Helos Draw Fire in Cambodia

A Marine Corps helicopter detachment supporting the Joint Task Force-Full Accounting (JTF-FA) search efforts in Cambodia was the focus of an attack April 3 at the detachment's base camp at Stoeng Treng.

Two explosions of undetermined origin rocked the base camp, resulting in the three CH-46E helicopters staged there evacuating the camp's 48 Americans and 25 Cambodians. Ground fire was seen as the helicopters departed into the night and flew on to the country's capital, Phnom Penh. Two days later, the helicopters retrieved equipment and supplies from Stoeng Treng.

The hostilities were believed to be related to stepped-up Khmer Rouge activity designed to influence the UN-sponsored elections held in Cambodia during May.

A four-aircraft detachment from Marine Medium Helicopter Squadron (HMM) 165, based at MCAS Kaneohe Bay, Hawaii, had been providing transportation to the JTF-FA since March 17, 1993. In October 1992, the squadron operated a two-aircraft detachment in Cambodia, the first American military aircraft in Cambodia since its fall to the Khmer Rouge in 1975.

According to the HMM-165 detachment's commander, Maj. William E. Taylor, "The flight was quiet for about 20 minutes. Then we encountered AAA [antiaircraft artillery] ... and went into 'terf mode' [flying treetop level]. We had at least one more AAA encounter about 30 miles north of Phnom Penh." At one point, Taylor's helicopter was hit through a forward cowling by small arms fire, causing minor

damage but no injuries. Taylor credits getting out safely to training, especially extensive night-vision goggle training.

Thanks to Sgt. Paul Schneider of MCAS Kaneohe Bay for information.

USMC Retires A-6 Intruder

An April ceremony at MCAS Cherry Point, N.C., marked the phaseout from the Marine Corps of the Grumman A-6 *Intruder* all-weather attack aircraft after almost 29 years of service. As a cost-cutting measure, the phaseout and replacement by the FA-18D *Hornet* was accelerated by two years.

Marine All-Weather Attack Squadron (VMA(AW)) 332 was the last Marine unit to fly the A-6. The *Moonlighters* have been redesignated a Marine All-Weather Fighter Attack Squadron (VMFA(AW)) and moved in June to MCAS Beaufort, S.C., to join their sister squadrons in MAG-31 in transitioning to the FA-18D.

Entering Marine Corps service in October 1964, the A-6A attack versions of the A-6 served with six squadrons – VMA(AW)s 121, 224, 225, 242, 332, and 533 – and with Marine All-Weather Attack Training Squadron 202. All except VMA(AW)-225 went on to operate the A-6E version, and some KA-6Ds were used by VMA(AW)-533 during its carrier deployments. Marine *Intruders* saw extensive action in Vietnam and in the Persian Gulf War, and occasionally deployed aboard Navy aircraft carriers.

3rd MAW Units Return from Somalia

The last units and detachments of the 3rd Marine Aircraft Wing to deploy to Somalia in support of Operation Restore Hope returned home by May 8, after five months of operations.

A four-aircraft detachment from Marine Heavy Helicopter Squadron (HMH) 466 returned to MCAS Tustin, Calif., on March 4. HMH-466 operated out of Baledogle, Somalia, and was routinely tasked with reconnaissance, troop insertions, and medical evacuations, carrying over 1,000 passengers and over 1.3-million pounds of cargo during its 60-day deployment.

HMH-363 returned to Tustin on April 27. The *Red Lions* spent their deployment transporting troops, food, and supplies in support of the relief operation. The round-the-clock flying drew some random small arms fire, but the squadron suffered no combat damage.

Returning May 5, Lt. Gen. Robert Johnson, commander of the multinational force in Somalia said, "When we landed [in Somalia] you could smell dead bodies all over the place. When I first got there, we saw expressionless children. Now, they are smiling and going to school. To me, this mission was the most gratifying mission of my three decades as a Marine."

Seen at MCAS Cherry Point, N.C., on April 20, the Marine Corps' last A-6 *Intruder* (BuNo 161681) displays the markings of the last Marine Corps *Intruder* squadron, VMA(AW)-332.

David F. Brown





A CH-53E from HMH-466 lifts cargo in support of Operation Restore Hope in Somalia.

VC-6 Launches UAV from LPD

Fleet Composite Squadron (VC) 6 made history April 26 with the first launch of a *Pioneer* unmanned aerial vehicle (UAV) from an amphibious vessel, *Denver* (LPD 9). VC-6 Detachment 2, NAS Patuxent River, Md., under LCdr. Randall McDonald, made the historic launch. AT2(AW) David Miller controlled the aircraft with remote controls.

The Navy is outfitting eight LPDs to operate the *Pioneer* UAVs, providing amphibious ready groups with an aerial reconnaissance capability. The UAVs saw extensive use in Operation Desert Storm, launched from the now-retired battleships *Missouri* (BB 63) and *Wisconsin* (BB 64). VC-6 Detachment 2 is scheduled to deploy with *Denver*.

Harrier Training Expands to 30 Weeks

The Marine Corps has expanded the pilot training syllabus for the AV-8B *Harrier II* to 30 weeks in order to provide the fleet with a more capable, combat-ready *Harrier* pilot.

The change at Marine Attack Training Squadron 203, instituted in March 1993 at MCAS Cherry Point, N.C., makes the syllabus twice as long as it was two years ago. The training was then extended to 22 weeks to give new pilots more tactical flying. The additional eight weeks of training

will, however, eliminate the need for several months of additional training in operational squadrons.

The new syllabus has pilots spending more time training to land and take off vertically in wooded areas. After pilots master their vertical/short takeoff and landing skills, they learn how to land on a simulated aircraft carrier deck located at Bogue Field, N.C.

Thanks to Cpl. J. W. Fritscher for information.

Active, Reserve HMs Team up

Helicopter Mine Countermeasures Squadrons (HM) 15 and 19, active and reserve, respectively, have teamed up to form an innovative composite training detachment. The two-aircraft detachment stood up in January to train HM-19 personnel in advance of their upcoming acceptance of new MH-53E helicopters to replace their RH-53Ds.

The "Pink Det," so named after the pink identification cards used by reserve personnel, has been successful in qualifying the first Selected Reserve MH-53E mission commander, Lt. Bob Wirt, and the first TAR (Training and Administration of Reserves) MH-53E aircraft commander, Lt. Ian McIntyre.

The detachment, a model of active/reserve cooperation, has already performed two operational missions in support of the Pacific Fleet. The detachment off-loaded 82,000 pounds of cargo from *Abraham Lincoln* (CVN 72) in February, and conducted electromagnetic interference testing with *Essex* (LHD 2).

Maritime Patrol FRS Consolidation on Track

The Navy's Maritime Patrol (VP) community is well on track toward restructuring to meet military drawdown and downsizing objectives as part of the Department of Defense Base Realignment and Closure initiative closing NAS Moffett Field, Calif.

Patrol Squadron 30, the Atlantic Fleet P-3 Fleet Readiness Squadron (FRS), has been consolidating with Pacific Fleet sister squadron, VP-31, since December 1991. VP-31 is due to disestablish in November and VP-30 will assume the full responsibility for fleet replacement training for the maritime patrol force.

Jacksonville, Fla., VP-30's home since 1975, will become the single VP-FRS site by October. VP-30 currently trains U.S. Navy pilots, naval flight officers, airborne systems specialists, and ground maintenance personnel in the operation of the P-3 *Orion*. In addition, the squadron provides training for foreign maritime patrol communities transitioning to the P-3.

"The maritime patrol force has taken the initiative in FRS consolidation, and it will save millions in manpower and operating costs while achieving efficiency and maintaining quality training," said Capt. E. L. Morris, Jr., VP-30's commanding officer. "Based on the lessons we have learned and challenges we have met, I believe our consolidation is an excellent working model for other communities faced with this issue."

As of January 1992, VP-30 was assigned 690 instructors, ground maintenance, and administrative personnel, as well as 18 P-3 *Orions*. Over the past 15 months, the number of staff

personnel has grown rapidly and will eventually reach a manning level of approximately 1,050 in August. Upon consolidation, VP-30 will maintain about 32 P-3s required to train the increased number of replacement personnel to meet fleet needs. The majority of the 30 aircraft currently aboard are fully mission capable P-3C Update IIs and IIIs.

To accommodate the increasing number of personnel, staff and aircraft, Base Realignment and Closure (BRAC II) funding has been allocated for construction of a new facility, hangar, ramp, and associated support projects at NAS Jacksonville. A key benefit of VP consolidation is a significant savings for the Department of the Navy.

"By achieving a single site VP-FRS, the Navy will save approximately \$19.2 million a year, while continuing to provide the fleet with the same high-quality instruction that two FRSs produced," explained Morris.

As a part of the consolidation and in response to a reduced crew manning factor in fleet squadrons, the VP community has developed an enhanced training syllabus intended to increase the quality of fleet replacement training and focus on the significant roles of maritime patrol forces supporting the Navy's "...From the Sea" philosophy. The new syllabus began on an interim basis in February 1993. The major focus continues to be providing the fleet with safe, standardized, and highly qualified replacement personnel.

"We bring with us a great deal of experience and knowledge required to incorporate site-specific training here in VP-30. This allows us to provide insight tailored training for students to meet the challenges of worldwide operations," explained Lt. Todd Porter, one of the naval flight engineer instructors. AE1(AW) Fernando Lozano, a flight engineer instructor, added, "The additional time we have incorporated into the

enhanced syllabus allows us to introduce students to more facets of their aircrew responsibilities. Going into greater detail and scope produces a better-prepared aircrewman, ready for the fleet."

Capt. Morris credits the success of the FRS consolidation to the teamwork, vision, and commitment to excellence of the men and women of the VP-30 *Pro's Nest* and VP-31 *Black Lightning Camp*.

Story by VP-30 Public Affairs

For the Record ...

- **Constellation** (CV 64) departed NS Mayport, Fla., May 27 bound for its home port of NAS North Island, Calif., via Cape Horn. The carrier, the last to complete the Service Life Extension Program at Philadelphia Naval Shipyard, is sailing around South America with part of Carrier Air Wing 2 onboard to rejoin the Pacific Fleet.
- An amphibious ready group centered around **Wasp** (LHD 1) arrived off Somalia March 23 to support UN relief efforts in Operation Restore Hope. Marine helicopters and *Harriers* from **HMM-263** embarked in *Wasp* have been flying sorties in support of Marines in Somalia.
- Soon to be the Navy's third LHD, **Kearsarge** commenced its sea trials April 19. LHD 3 will be commissioned September 25 and home-ported in Norfolk, Va.
- **NAS Adak**, Alaska, one of the bases on the cutting edge of the cold war, is slated for reduction to a caretaker status by July 1, 1994. By late 1993, it will no longer be a regular deployment site for patrol squadrons.
- **VR-57**, NAS North Island, Calif., flew logistics missions into **Croatia** during April in support of United Nations Protection Forces engaged in peacekeeping operations.
- Two Navy **P-3 Orions** from NAS Moffett Field, Calif., have deployed to **Mexico** to expand the maritime patrol range for routine counter-drug detection and monitoring missions occurring over international waters of the Pacific Ocean.
- While deployed to NAS Sigonella, Sicily, **VP-24** sent an aircraft in March to Topel Turkish Naval Aviation Base in northern Turkey to familiarize the Turkish Navy in the capabilities of the P-3C Update III *Orion*. The detachment operated with Turkish S-2 *Tracker* antisubmarine aircraft in an exercise against a Turkish Type 209 submarine in the Sea of Marmara.
- In November 1992, **HMH-361** became the first CH-53E squadron to form the nucleus of an Air Combat Element (ACE) of a Marine expeditionary unit. Normally, ACEs are built around HMM squadrons. **HMH-361**, joined by detachments from **HMM-262**, **HML-267**, and **VMA-311**, returned to MCAS Tustin, Calif., in May.
- A May 3 ceremony at MCAS Futenma, Okinawa, Japan, marked the **redesignation of Headquarters and Headquarters Squadron 18 to Marine Tactical Air Command Squadron 18**, effective May 1. The redesignation is concurrent with the mission change from administrative unit to tactical air command and control.
- The Marine Corps is planning to **consolidate its CH-46E training** at MCAS New River, N.C. The CH-46E training squadron at New River, **HMT-204**, will assume all of the training when **HMT-301** is deactivated at MCAS Tustin, Calif., December 31.
- **VS-38**, NAS North Island, Calif., is transitioning to the **S-3B Viking**, with delivery of its first S-3B scheduled for July. The *Red Griffins*, which returned from the **S-3A's last deployment** in January, are also riding *Constella-*

tion around Cape Horn.

- **VMFA-323**, MCAS El Toro, Calif., commenced transition from the FA-18A *Hornet* to the **FA-18C** version, receiving the first of its new aircraft in April 1993.
- **VMFA(AW)-224** arrived at MCAS Beaufort, S.C., March 11 as it transferred from MAG-14, MCAS Cherry Point, N.C., to MAG-31 at Beaufort in conjunction with the *Bengals'* transition to the FA-18D.
- **HMH-772**, a Marine Corps reserve squadron based at NAS Willow Grove, Pa., has traded its **CH-53D** transport helicopters for the **RH-53D** version being replaced by the MH-53E in the Navy's two reserve mine countermeasures (HM) squadrons. The RH-53D, also used by **HMH-769** at NAS Alameda, Calif., has an aerial refueling capability. **HM-18**, NAS Norfolk, Va., and **HM-19**, NAS Alameda, will begin equipping with the MH-53E at the end of 1993.
- The **Axemen** of **VAQ-309** became the first reserve squadron to fire an AGM-88 High-Speed Anti-Radiation Missile from an EA-6B *Prowler*. The test shot was staged out of **NAWS Point Mugu**, Calif., March 17.
- **HC-1**, NAS North Island, Calif., graduated its last **SH-3** helicopter maintenance class April 30. **HS-1**, NAS Jacksonville, Fla., is assuming all SH-3 pilot and maintenance training.
- Father Nick Graff, priest of St. John the Divine Greek Orthodox Church in Jacksonville, Fla., was on hand March 21 to bless the first **Hellenic Air Force A-7E Corsair II** to complete depot-level maintenance at **Naval Aviation Depot, Jacksonville**. The depot is performing a \$70-million contract to overhaul 36 Greek A-7s.
- Navy officials began meeting in March with officials from **Ventura County, Calif.** to discuss

possible **joint use of NAWS Point Mugu** as a military and civil airfield. The station has an 11,000-foot runway capable of handling the largest commercial aircraft.

Correction: *NANews*, May-June 1993, p. 6: Helicopter Mine Countermeasures Squadron 14 was inadvertently listed as 16.

COMSTRIKE-FIGHTWINGPAC Becomes Type Wing

Commander Strike Fighter Wing, Pacific, changed from a flag-level functional wing to a type wing June 1 as part of the ongoing reorganization of wings in the Pacific Fleet. RAdm. Bernard J. Smith was the last flag to command the wing, based at NAS Lemoore, Calif.

Capt. Jerry B. Singleton became commander of the wing, which is now the type wing for the Pacific Fleet's FA-18 *Hornet* strike fighter squadrons. His staff was formed January 4 and has assumed some of the duties performed by the functional wing.

The naval air stations that reported to RAdm. Smith now report directly to Commander Naval Air Force, U.S. Pacific Fleet.

The wing was originally established on July 1, 1973, as Commander Light Attack Wing, Pacific. It was redesignated COMSTRIKEFIGHTWINGPAC April 5, 1991, when the Pacific Fleet marked the phaseout of its last light attack A-7 squadron, VA-122.

Established ... COMSEACONTROL-WINGPAC

An April 22 ceremony at NAS North Island, Calif., marked the establishment of Commander Sea Control Wing, U.S. Pacific

Fleet (COMSEACONTROL-WINGPAC). Capt. T. Scott Douglas is the first commander of the new type wing.

COMSEACONTROL-WINGPAC joins the fleet as part of the reorganization of wings under Commander Naval Air Force, U.S. Pacific Fleet. The new type wing assumes administrative, training, readiness, maintenance, and logistics responsibilities for the Pacific Fleet's S-3 *Viking* carrier-based Air Antisubmarine Squadrons (VS), previously administered by a functional wing, Commander Antisubmarine Warfare Wing, U.S. Pacific Fleet, which will be disestablished this year. The squadrons included in the new wing are VSs 29, 33, 35, 37, 38, and 41, all based at NAS North Island, and VS-21, NAF Atsugi, Japan.

COMHSLWINGPAC

A May 5 ceremony at NAS North Island, Calif., marked the establishment of Commander Helicopter Antisubmarine Light Wing, U.S. Pacific Fleet (COMHSLWINGPAC). Capt. John R. Brown is the first commander of the new type wing.

COMHSLWINGPAC joins the fleet as part of the reorganization of wings under Commander Naval Air Force, U.S. Pacific Fleet. The new type wing assumes administrative, training, readiness, maintenance, and logistics responsibilities for the Pacific Fleet's SH-2F and SH-60B Helicopter Antisubmarine Squadrons Light (HSL) previously administered by a functional wing, Commander Antisubmarine Warfare Wing, U.S. Pacific Fleet, which will be disestablished this year. The Light Airborne Multipurpose System squadrons included in the new wing are HSLs 33, 41, 43, 45, 47, and 49, all based at NAS North Island; HSL-51, NAF Atsugi, Japan; and HSL-37, NAS Barbers Point, Hawaii.

Disestablished ... COMPATWING 2



A June 8 ceremony at NAS Barbers Point, Hawaii, marked the disestablishment of Commander Patrol Wing (COMPATWING) 2 after 56 years of service. Capt. Frederick E. Crecelius was the wing's last commander.

COMPATWING 2 was established at NAS Ford Island, Hawaii, on October 1, 1937, formed from elements of the Hawaiian Patrol Wing and charged with coordinating air activities for the protection of shipping near the Hawaiian Islands. Many of its aircraft were destroyed on December 7, 1941, during the Japanese attack on Pearl Harbor. One of the wing's PBY aircraft assisted in sinking a Japanese miniature submarine during the attack.

As WW II progressed, the wing's squadrons and tenders were far-flung as far as Midway, Samoa, the Marianas, the Admiralties, and the Philippines. Their missions included patrol bombing, antisubmarine patrol, reconnaissance, rescue, and medical evacuation. In November 1942, the wing was redesignated Commander Fleet Air Wing (COMFAIRWING) 2 and moved to NAS Kaneohe Bay, Hawaii. One of the wing's most daring operations took place in January 1944 when 18 PB2Y *Coronado* flying boats from Patrol Bombing Squadron 102 conducted a long-range strike against Wake Island.

COMFAIRWING 2 moved to NAS Barbers Point after the war, and from May 1949 until August 1952, also served as Commander Fleet Air, Hawaii. The wing deployed to the Formosa Straits in 1952 aboard *Salisbury Sound* (AV 13) and assumed responsibility as Commander Task Force 72 (Formosa Straits

Patrol Force) to coordinate patrol plane and ship operations in that tense region during the Korean War. The wing returned to Barbers Point in March 1953 upon relief by COMFAIRWING 1.

Deploying in September 1965 to NAS Sangle Point, R.P., COMFAIRWING 2 assumed responsibility as Commander Task Group 72.3 (Philippine Air Patrol Group) and coordinated patrol plane operations in support of interdiction efforts (Operation Market Time) off the coast of Vietnam. The wing returned to Barbers Point in 1967. The wing later received the Navy Unit Commendation for Market Time operations in 1970.

Redesignated COMPATWING 2 in June 1973, the wing underwent increased modernization with the addition of a computerized Antisubmarine Warfare Operations Center in August 1974, a necessary addition in order to counter the Soviet ballistic missile submarines patrolling in the eastern Pacific. The increasing sophistication of the wing's P-3 *Orion* patrol aircraft enabled it to keep pace with the threat. By 1979, the wing's five patrol squadrons (VP) had all transitioned to the Tactical Navigation Modernization version of the P-3B (or "Superbee") also equipped with the Harpoon anti-shiping missile.

In 1981, the wing added Fleet Air Reconnaissance Squadron (VQ) 3 to its control, followed by Patrol Squadron Special Projects Unit 2 in 1982. In 1988, the wing received the first Mobile Operations Command and Control system in the Pacific Fleet, enabling it to set up operations at remote sites on short notice. By 1990, the wing's five VP squadrons had all transitioned to the modern P-3C *Orion*, and VQ-3 had traded its EC-130Qs for the new E-6A. (VQ-3 left the wing in 1992 when it moved to Tinker AFB, Okla.) Some of the wing's units made significant contributions in operations against Iraq during Operation Desert Storm.

COMPATWING 2 was disestablished as part of the

restructuring of the Pacific Fleet's aviation staffs. Its role was assumed by the staff of Commander Patrol Wings, Pacific, which moved from NAS Moffett Field, Calif., to Barbers Point effective July 1, 1993.

HS-9 Sea Griffins



An April 23 ceremony at NAS Jacksonville, Fla., marked the disestablishment (officially April 30) of Helicopter Antisubmarine Squadron (HS) 9 after almost 17 years of service. Cdr. Charles H. Litz was the last CO of the *Sea Griffins*.

Established at NAS Jacksonville on June 4, 1976, with SH-3H *Sea King* helicopters, HS-9 carried on the traditions of the first squadron designated HS-9, which served from June 1956 until October 1968. After initial work-ups onboard *Saratoga* (CV 60), HS-9 joined Carrier Air Wing (CVW) 8, with which it would operate for the next 15 years, making its first deployment in 1977 aboard *Nimitz* (CVN 68) to the Mediterranean. During work-ups for its next deployment, HS-9 participated in the filming of the motion picture *The Final Countdown*.

HS-9 returned to the Mediterranean in 1978 and again in 1979, with *Nimitz* being diverted to the Arabian Sea in January 1980 in response to the Iranian hostage crisis. During its 1981-82 deployment, HS-9 pioneered the



HS-9 SH-3H

"Flex-deck" concept by operating detachments from *Nimitz* to *Texas* (CGN 39) and *Mississippi* (CGN 40). Upon return, the *Sea Griffins* worked up aboard *Carl Vinson* (CVN 70) in 1982. From 1982 through 1987, HS-9 deployed four more times on-board *Nimitz*, operating in the Caribbean, Mediterranean, North Atlantic, South Atlantic, and eastern Pacific, departing *Nimitz* in July 1987 when the carrier rounded Cape Horn and joined the Pacific Fleet.

HS-9 followed CVW-8 as it transferred to *Theodore Roosevelt* (CVN 71), working up in the Caribbean and deploying to the North Atlantic in August 1988 for two months, followed by a Mediterranean cruise in 1989. The *Sea Griffins* worked up aboard *Abraham Lincoln* (CVN 72) in early 1990.

The *Sea Griffins* entered combat for the first time in January 1991 when *Theodore Roosevelt* supported Operation Desert Storm. With the expanded capabilities of night-vision goggles, the Downed Aviator Locator System, and the Global Positioning System, HS-9 distinguished itself during the Persian Gulf War with forward operations onboard the destroyers *Leftwich* (DD 984) and *Oldendorf* (DD 972) and the destruction of 13 antiship mines. Operating with special operations forces, HS-9 captured 35 Iraqi prisoners of war. Before the deployment ended, HS-9 supported Operation Provide Comfort, the Kurdish refugee relief effort.

In October 1991, HS-9 joined CVW-17, and made its final deployment in 1992, operating in the Mediterranean onboard *Saratoga*, including support of Operation Provide Promise in the Adriatic Sea off war-torn Bosnia, returning home for the last time in November 1992.

VA-155 A-6E fires Zuni rocket at Fallon, Nev.

L. J. Scott/McPherson



VA-155 Silver Foxes

An April 27 ceremony at NAS Whidbey Island, Wash., marked the disestablishment (officially April 30) of Attack Squadron (VA) 155 after over five years of service. Cdr. Larry J. Munns was the last CO of the *Silver Foxes*.

Established on September 1, 1987, at NAS Whidbey Island, VA-155 (the third squadron to bear the designation VA-155) was formed as the A-6E and KA-6D squadron for short-lived Carrier Air Wing (CVW) 10. The *Silver Foxes* served in CVW-17 from May 1988 until October 1989, operating briefly from *Nimitz* (CVN 68), and from *Independence* (CV 62) during the latter carrier's two-month inter-fleet transfer around Cape Horn to the Pacific Fleet.

On October 1, 1989, VA-155 joined CVW-2 onboard *Ranger* (CV 61) and saw combat in January and February 1991 on its first deployment, supporting Operation Desert Storm. VA-155 flew 647 combat sorties and delivered 2,289,940 pounds of ordnance on enemy targets, losing only one A-6E to enemy action.

After transitioning to the Systems Weapons Improvement Program version of the A-6E, VA-155 made its second and final deployment, returning to the Persian Gulf in late 1992 aboard *Ranger*, flying 1,700 armed

reconnaissance sorties in support of Operation Southern Watch, the enforcement of a no-fly zone in Iraq. Before returning home in January 1993, VA-155 also flew armed reconnaissance sorties in support of Operation Restore Hope relief efforts in Somalia.

Deactivated ...

MAG-32



Marine Aircraft Group (MAG) 32 was deactivated on April 30, 1993, in a ceremony at MCAS Cherry Point, N.C., after 43 years of service. Col. William R. Jones was the last CO.

Activated on February 1, 1943, at MCAS Cherry Point, MAG-32 staged in January 1944 to bases in California and thence to Ewa Field, Hawaii, for combat training prior to deploying to the war zone. In October, the group's squadrons moved to the Bismarck Islands in the southwest Pacific. While most of the group sailed for the Philippines in December 1944, some of its SBD dive-bomber squadrons flew strikes against Japanese bases on New Britain and New Ireland.

MAG-32 arrived at Mangaldan, Luzon, in January 1945 and with MAG-24 formed MAGS-Dagupan under the Army Air Forces' 308th Bombardment Wing, providing close air support

with its SBD-5/6 aircraft to the 1st Cavalry Division in its famous dash to Manila. The division's historian attributed much of the success of the capture of Manila to "the superb air cover, flank protection, and reconnaissance provided by Marine Air Groups 24 and 32."

In March 1945, MAG-32 moved to Moret Field in Mindanao, providing close air support to Army invasion troops and bombing Japanese bases and supply routes. The group's SBDs were retired and replaced in July with SB2Cs and TBMs. MAG-32 was awarded the Presidential Unit Citation for its role in the liberation of the Philippines.

With the end of hostilities in September, MAG-32 moved to Tsingtao, China, as part of the effort to disarm and repatriate Japanese forces in China. The group also flew reconnaissance patrols over Shantung Province where Communist Chinese forces clashed with Japanese and their former puppet troops. In May 1946, MAG-32 relocated to NAS Miramar, Calif., followed by another move to MCAS El Toro, Calif., where it remained until deactivation on April 30, 1947.

Reactivated on May 8, 1952, at Miami, Fla., as part of the Korean War build-up, MAG-32 moved to Cherry Point in January 1954, relocating to MCAS Beaufort, S.C., in August 1957. From October through December 1962, the group's squadrons deployed to Guantanamo Bay, Cuba, and Roosevelt Roads, P.R., as part of the quarantine of Cuba during the Cuban Missile Crisis.

In January 1976, MAG-32 relocated back to Cherry Point to become the group for the East Coast AV-8 *Harrier* squadrons, eventually including Marine Attack Squadrons (VMAs) 223, 231, 331, and 542, and the *Harrier* replacement squadron, Marine Attack Training Squadron



203. During 1979, the group began replacing its AV-8A, AV-8C, and TAV-8A aircraft with the modern AV-8B and TAV-8B *Harrier II*s. Throughout the 1970s and 1980s, the group's elements participated in many exercises and deployments overseas.

MAG-32 sent planes and pilots into combat in January 1991 during Operation Desert Storm against Iraqi forces. VMAs 231 and 542 flew close air support sorties from land bases, while VMA-331 flew its missions from *Nassau* (LHA 4) in the Persian Gulf.

The conflict marked the Marine Corps' first combat use of the *Harrier*.

With the deactivation of MAG-32, its AV-8B *Harrier* squadrons shifted to MAG-14, also based at MCAS Cherry Point.

MALS-32



An April 29 ceremony at MCAS Cherry Point, N.C., marked the deactivation (officially April 30) of Marine Aviation Logistics Squadron (MALS) 32 after 43 years of service. Lt. Col. F. B. Kennedy was the last CO.

The history of MALS-32 parallels that of Marine Aircraft Group (MAG) 32 detailed above; MALS-32 was assigned to MAG-32 for its entire service. The squadron was activated at Cherry Point on February 1, 1943, as Headquarters Squadron 32. It was deactivated on April 30, 1947, and reactivated on May 8, 1952, as Headquarters and Headquarters Squadron 32. The squadron was redesignated Headquarters and Maintenance Squadron 32 on February 15, 1954, and received its designation as MALS-32 on October 1, 1988.

MALS-32's mission of providing maintenance and logistics support to the Fleet Marine Force Atlantic Fleet's AV-8 *Harrier*

VMO-2 OV-10D

squadrons has been assumed by MALS-14, also based at Cherry Point, and which absorbed the material and many of the personnel of MALS-32. MALS-14 is now the largest MALS in the Marine Corps.

VMO-2



Marine Observation Squadron (VMO) 2 was deactivated on May 20, 1993, in a ceremony at MCAS Camp Pendleton, Calif., after almost 45 years of service. Lt. Col. Earl W. Timpe was the last CO.

Activated on November 1, 1943, at Quantico, Va., as Artillery Spotting Division, VMO-251, the unit was redesignated VMO-1 on February 1, 1944, by then staging through Hawaii en route to the war zone. Equipped with OY-1 spotter planes, VMO-2 flew hundreds of missions in the Saipan, Tinian, and Okinawa campaigns in support of the 2nd and 4th Marine Divisions. VMO-2's aircraft were the first American aircraft to land on Saipan and Okinawa during their liberation. From September 1945 until June 1946, VMO-2 participated in the occupation of Japan, operating from Nagasaki. The squadron then relocated to MCAS Cherry Point, N.C., deactivating on August 26, 1946.

The Korean War build-up brought about the reactivation of VMO-2 on June 15, 1951, at Santa Ana, Calif., equipped with light observation aircraft and helicopters, including the OE-1 (O-1B), OY-2, HOK-1 (OH-43D), HO5S-1, and HTL-4/5. The squadron deployed to Camp Gifu, Japan, in July 1953, relocat-

ing to Camp Sukiran, Okinawa, in April 1956, by then operating only the OE-1 and the HOK-1. VMO-2 spent three months at NAS Cubi Point, R.P., in 1958, and relocated to MCAF Futenma, Okinawa, in October 1960. The squadron participated in exercises in Taiwan during 1960, and in the Philippines during 1962. In the late 1950s, the squadron also operated an SNB-5 transport.

VMO-2's long participation in the Vietnam conflict began in April 1962 when the squadron sent two OE-1s (O-1Bs) in country with Marine Medium Helicopter Squadron 362. As fighting intensified, a four-plane detachment was sent to Da Nang, with the remainder of the squadron deploying in May 1965. The squadron also then became an all-helicopter squadron when it received new UH-1E "Huey" helicopters in Vietnam to replace its obsolete OH-43Ds, UH-43Cs, and O-1Bs left in Okinawa. In Vietnam, VMO-2 was busily engaged in observation, fire support, and medical evacuation missions. VMO-2 was awarded the Navy Unit Commendation for its August 1965 participation in Operation Starlight, the first main confrontation between a major U.S. unit and a large Viet Cong force.

VMO-2 received a significant upgrade in capability in July 1968 with the introduction of the heavily armed OV-10A *Bronco*. In April 1969, the AH-1G *HueyCobra* helicopter gunship began replacing the UH-1E. The squadron eventually became an all-fixed wing squadron with OV-10As, and continued to make significant contributions to the war effort from its base at Marble Mountain in Da Nang until April 1971, when it was transferred to MCB Camp Pendleton, Calif., its home base ever since.

In late 1979, VMO-2 began operating the OV-10D night observation aircraft alongside its OV-10As. In 1981, the squadron assisted the Royal Moroccan Air Force in forming its own OV-10 squadron. In May 1981, VMO-2 launched two OV-10Ds from *Okinawa* (LPH 3), the first ever from an amphibious ship. The infrared sensor capability of the OV-10D enabled VMO-2 to assist the Drug Enforcement Agency in drug interdiction operations beginning in 1983. In July 1986, the squadron made history by flying an OV-10 1,800 miles without refueling. In January 1988, VMO-2 became the sole source for providing OV-10 detachments to the western Pacific in support of the Unit Deployment Program. Those detachments were called upon to support contingency operations in the Philippines during a coup attempt and in support of earthquake and volcano relief efforts. In May 1989, VMO-2 deployed to Venezuela for joint operations with the Venezuelan Air Force's OV-10A squadron.

In August 1990, after Iraqi forces invaded Kuwait, VMO-2 sent six OV-10s to Saudi Arabia as part of Operation Desert Shield. When Operation Desert Storm commenced in January 1991, VMO-2 flew missions around the clock, providing forward air control, tactical air coordination, and multisensor reconnaissance with its OV-10A/D/D+ *Bronco*. One crew provided spotting for *Wisconsin* (BB 64) as she fired her guns in anger for the first time since the Korean War. VMO-2's 286 missions resulted in the destruction of 54 tanks, 53 armored personnel carriers, 49 artillery pieces, 112 other vehicles, and 4 command posts, all with the loss of only 1 aircrew (POWs returned after the war).

VMO-2 transferred the last of its OV-10As in 1992, operating only OV-10D+ versions, and closed down its Okinawa detachment in December 1992. The squadron was deactivated one year ahead of schedule because of accelerated force-level reductions.



1992 The Year



war in Review



By Judith A. Walters and
LCdr. Rick Burgess

The new world order, brought about by the disintegration of the Soviet Union, left the United States as the only superpower. Although there was no longer a threat of global nuclear war, 1992 did not bring a world free from conflict and difficulties.

Indeed, the collapse of the Soviet Union itself created a vacuum of power. Ethnic unrest and severe economic conditions unsettled the successor republics of the former Soviet Union.

Although 63 percent of those in Bosnia and Herzegovina voted for the independence from Yugoslavia, Bosnian Serbs proclaimed that the Serbian Republic of Bosnia and Herzegovina was a constitutive part of Yugoslavia. As a result, fighting broke out between the Serbs, Croats, and Slavic Moslems of Bosnia and Herzegovina and continued throughout the year. Along the coastline of the former Yugoslavia, aircraft carriers *Saratoga* and then *John F. Kennedy* kept watch in the Adriatic Sea in support of Operation Provide Promise – the United Nations (UN) relief effort in strife-torn Bosnia-Herzegovina.

UN sanctions against Iraq continued throughout the year. In August, President Bush announced that the U.S. and its allies would shoot down any Iraqi planes flying south of the 32nd parallel to protect the Shi'ite Moslems in the southern part of the country from Iraqi air attacks. The carriers *Independence*, *Ranger*, and *Kitty Hawk* were successively in the Persian Gulf as the visible and stabilizing U.S. presence of Operation Southern Watch.

In Somalia, inter-clan violence disrupted supply lines and plunged the country into a severe famine. Carriers *Ranger* and *Kitty Hawk* provided a U.S. presence off the coast in the Indian Ocean in support of Operation Provide Relief. In December, U.S. Marines landed at the capital, Mogadishu, to protect the delivery of the humanitarian shipments of food and

Kitty Hawk (CV 63) conducts underway replenishment with Jarrett (FFG 33).

supplies that were arriving from worldwide sources.

The Navy also provided humanitarian relief after hurricanes Andrew in Florida and Iniki in Hawaii.

Throughout the year, the new world order presented regional rather than global threats and challenges. In response, the Navy developed a new strategy promulgated in the white paper entitled "... From the Sea." The paper emphasized littoral warfare – along the coastlines – and maneuver from the sea.

The downsizing of the Navy continued throughout the year. Many squadrons and naval air shore facilities were disestablished. In October, NAS Cubi Point, R.P., was disestablished ending almost a century of American military presence in the Philippines.

Forrestal was redesignated a training carrier to replace *Lexington*, but the Navy contemplated putting her in mothballs. With the decommissioning of *Midway* and the commissioning of *George Washington*, the number of active carriers at year's end remained at 14.

The Pentagon down-scaled the development of the V-22 tilt-rotor aircraft, after Secretary of Defense Cheney – long an opponent of procuring the V-22 – agreed to spend the \$1.5 billion that Congress had appropriated for the project.

As the year ended and the presidency of George Bush drew to a close, the "no-fly zone" still existed over southern Iraq, U.S. troops were in Somalia, and Bosnia and Herzegovina appeared to be the next major regional challenge.

January

01 Naval Air Warfare Center (NAWC) was established under Commander, Naval Air Systems Command. The new activity's first commander was RADM George Strohsahl. NAWC was to have two divisions: Aircraft (AD) and Weapons (WD).

02 Naval Air Warfare Center Aircraft Division (NAWC AD) was established at NAS Patuxent River, Md., with RADM Strohsahl (acting) as its first commander. NAWC AD is the Navy's principal research, development, test, and evaluation; engineering; and fleet support activity for naval aircraft, engines, avionics, aircraft support systems and ship, shore, and air

operations. It absorbed activities of Naval Air Development Center, Warminster, Pa.; Naval Air Engineering Center, Lakehurst, N.J.; Naval Air Propulsion Center, Trenton, N.J.; Naval Avionics Center, Indianapolis, Ind.; and Naval Air Test Center, Patuxent River, Md. The operating site at Warminster was eventually to be consolidated at Patuxent River.

02 Flight Test and Engineering Group (FTEG) was established under Naval Air Warfare Center Aircraft Division. The Naval Air Test Center (NATC), Patuxent River, Md., was disestablished the same day. The old NATC directorates became directorates under FTEG. Capt. Robert Parkinson, former NATC deputy commander, became the director of FTEG.

09 Department of Defense announced its acceptance of an offer from the government of Saudi Arabia to award its Kuwait Liberation Medal to members of the U.S. armed forces who directly participated in Operation Desert Storm. The award had been established by King Fahd bin Abdul Aziz of Saudi Arabia to honor the outstanding performance of coalition forces in their historic liberation of Kuwait last year.

13 In a memorandum, SecNav directed the Navy and Marine Corps to integrate Marine fighter-attack and electronic warfare squadrons into Navy carrier air wings, in order to reduce the requirements for F-14s, FA-18s, and EA-6Bs. Historically, Marine tactical squadrons had frequently operated as part of carrier air wings, but rarely had this concept been institutionalized in any permanent form.

18 VMFA-112, NAS Dallas, Texas, the last operational squadron to fly the F-4 *Phantom II*, held a retirement ceremony for its last F-4. The last operational flight was made by Col. John Brennan of VMFA-112 on January 10. The first flight of a Navy F4H-1 *Phantom II* took place on May 27, 1958.

19 Naval Aviation History Office commemorated its 50th anniversary while preparing for its move to new quarters in the Washington Navy Yard.

21 The first production ES-3A electronic warfare/reconnaissance aircraft, modified by a Lockheed field team at NAS Cecil Field, Fla., made its first flight.

21 Naval Air Warfare Center Weapons Division (NAWC WD) was established in a

ceremony at Point Mugu, Calif., with RADM William E. Newman as its first commander. NAWC WD headquarters was located at Point Mugu and China Lake, with a facility at White Sands, N.M. NAWC WD is responsible for aircraft weapons and weapons systems, simulators, and targets. It absorbed the activities of Pacific Missile Test Center, Point Mugu, Calif.; Naval Weapons Center, China Lake, Calif.; Naval Weapons Evaluation Facility, Albuquerque, N.M.; and Naval Ordnance Missile Test Station, White Sands, N.M.

21 Naval Air Station, Point Mugu, Calif., was disestablished; Naval Air Weapons Station, Point Mugu, took its place the same day.

22 Naval Air Weapons Station, China Lake, Calif., was established at the site of the former Naval Weapons Center.

22-30 Space shuttle *Discovery* lifted off from Cape Canaveral. Stephen S. Oswald, a former Navy pilot; Dr. Norman Thagard, a Marine Corps reservist; and Lt. Col. David Hilmers, USMC, were onboard. The mission ended with a landing at Edwards AFB, Calif.

23 The first production U.S. Navy T-45A *Goshawk* jet trainer rolled out at the McDonnell Aircraft facility in St. Louis, Mo. The T-45 Training System is the Navy's first totally integrated pilot training system, combining computer-based academics, simulators, trainer aircraft, and a training integration system and contractor logistics support.

28 Two U.S. Navy ships (USNS *Saturn* and USS *Saipan* (LHA 2)) and a helicopter squadron (HC-6, Det. 5) operating in the North Arabian Sea provided emergency medical assistance to an injured Greek sailor. HC-6, Det. 5, was assigned to *Saturn* during the ship's deployment. *Saturn* rendezvoused with *Saipan*, which was equipped with a fully staffed hospital facility.

31 The Navy took delivery of the last production A-6 *Intruder* from Grumman, closing out over 31 years of *Intruder* production. The aircraft was to be delivered to Attack Squadron 145 at NAS Whidbey Island, Wash.

February

04 Mr. Pete Williams, Assistant Secretary of Defense (Public Affairs), stated that the Navy's ultimate goal of active carriers was 12.

05 *Forrestal* (CV 59), the Navy's first super-carrier, was redesignated a training carrier (AVT 59) at her new home port, NAS Pensacola, Fla. This brought the Navy's total of active carriers down to 14 active and 1 training carrier. *Forrestal* replaced *Lexington* (AVT 16).

06 A ceremony at NAS Barbers Point, Hawaii, marked the beginning of HSL-37's transition from the SH-2F *Seasprite* helicopter to the SH-60B.

11 VA-34 *Blue Blasters* became the first fleet A-6E squadron to fire an AGM-65E laser-guided Maverick missile during an exercise in the Arabian Gulf.

12 The Navy announced that all Navy and Marine Corps H-53 *Super Stallion* and *Sea Dragon* helicopters were grounded after a Marine Corps CH-53E helicopter crashed at NAS Cecil Field, Jacksonville, Fla., on 08 Feb. The crash killed all four Marines aboard. All CH and MH-53Es were inspected. The Atlantic Fleet's helicopters were fully operational on 18 Feb and the Pacific Fleet helos returned to duty 20 Feb.

14 VMFA(AW)-225 formally accepted the first fleet two-seat Lot 14 FA-18D *Hornet* at MCAS El Toro, Calif. This was the first aircraft capable of operating the new Advanced Tactical Aerial Reconnaissance System. By July, VMFA(AW)-225 would have 12 of the new aircraft.

24 McDonnell Douglas and British Aerospace reached an exclusive partnership agreement, pending U.S. government approval, to work together to develop and produce advanced short takeoff/vertical landing (ASTOVL) strike fighter aircraft.

March

04 Naval Air Warfare Center Aircraft Division officially stood up in ceremonies held at NAS Patuxent River, Md. RAdm. (Sel.) Barton Strong assumed command of the division.

04 VAW-113, NAS North Island, Calif., became the first fleet squadron to accept delivery of the E-2C Group II aircraft, equipped with the new APS-145 radar.

06 VF-11 *Red Rippers* were welcomed by NAS Miramar, Calif. VF-11 and VF-31 *Tomcatters* had moved from the disestablished CVW-6 at NAS Oceana, Va., to CVW-14 at NAS Miramar and transitioned from F-14As to F-14Ds, becoming the fleet's first operational F-14D *Super Tom-*

cat squadrons.

10 VP-5, Jacksonville, Fla.; Anti-Submarine Warfare Operations Center, Rota, Spain; and Rota's Explosive Ordnance Disposal Team joined with the Spanish military for Operation MAR-PALMA '92. During the operation, the first mine was delivered from a Spanish P-3.

10 Department of Defense announced its plan for withdrawal from the Philippine naval complex at Subic Bay. Major milestones in the plan included: closure of DoD dependents' schools in June; transfer of the majority of dependents throughout the summer months; relocation of Fleet Logistics Support Squadron 50 to Anderson AFB, Guam, in August; disestablishment of the Ship Repair Facility in September; and formal final turnover of the complex to the Philippine government in December.

16 *Bon Homme Richard* (ex-CVA 31) arrived at Long Beach, Calif., from Bremerton, Wash., for scrapping by Southwest Recycling Corp.

21 *Independence* (CV 62), with CVW-5 on-board, departed Subic Bay, the last carrier scheduled to call at the base before its closure.

Lt. Wes Nielsen of the Naval Air Warfare Center Aircraft Division traps an FA-18 aboard *George Washington* (CVN 73) for the carrier's first arrested landing.



PH2/AV1 Troy D. Summers

24 Mar–2 Apr Space shuttle Atlantis lifted off from Cape Canaveral, Fla. The crew included mission specialists Navy Captain David C. Leestma and reserve Navy LCDr. Kathryn D. Sullivan. The mission ended at Kennedy Space Center, Fla.

26 SecDef announced plans to cut 830 National Guard and reserve units. In FY 93, the Naval Air Reserve stood to lose VPs 64, 67, 90, and 93, all flying the P-3 *Orion*; and HSL-74, flying the SH-2F *Seasprite*.

31 NASA announced that LCdr. Wendy B. Lawrence had been selected for the space program. Lawrence was the first regular Navy woman Naval Aviator astronaut.

April

01 Fleet Electronic Warfare Support Group (FEWSG) merged with Fleet Deception Group, Atlantic, to form Fleet Tactical Readiness Group. The new command, based at Naval Amphibious Base, Little Creek, Va., assumed operational control of FEWSG's electronic aggressor squadrons VAQs 33, 34, and 35.

01 By CNO direction, the remaining A-7 aircraft in active inventory were to be retired by April 1. The decision was partially reversed, however, in order to retain 11 TA-7C and 3 EA-7L aircraft on strength with Naval Air Warfare Center as chase aircraft for various programs, including the Tomahawk missile program.

07 SecDef Dick Cheney announced that the president had nominated VAdm. Richard M. Dunleavy to be placed on the retired list in his current grade. VAdm. Dunleavy was scheduled to retire on July 1 after more than 33 years of active service. He was currently serving as Assistant Chief of Naval Operations, Air Warfare (OP-05).

08 McDonnell Douglas delivered the 6,000th production missile of the Harpoon program to the Navy in a ceremony in St. Charles, Mo. The Harpoon has been used successfully by Naval Aviation in combat against Libyan and Iranian forces and, in its Standoff Land Attack Missile version, against Iraqi forces.

11 *Midway* (CV 41) was decommissioned, bringing the Navy's total of active carriers down to 13 (plus 1 training carrier). After the ceremony at NAS North Island, Calif., she was towed to the inactive ship facility at Bremerton, Wash., for storage.

13–25 In response to a request from Italian authorities to save the town of Zafferana from a lava flow advancing from Mount Etna, two Marine CH-53E *Super Stallions* from HMM(C)-226 aboard *Inchon* (LPH 12) placed 8,000-pound concrete blocks in the path of the lava. They were augmented by a CH-53E from Sigonella-based HC-4.

15 The first flight of an FA-18 *Hornet* equipped with a Hughes APG-73 radar took place at St. Louis, Mo. The APG-73

is an upgrade of the APG-65 radar, with increased signal data processor speed and memory and allowance for further growth. Production deliveries are scheduled to begin in June 1994.

22 U.S. and Australia began Coral Sea '92, joint military exercises off the east coast of Australia, coinciding with the 50th anniversary of the Battle of Coral Sea.

May

01 The first class of flight instructors from VT-21, assigned to train the next generation of Naval Aviators in the new T-45A *Goshawk*, began their own training in the T-45A.

07 The last TACAMO (take charge and move out) EC-130 began its final deployment from NAS Patuxent River, Md., with VO-4, which was undergoing a transition from the EC-130Q to the new E-6A *Mercury*.

07–16 Space shuttle Endeavour made its first flight into space, with Navy Captain Daniel C. Brandenstein in command. Cdr. Pierre J. Thout was a mission specialist. HCS-5 was put on alert as a rescue unit for the mission.

08 Five naval pioneers were inducted into the Naval Aviation Hall of Honor at the National Museum of Naval Aviation: VAdm. Gerald F. Bogan, Adm. Austin K. Doyle, LCdr. Edward Henry "Butch" O'Hare, VAdm. William Alton Schoech, and Lawrence Burst Sperry, who was the first

Practice bombs await loading aboard John F. Kennedy (CV 67) as she sails in the Adriatic Sea off Bosnia.



PHCS(AC) D. W. Holmes II

civilian commissioned in the U.S. Navy Flying Corps in 1917. VCNO Adm. J. L. Johnson presided at the induction.

16 *Kearsarge* (LHD 3) was christened at Pascagoula, Miss., by Mrs. Alma J. Powell, wife of Gen. Colin Powell, Chairman of the Joint Chiefs of Staff.

21 The Marine Corps took delivery of an AH-1W, the first *Super Cobra* helicopter gunship intended for use by its reserve 4th Marine Air Wing squadrons: HMA-773, NAS Atlanta, Ga., and HMA-775, MCAS Camp Pendleton, Calif. The new gunships would replace AH-1J versions which were being retired.

22* VQ-5, NAS Agana, Guam, took delivery of its first ES-3A electronic reconnaissance aircraft, marking the operational service entry of this new version of the S-3 antisubmarine warfare aircraft.

29 Strategic Communications Wing 1 was established at Tinker AFB, Okla., consolidating all TACAMO operations. The Navy's two TACAMO squadrons, VQs 3 and 4, relocated to Tinker.

31 Four aviators of the VS-21 *Fighting Red-tails* attached to *Independence* (CV 62) assisted a sea rescue of 19 crewmen from a sinking Panamanian cargo ship, located 580 nautical miles off the coast of Diego Garcia in the Indian Ocean.

June

04 The first T-45A prototype crashed during landing at Edwards AFB, Calif.

12 VAdm. Dick Dunleavy retired from the Navy. He was the last Assistant Chief of Naval Operations (Air Warfare). RAdm. Riley D. Mixson, his deputy, became acting ACNO (Air Warfare).

19 Rimpac '92 began. The exercise was conducted in the Pacific mostly off the coast of Hawaii and southern California. It included the military forces of the United States, Canada, Japan, Australia, and South Korea. *Kitty Hawk* (CV 63) participated.

25 June-9 Jul Returning to service, space shuttle Columbia took off into orbit on a 13-day mission, with Capt. Richard N. Richards as mission commander and LCdr. Bowersox as pilot. The mission ended with a landing at Kennedy Space Center, Fla.

26 VAdm. Rudy Kohn replaced Adm. Jerome L. Johnson as the Gray Eagle, the Naval Aviator who has been on active duty the longest. Adm. Johnson retired

after more than 36 years of active commissioned service. He was currently serving as Vice Chief of Naval Operations.

27 VT-21 became operational as the Navy's first training squadron to give instruction on the T-45A *Goshawk*.

29 An amphibious ready group of six ships and 2,200 Marines entered the Adriatic Sea off the Yugoslav coast.

July

01 Helicopter Sea Control Wing (HSCW) 3 was redesignated Helicopter Antisubmarine Light Wing (HSLW) 1, absorbing HSCW-1 at the same time and placing all Atlantic Fleet helicopter antisubmarine light squadrons under one wing.

02 SecDef Cheney agreed to spend the \$1.5 billion he had been withholding from the V-22 program. Congress had generously funded the program and had threatened to withhold money from the Defense Department's operating budget until Cheney released the funds appropriated for the V-22.

04 *George Washington* (CVN 73) was commissioned at NS Norfolk, Va., as the nation's sixth *Nimitz*-class aircraft carrier. First Lady Barbara Bush was the ship's sponsor. This brought the Navy's total active carriers to 14 (1 training carrier). *George Washington* had been christened on July 21, 1990.

10 The last production Grumman F-14D *Super Tomcat* was delivered to the Navy. This marked the end of 22 years of production of the F-14 *Tomcat* and *Super Tomcat* fighter.

16 HMH-462, the last squadron to operate the CH-53A, flew the last two CH-53As from MCAS Tustin, Calif., to the Aerospace Maintenance and Regeneration Center, Davis-Monthan AFB, Ariz. HMH-462 is transitioning to the CH-53E.

20 The fourth prototype of the V-22A *Osprey* tilt-rotor aircraft crashed into the Potomac River on approach to MCAF Quantico, Va., killing three Marines and four Boeing employees. The remaining three prototypes were grounded pending the results of the mishap investigation. The mishap was blamed on mechanical failure.

22 In a press conference in the Pentagon, Acting Secretary of the Navy Sean O'Keefe and Chief of Naval Operations Adm. Frank B. Kelso II announced a sweeping reorganization of the OPNAV

staff. The plan, developed by Adm. Kelso, aligned the OPNAV staff with the Joint Staff. The reorganization was scheduled to be in effect on January 1, 1993. The Assistant Chiefs of Naval Operations (ACNOs) for Submarine Warfare (OP-02), Surface Warfare (OP-03), Air Warfare (OP-05), and Naval Warfare (OP-07) would merge into one staff under the Deputy Chief of Naval Operations, Resources, Warfare Requirements and Assessment (Code N8), a three-star flag officer.

24 *Saratoga* (CV 60) became the first U.S. aircraft carrier ever to conduct sustained flight operations in the Adriatic Sea. She was sent there in response to the strife in the former Yugoslavian republic of Bosnia-Herzegovina. Deployed with *Saratoga* was the amphibious ship *Iwo Jima* (LPH 2).

31 Adm. Leon A. Edney, Commander in Chief, U.S. Atlantic Command, and NATO's Supreme Allied Commander, Atlantic, retired. Adm. Edney was designated a Naval Aviator in 1958. He was relieved by Adm. Henry H. Mauz, Jr.

31 Jul-8 Aug Space shuttle Atlantis rocketed into orbit and landed at Cape Canaveral 8 days later. Naval Aviator Maj. Andrew M. Allen, USMC, was pilot of the mission. It was his first shuttle flight.

August

01 *Ranger* (CV 61) departed NAS North Island, Calif., for its last deployment to the western Pacific. The carrier was to be decommissioned in 1993.

05 Pentagon announced that it would ask contractors to develop a less expensive version of the V-22 *Osprey* tilt-rotor aircraft.

10 OPNAV staff commenced the administrative conversion to N codes. The reorganization would provide closer liaison with the Army and Air Force and optimize early cross-service technology and requirements discussions. The Assistant Chief of Naval Operations (Air Warfare) (OP-05) became N88, one echelon under N8, Deputy Chief of Naval Operations, Resources, Warfare Requirements and Assessment.

12 Commander in Chief, U.S. Pacific Fleet, announced the formation of six permanent battle groups.

19 VQ-6 received its first ES-3A carrier-based electronic reconnaissance aircraft.

22-26 Hurricane Andrew, the most ex-

pensive natural disaster ever to strike the U.S., ravaged the Bahamas, Louisiana, and Florida, leveling Homestead AFB. Naval Aviation units were called into action to help relieve the suffering of hundreds of thousands of Americans. Navy ships with supplies and repair capabilities steamed from East Coast ports for Florida.

23 *Independence* (CV 62) entered the Persian Gulf prepared to enforce an allied ban on Iraqi flights over south Iraq below the 32nd parallel.

26 President Bush announced that the United States and its allies had informed Iraq that in 24 hours, allied aircraft would fly surveillance missions in southern Iraq and were prepared to shoot down any Iraqi aircraft flying south of the 32nd parallel. The action was precipitated by Iraq's failure to comply with UN Resolution 688, which demanded that the Iraqi government stop the repression of its Shi'ite population in southern Iraq.

27 Operation Southern Watch – Persian Gulf allies began to enforce the ban on Iraqi planes from flying south of the 32nd parallel and attacking Shi'ite Moslem ethnic groups in the marshes of southern Iraq. Any Iraqi planes that violated the ban would be shot down. *Independence* (CV 62) and *Saratoga* (CV 60) and *Iwo Jima* (LPH 2) participated. Marine Corps AV-8B *Harriers* from *Tarawa* (LHA 1) also supported the operation.

28 Typhoon Omar devastated Guam. Joint Task Force, Marianas, coordinated the relief efforts of all the military services. Naval Aviation units involved in relief efforts included NAS Agana, HC-5, VRC-50, VR-59, and VQs 1 and 5.

September

04 Two CH-53E and two AH-1W helicopters from *Iwo Jima* (LPH 2), stationed in the Adriatic in support of the UN relief efforts to the Bosnian capital of Sarajevo, rushed to the scene of an Italian Air Force G.222 transport downed by a surface-to-air missile. The helicopters drew fire from the ground but were undamaged.

04 Cdr. Linda V. Hutton assumed command of VRC-40, becoming the first woman to command an operational Atlantic Fleet aircraft squadron.

11 Hurricane Iniki, the strongest storm to

hit the Hawaiian Islands in 90 years, devastated 75 to 80% of the island of Kauai. NAS Barbers Point and its tenant commands provided volunteers to assist local residents. *Belleau Wood* (LHA 3) sailed to Kauai with troops and relief supplies. Pacific Missile Range Facility, Barking Sands, on Kauai was only slightly damaged and served as a hub of relief flight operations. Navy and Marine Corps aircraft flew in supplies and personnel. VP-1 and HSL-37 participated in the relief effort.

12-20 Space shuttle Endeavour carried out its second mission of the year, with Naval Aviator Robert Gibson in command.

14 *Forrestal* (AVT 59) arrived at Philadelphia Naval Shipyard from NAS Pensacola, Fla., to commence a 14-month, \$157-million complex overhaul. *Forrestal* would then be used as a training carrier. The Navy, however, decided in early 1993 to mothball *Forrestal* in Philadelphia and leave the Navy without a dedicated training carrier.

16 President Bush dispatched the *Tarawa* (LHA 1) amphibious ready group to the coast of Somalia as part of Operation Provide Relief, a multinational effort to relieve the massive starvation in the country. The Marine AV-8 *Harrier* and helicopters from HMM-161 (Reinforced) stood ready offshore to protect relief teams and transport aircraft bringing in a contingent of Pakistani peacekeeping troops to Mogadishu, the capital city.

16 *Ranger* (CV 61) arrived on station in the Persian Gulf in support of Operation Southern Watch, enforcing the "no-fly zone" over Iraq south of the 32nd parallel.

28 Secretary of the Navy Sean O'Keefe, Chief of Naval Operations Adm. Frank B. Kelso II, and Commandant of the Marine Corps Gen. Carl E. Mundy, Jr., signed a new Navy/Marine Corps strategy, entitled "... From the Sea." The new strategy was developed in response to the shift in the threat from global to regional. It emphasized littoral warfare and maneuver from the sea.

30 The four functional wings (Helicopter Wings, Atlantic; Patrol Wings, Atlantic; Strike Fighter Wings, Atlantic; and Tactical Wings, Atlantic) of Naval Air Force, U.S. Atlantic Fleet, were disestablished in a sweeping change that eliminated an entire echelon of command in the administrative structure of Naval Aviation on the East Coast.

30 During FY 92, the Navy trained a total of 1,216 pilots: 776 Navy, 379 Marine, and 61 Coast Guard. The Navy also trained a total of 433 Naval Flight Officers: 396 Navy and 37 Marine (none from Coast Guard).

30 Naval Base, Subic Bay, R.P., the last military base in Southeast Asia, was formally turned over to the Philippine government.

McDonnell Douglas



VMFA-312 joined Carrier Air Wing 8 in response to the Secretary of the Navy initiative to integrate Marine squadrons into carrier air wings.

October

02 Two Sea Sparrow ship-to-air missiles from *Saratoga* (CV 60) were fired during NATO exercise Display Determination '92 in the Aegean Sea. One or more of the missiles hit the Turkish destroyer *Muavenet*, killing five crew members and injuring as many as 14.

03 Chief of Naval Operations Adm. Frank B. Kelso II ordered U.S. warships to cease operations of the Sea Sparrow missile until investigators determined the cause of accidentally hitting of the Turkish destroyer *Muavenet* during NATO exercise Display Determination '92.

07 *John F. Kennedy* (CV 67), with CVW-3 onboard, and her battle group left for a six-month deployment to the Mediterranean Sea to relieve *Saratoga* (CV 60). The tensions in the area involved the civil war in former Yugoslavia and conflicts with Iraq's president, Saddam Hussein.

15 HS-14 became the first U.S. squadron to land aircraft (SH-3H *Sea King*) on the deck of a Russian warship, RNS *Admiral Vinogradov*, a *Udaloy*-class destroyer.

22 Department of Defense announced a contract award to the Bell-Boeing Joint Program Office for the modification and test of a V-22 derivative. The aircraft was in consonance with Secretary of Defense letters of July 2, 1992, to congressional leadership. It was a down-scaled version of the tilt-rotor V-22 aircraft.

22 Space shuttle *Columbia* was launched on a 10-day mission. Naval Aviator James Wetherbee was the commander. Michael Baker and William Shepard, also in the Navy but not aviators, were part of the crew.

24 Atlantic Fleet reorganized into six permanent battle groups, a major change in fleet composition. Previous Navy plans called for forming battle groups for specific workups and deployments.

30 NAS Cubi Point, R.P., was disestablished ending almost a century of American military presence in the Philippines. The occasion was marked by a public ceremony.

November

03 *Kitty Hawk* (CV 63) departed NAS North Island, Calif., with CVW-15, on her first deployment in more than five years, following a four-year Service Life Extension Program overhaul at Philadelphia Naval Shipyard, Pa.

03 Presidential Commission on the Assignment of Women in the Armed Forces recommended against allowing military women to fly in combat, but for allowing women to serve in some combat ships.

06 *Constellation* (CV 64), the last carrier that would undergo overhaul under the Service Life Extension Program (SLEP), returned to sea for 10 days of sea trials following its 29-month SLEP at Philadelphia Naval Shipyard, Pa.

06 The Emil Buehler Naval Aviation Library was dedicated at the National Museum of Naval Aviation, NAS Pensacola, Fla.

07 In support of Operation Provide Promise, an amphibious ready group (ARG) centered on *Guam* (LPH 9), with HMM-261 (Reinforced), relieved the *Iwo Jima* (LPH 2) ARG, with HMM-365 (Reinforced) aboard, in the Adriatic.

14 The Rolling Airframe Missile (RAM) System was installed on *Peleliu* (LHA 5). RAM is a lightweight, quick-reaction, high-firepower weapon system.

14 *Ex-Lexington* (AVT 16), the Navy's unsinkable "Blue Ghost" of WW II, was officially turned over to the city of Corpus Christi, Texas, during a ceremony. *Lexington* would be open for public tours.

20 *Enterprise* (CVN 65) shifted from the Pacific Fleet to the Atlantic Fleet. She will be home-ported at Norfolk, Va., upon completion of overhaul and nuclear refueling at Newport News Shipbuilding and Drydock Co.

24 The last Americans left NS Subic Bay, R.P., ending 94 years of U.S. military presence in the Philippines. The U.S. pullout from the Philippines was the result of the Philippine Senate's rejection of a 1991 treaty that would have extended the American military presence in the country for at least another decade in return for more than \$2 billion in aid.

December

01 As of 01 Dec, the Navy and Marine Corps had taken delivery of 836 FA-18 *Hornets*, out of a total of 1,150 delivered worldwide.

02-10 Space shuttle *Discovery* carried out a secret mission for the Department of Defense. The all-military crew included Naval Aviators David Walker and Robert Cabana.

07 Navy and McDonnell Douglas Aerospace finalized the \$3.715-billion development contract for the advanced

FA-18E/F. The cost-plus-incentive contract covers 7.5 years of engineering and support activities, including the manufacturing and testing of seven flight test aircraft and three ground test airframes.

07 *Ranger* (CV 61) and her task force, diverted from the Persian Gulf, sailed off the coast of Somalia in support of Operation Restore Hope, the UN-authorized effort to relieve mass starvation amid factional fighting in Somalia.

09 Under the leadership of U.S. armed forces, Operation Restore Hope began in the early morning. The preannounced landing of U.S. Marines was witnessed by millions of U.S. primetime television viewers. Initially, HMM-164 (Reinforced) from *Tripoli* (LPH 10) provided all of the Marine helicopter support to ground forces in Somalia.

14 HSL-84 received its first SH-2G *Seasprite* at NAS North Island, Calif. The new *Seasprite* variant is replacing the SH-2F. HSL-84 would be the only squadron to receive the SH-2G.

16 Five air traffic controllers from *Kitty Hawk* (CV 63) were sent aboard *Leahy* (CG 53) to establish approach control services in and out of Mogadishu, Somalia, in support of Operation Restore Hope. Approaching aircraft were picked up from a VAW-114 E-2C *Hawkeye*, which tracked flights and issued advisories from about 200 miles out. Once the flights were within 50 miles, the *Leahy* team took over and led them to within visual range of the airport, about 10 miles away.

17 Amphibious assault ship *Okinawa* (LPH 3) was decommissioned at NS San Diego, Calif., after more than 30 years of service.

19 Relieving *Ranger* (CV 61) off Somalia, *Kitty Hawk's* (CV 63) aircraft assumed the missions of photoreconnaissance, armed reconnaissance, and show of force to discourage opposition to Operation Restore Hope.

27 Iraqi jets violated the "no-fly zone" below the 32nd parallel, resulting in the loss of a MiG-25 to an AIM-120 AAMRAM missile fired by a USAF F-16D. *Kitty Hawk* (CV 63), diverted from relief efforts off the coast of Somalia to the Persian Gulf, dispatched F-14A and FA-18A fighters in support of Operation Southern Watch.

Carrier and Air Wing Deployments

Dwight D. Eisenhower (CVN 69)

CVW-7 (Tail Code: AG)
Med/Red Sea/Persian Gulf/NorLant
26 Sep 91-2 Apr 92.

Squadron	Aircraft
VF-143	F-14B
VF-142	F-14B
VFA-136	FA-18C
VFA-131	FA-18C
VA-34	A-6E/KA-6D
VAW-121	E-2C
HS-5	SH-3H
VAQ-140	EA-6B
VS-31	S-3B

America (CV 66)

CVW-1 (Tail Code: AB)
Med/Red Sea/Persian Gulf
02 Dec 91-06 Jun 92

Squadrons	Aircraft
VF-102	F-14A
VF-33	F-14A
VFA-82	FA-18C
VFA-86	FA-18C
VA-85	A-6E/KA-6D
VAW-123	E-2C
HS-11	SH-3H
VAQ-137	EA-6B
VS-32	S-3B

Saratoga (CV 60)

CVW-17 (Tail Code: AA)
Mediterranean
(Provide Promise)
06 May 92-06 Nov 92.

Squadrons	Aircraft
VF-74	F-14B
VF-103	F-14B
VFA-83	FA-18C
VFA-81	FA-18C
VA-35	A-6E/KA-6D
VAW-125	E-2C
HS-9	SH-3H
VAQ-132	EA-6B
VS-30	S-3B
VX-1 det	ES-3A

Independence (CV 62)

CVW-5 (Tail Code: NF)
Australia/Indian Ocean/Persian Gulf
(Southern Watch)
15 Apr 92-13 Oct 92.

Squadrons	Aircraft
VF-154	F-14A
VF-21	F-14A
VFA-192	FA-18C
VFA-195	FA-18C
VA-115	A-6E
VAW-115	E-2C
HS-12	SH-3H
VAQ-136	EA-6B
VS-21	S-3B

Ranger (CV 61)

CVW-2 (Tail Code: NE)
Indian Ocean/Persian Gulf
(Southern Watch, Provide Relief)
01 Aug 92-31 Jan 93

Squadrons	Aircraft
VF-1	F-14A
VF-2	F-14A
VA-155	A-6E
VA-145	A-6E
VAW-116	E-2C
VAQ-131	EA-6B
HS-14	SH-3H
VS-38	S-3A

John F. Kennedy (CV 67)

CVW-3 (Tail Code: AC)
Mediterranean
(Provide Promise)
07 Oct 92-07 Apr 93

Squadrons	Aircraft
VF-14	F-14A
VF-32	F-14A
VFA-37	FA-18C
VFA-105	FA-18C
VA-75	A-6E
VAW-126	E-2C
HS-7	SH-3H
VAQ-130	EA-6B
VS-22	S-3B
VRC-40 Det 1	C-2A

Kitty Hawk (CV 63)

CVW-15 (Tail Code: NL)
Indian Ocean/Persian Gulf
(Provide Relief/Southern Watch)
03 Nov 92-03 May 93

Squadrons	Aircraft
VF-51	F-14A
VF-111	F-14A
VFA-97	FA-18A
VFA-27	FA-18A
VA-52	A-6E/KA-6D
VAW-114	E-2C
HS-4	SH-60F/HH-60H
VAQ-134	EA-6B
VS-37	S-3B
VRC-50 det	C-2A

PH3 George Delmoral



Flight deck officer Lt. Ron Fry demonstrates how flight deck personnel keep track of aircraft aboard Theodore Roosevelt (CVN 71). L to R: Dr. Thomas E. Moore, Jr.; Brig. Gen. James J. Cravens, Jr., USA; Brig. Gen. Lloyd W. Newton, USAF; and Brig. Gen. Clara L. Adams-Ender, USA.

Active Patrol Squadron Major Deployments 1992

NAS Keflavik, Iceland

Aug 91 - Mar 92	VP-16	P-3C UIIIR
Mar 92 - Sep 92	VP-45	P-3C UIIIR
Sep 92 - Mar 93	VP-5	P-3C UIIIR

NAS Sigonella, Sicily (Det at Jeddah, Saudi Arabia)

Nov 91 - May 92	VP-23	P-3C UII
May 92 - Nov 92	VP-26	P-3C UII
Nov 92 - May 93	VP-24	P-3C UIIIR

NS Rota, Spain

Dec 91 - Jan 92	VP-49 det	P-3C UIIIR
Jan 92 - Jul 92	VP-11 det	P-3C UII.5
Jul 92 - Sep 92	VP-16 det	P-3C UIIIR
Sep 92 - Jan 93	VP-8 det	P-3C UII.5

NS Roosevelt Roads, PR

Dec 91 - Jan 92	VP-49	P-3C UIIIR
Jan 92 - Jul 92	VP-11	P-3C UII.5
Jul 92 - Feb 93	VP-8	P-3C UII.5

NAS Bermuda

Aug 91 - Mar 92	VP-16 det	P-3C UIIIR
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NAS Adak, Alaska

Aug 91 - Jan 92	VP-50	P-3C UIIIR
Jan 92 - Jun 92	VP-1	P-3C UIIIR
Jun 92 - Nov 92	VP-9 det	P-3C UIIIR
Nov 92 - May 93	VP-40 det	P-3C UII

NAF Misawa, Japan

Aug 91 - Jan 92	VP-22	P-3C UII.5
Jan 92 - Jun 92	VP-47	P-3C UII
Jun 92 - Nov 92	VP-6	P-3C UII.5
Nov 92 - May 93	VP-17	P-3C UI

NAF Kadena, Okinawa, Japan

Nov 91 - May 92	VP-46 det	P-3C UIIIR
May 92 - Nov 92	VP-4 det	P-3C UIIIR
Jun 92 - Nov 92	VP-6 det	P-3C UII.5
Nov 92 - May 93	VP-22 det	P-3C UIIIR
Nov 92 - May 93	VP-17 det	P-3C UIIIR

NAS Cubi Point, RP

Aug 91 - Jan 92	VP-22 det	P-3C UII.5
Jan 92 - Apr 92	VP-47 det	P-3C UII

NAF Diego Garcia, BIOT (Det at Al Masirah, Oman)

Nov 91 - May 92	VP-46	P-3C UIIIR
May 92 - Nov 92	VP-4	P-3C UIIIR
Nov 92 - May 93	VP-22	P-3C UIIIR

PHC Jack C. Bahm



Marines board a CH-46 Sea Knight on the flight deck of Inchon (LPH 12) as the vessel takes part in the joint exercise Dragon Hammer '92.

PH3 Bruce Moore



VX-1 brought the ES-3A carrier-based electronic reconnaissance aircraft to the Mediterranean with a detachment onboard Saratoga (CV 60).



An SH-2F Seasprite lands aboard the amphibious assault ship Nassau (LHA 4) off the coast of Norway during Teamwork '92.

Key to P-3C Aircraft:

UI = Update I

UII = Update II

UII.5 = Update II.5

UIII = Update III

UIIIR = Update III retrofit

Bureau Numbers Issued in 1992

Numbers below were assigned by CNO during 1992 for future Navy and Marine Corps aircraft procurement:

Numbers	Qty	Type	Name	Contractor
164945-164992	48*	FA-18C/D	Hornet	McD
164993-164998	6	C-130T	Hercules	L
164999-165000	2	KC-130T	Hercules	L
165001-165006	6	AV-8B	Harrier II	McD
165007-165027	21	AV-8B**	Harrier II+	McD
165028-165035	8	AV-8B***	Harrier II+	McD
165036	1	TAV-8B***	Harrier II	McD
165037-165056	20	AH-1W	Super Cobra	B
165057-165092	36	T-45A	Goshawk	McD
165093-165094	2	C-20G	Gulfstream III	G
165095	1	SH-60B	Seahawk	S
165096	1	HH-60J****	Jayhawk	S
165097	1	AH-1W	Super Cobra	B
165098-165105	8	P-3C*****	Orion	L
165106-165112	7	SH-60B	Seahawk	S
165113-165119	7	SH-60F	Seahawk	S
165120-165123	4	HH-60H	Seahawk	S
165124-165127	4	HH-60J****	Jayhawk	S
165128-165134	7	SH-60B	Seahawk	S
165135-165141	7	SH-60F	Seahawk	S
165142-165145	4	HH-60H	Seahawk	S
165146-165150	5	HH-60J****	Jayhawk	S
165151-165153	3	C-20G	Gulfstream III	G
165154-165157	4	SH-60F	Seahawk	S
165158-165161	4	C-130T	Hercules	L
166162-165163	2	KC-130T	Hercules	L

* Includes 34 FA-18Cs and 14 FA-18Ds.

** For Italy.

*** For Spain.

**** For Coast Guard.

***** For Republic of Korea.

Contractor codes:

B = Bell

B/B = Bell/Boeing

G = Gulfstream

McD = McDonnell Douglas

L = Lockheed S = Sikorsky



4th Marine Aircraft Wing Reorganization

On July 1, 1992, the Marine Corps Reserve 4th Marine Aircraft Wing was extensively reorganized along largely geographic lines. This table reflects the reorganization, with subsequent changes noted:

Headquarters 4th MAW – NAS New Orleans, LA

MASD 4th MAW, NAF Washington, DC

MAG-41 – NAS Dallas, TX

MALS-41

VMFA-112

HMH-772 Det B*

Det A – NAS Memphis, TN

VMA-124

Det B – NAS Glenview, IL

HML-776

VMGR-234

MAG-42 – NAS Atlanta, GA

MALS-42

HMA-773

VMO-4

Det A – NAS Cecil Field, FL

VMFA-142

Det B – NAS Norfolk, VA

HMM-774

Det C – NAS New Orleans, LA

HML-767

MAG-46 – MCAS El Toro, CA

MALS-46

HMM-764

VMFA-134

Det A – MCAS Camp Pendleton, CA

HMA-775

Det B – NAS Alameda, CA

HMH-772 Det A**

VMA-133***

Det C – NAS Whidbey Island, WA****

VMAQ-4*****

VMFT-401 – MCAS Yuma, AZ

MAG-49 – NAS Willow Grove, PA

MALS-49

HMH-772

VMA-131

Det A – NAF Washington, DC

VMFA-321

Det B – Stewart Field, NY

VMGR-452

Det C – NAS South Weymouth, MA

HML-771

VMA-322*****

MACG-48 – NAS Glenview, IL

H&HS-48, NAS Glenview, IL

MWCS-48, NAS Glenview, IL

MATCS-48, NAS Memphis, TN

MASS-6, NAS South Weymouth, MA

MACS-24, Dam Neck, VA

4th LAAM, Fresno, CA

4th LAAD, Fresno, CA

MWSG-47 – NAF Detroit, MI

H&HS-47, NAF Detroit, MI

MWSS-471, NAS Dallas, TX

MWSS-472, MCAS El Toro, CA

MWSS-473, NAS South Weymouth, MA

MWSS-474, NAS Willow Grove, PA

MWSS-474, NAS Atlanta, GA

* Deactivated on 01 April 93.

** Deactivated 01 April 93; re-formed as HMH-769 on 01 Apr 93.

*** Deactivated on 30 Sep 92.

**** Deactivated on 01 Oct 92. VMAQ-4 was reactivated as an active duty squadron at MCAS Cherry Point, NC, on 02 Oct 92.

***** Deactivated on 30 Jun 92.



VF-143 F-14B Tomcats prepare to recover aboard George Washington (CVN 73).

Aviation Command Changes in 1992[★]

Established

Commander Strategic Communications Wing 1	01 May 92
Flight Test and Engineering Group	02 Jan 92
Naval Air Training Management Support Activity, Corpus Christi, TX	15 Apr 91
Naval Air Warfare Center (NAWC)	01 Jan 92
Naval Air Warfare Center Aircraft Division (NAWC AD)	02 Jan 92
Naval Air Warfare Center Weapons Division (NAWC WD)	21 Jan 92
Naval Air Weapons Station, Point Mugu, CA*	21 Jan 92
Naval Air Weapons Station, China Lake, CA*	22 Jan 92

Activated

VMAQ-1	01 Jul 92
VMAQ-3	01 Jul 92
VMAQ-4**	01 Oct 92

Redesignated

Commander Helicopter Sea Control Wing 3 to Commander Helicopter Antisubmarine Light Wing 1	01 Jul 92
Fleet Electronic Warfare Support Group (FEWSG) to Fleet Tactical Readiness Group (FTRG)	01 Apr 92
MACS-23 to MACS-24 Det A	01 Jul 92
VMA(AW)-533 to VMFA(AW)-533	01 Oct 92

Disestablished

Commander Carrier Air Wing 6	01 Apr 92
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Commander Helicopter Wings, Atlantic	30 Sep 92
Commander Helicopter Sea Control Wing 1	01 Jul 92
Commander Patrol Wings, Atlantic	30 Sep 92
Commander Strike Fighter Wings, Atlantic	30 Sep 92
Commander Tactical Wings, Atlantic	30 Sep 92
Commander Training Wing 3	31 Aug 92
Marine Aviation Training Support Group, Lakehurst, NJ	01 Oct 91
NAS Cubi Point, RP	30 Oct 92
NAS Mayport, FL***	01 Jun 92
NAS Point Mugu, CA*	21 Jan 92
Naval Air Test Center, Patuxent River, MD#	31 Dec 91
Naval Air Development Center, Warminster, PA#	31 Dec 91
Naval Air Engineering Center, Lakehurst, NJ#	31 Dec 91
Naval Air Propulsion Center, Trenton, NJ#	31 Dec 91
Naval Air Technical Training Center, Lakehurst, NJ	01 Oct 91
Naval Avionics Center, Indianapolis, IN#	31 Dec 91
Naval Ordnance Missile Test Station, White Sands, NM*	11 May 92
Naval Weapons Center, China Lake, CA*	22 Jan 92
Pacific Missile Test Center, Point Mugu, CA*	31 Dec 91
HSL-31	31 Jul 92
HSL-35	04 Dec 92
HSL-36	30 Sep 92
VA-176	30 Oct 92
VAQ-133	01 Jun 92
VC-1	30 Sep 92
VC-5	31 Aug 92
VFA-132	01 Jun 92
VP-50	30 Jun 92
VS-28	01 Oct 92
VT-24****	30 Oct 92
VT-25****	30 Oct 92
VT-26****	29 May 92

Deactivated

VMA-133	30 Sep 92
VMA-322	30 Jun 92
VMA-331	30 Sep 92
VMAQ-4**	30 Sep 92
VMFA-333	31 Mar 92
VMFA-531	31 Mar 92

★ Command changes not noted in "The Year in Review 1991" (*Naval Aviation News*, Jul-Aug 92, p. 25) are included in this table.

After disestablishment, these became sites for the Naval Air Warfare Center Aircraft Division's activities. The Flight Test and Engineering Group assumed the directorates of the former Naval Air Test Center.

* NAS Point Mugu and NWC China Lake were disestablished and reorganized as Naval Air Weapons Stations. The Pacific Missile Test Center and part of NWC China Lake were absorbed by the Naval Air Warfare Center Weapons Division, headquartered at Point Mugu. Naval Ordnance Missile Test Station, White Sands, became a detachment site of NAWC WD.

** VMAQ-4 was deactivated as a reserve unit on 01 Oct 92 and reactivated as an active duty unit on 02 Oct 92.

*** NAS Mayport was absorbed by NS Mayport, which continues to operate the airfield.

**** Dates for these units, which vary from those reported in earlier issues of *Naval Aviation News*, are the official CNO-approved dates.



Aviation Ordnanceman



Teamwork, attention to detail, and double checking every procedure are critical to the safety of the personnel of Strike Division, NAWC AD Patuxent River, as they load a MK-82 bomb onto an F-14A.

By JO1(SW) Eric S. Sesit

To many of us, working with things that blow up is a job best left for others to tackle. But rockets, missiles, and bombs are the tools of the trade for the Navy's Aviation Ordnancemen (AOs). The *Blue Jackets' Manual* states: "AOs maintain, repair, install, operate, and

handle aviation ordnance equipment. They also handle, stow, issue, and load munitions and small arms."

AOs must be competent with tools, equipment, and machinery and possess physical strength and manual dexterity. They must be United States citizens eligible for security clearance and, since ordnance is color coded for identification purposes, AOs must have good color perception.

An AO begins his or her career by attending "A" school in Memphis, Tenn. After 9 to 11 weeks of training, airmen usually are sent to the fleet for sea duty. According to AOCM(AW) Dan Shaunessy, the AO detailer, "A typical career path for a young AO might be working as a member of a loading team, assembling bombs or loading aircraft, or working in an AIMD (Aviation Intermediate Maintenance Department) repairing bomb racks and launchers. As a second class petty officer, AOs should be a team leader, and a first class petty officer should be a qualified quality assurance safety observer."

There can be as few as six AOs assigned to a helicopter detachment and as many as 28 assigned to an A-6 squadron. The ship's company of an aircraft carrier may have between 160 to 250 AOs assigned.

"Shipboard AOs load out the ship with ordnance, breakout and build up the ordnance, issue and track it, maintain the armory and the sprinklers in the magazines, and maintain the weapons elevators," Shaunessy said. "The squadron AOs concentrate on keeping the squadron's aircraft flying with full loads of ordnance."

Such varied duties require specialization, and AOs may earn Navy Enlisted Classification (NEC) codes in 22 different areas, ranging from maintaining support equipment to handling hazardous materials. Usually, an AO earns an NEC for handling munitions for a particular aircraft. If sent to another squadron flying a different aircraft and the billet requires a different NEC, the AO will probably attend one of the many "C" schools to learn the required skills.

JO1(SW) Eric S. Sesit



PHCS(AC) D. W. Holmes II

AOs of the VFA-105 Gunslingers load a MK-37 500-pound practice bomb onto the wing of an FA-18 Hornet onboard Kennedy (CV 67).

AOs spend much of their time at sea. Airmen serve 42 months at sea before going to shore duty for 24 months. Petty officers serve an average of 45 months at sea and 24 to 30 months ashore, and senior and master chiefs can expect to spend 48 months at sea and 36 months ashore.

Although sea intensive, shore duty offers a wide range of interesting assignments. A somewhat unknown billet but extremely challenging for AOs is the Strike Division at Naval Air Weapons Center Aircraft Division, Patuxent River, Md. "They research, test, and evaluate new ordnance for the fleet," CWO3 Richard A. Brasko, Strike's ordnance officer, said. "This includes developing checklists for handling ordnance and evaluating the loading and separation of ordnance from

the aircraft. Working here is an AO's dream come true, seeing firsthand how new weapons develop." Naval Air Weapons Stations, Point Mugu and China Lake, Calif., provide the same varied exposure to the ordnance rating.

AO1(AW) Michael R. Racine, leading petty officer of the Strike bomb shop, echoed Brasko's remarks. "To me, this is a career-enhancing billet. I've been associated with F-14s most of my career. Here, I get to work on everything from helicopters to A-6s, everything the Navy flies. Additionally, what we're working on now will be out in the fleet in a few years, and I'll be one step ahead," Racine said.

"The operational tempo here is a little slower than in the fleet. Everything we do is scheduled well in advance, but there is a great deal of job satisfaction knowing that we are setting the guidelines and making changes to procedures that will make people's jobs in the fleet safer," Racine added.

"There are billets for more than 7,500 AOs in the fleet, but because of the misconceptions of new recruits, and the large numbers of people leaving the Navy, the AO rating is only 91-percent manned," Shaunessy said. "Initially, community managers for the AO rating had made plans to incorporate Weapons Technicians (WTs), whose rating was drawing down. WTs were originally slotted to cross rate to the AO rating but when other ratings opened up to WTs, the AOs were left with plenty of billets to fill."

"The military drawdown and squadron disestablishments have affected the AO rating, but we're doing our best to accommodate all our career sailors," Shaunessy continued. "For instance, many of the A-6 AOs will roll over to work on the EA-6Bs. If they need a school to fill a billet, we'll work with them to get it."

Women currently comprise only three percent of the AO rating and currently serve only on shore duty, overseas, or with P-3 squadrons. Enlisted Community Manager LCdr. Raymond Miskowski foresees a big change in that statistic. "With the personnel changes that are taking place now and in the future, and the advancement opportunities in the AO rating in particular, I see the number of women AOs rising to meet the Navy average," Miskowski said.

Advancement remains strong for the AOs right through limited duty and warrant officers. Selective Reenlistment Bonuses are also being offered to first-term sailors wishing to reenlist.

"Many recruits look for a career skill they can use after leaving the service, and that's fine," Shaunessy said. "Skills learned as an Aviation Ordnanceman can indeed be utilized in the civilian world in construction and perhaps the defense industry. However, the AO rating is a great Navy skill with rapid advancement and challenging billets around the world. It's a good field to get into for someone looking to make the Navy a career." ■



J01(SW) Eric S. Sesit

Final preparations before flight. AO2 Jeffrey Anderson of Strike Division, NAWC AD Patuxent River, arms the BRU-32 bomb rack.

Navy Expands Assignments of

Even though Congress has not repealed the combat exclusion law for women, the Navy is aggressively expanding their roles.

"There is no question that the number of opportunities for women in the Navy will grow in the years ahead," Chief of Naval Operations Admiral Frank B. Kelso II said in a recent interview. "And it's important that we do that now."

With that in mind, Kelso set in motion the Navy's plan to implement the major changes directed by Secretary of Defense Les Aspin April 28. Adm. Kelso said the Navy will:

Permit women to compete for assignment in aircraft engaged in combat missions.

Navy Recruiting Command will begin recruiting aviation officers on a gender-neutral basis, effective immediately.

Women who are already qualified in fleet aircraft will be eligible to compete for transition to combat versions of their aircraft.

Additional noncombatant ships (AOE, AOR, LCC, and AGF) will be immediately opened to women, with priority assignment to these ships for qualified, sea duty-eligible women currently serving in ships slated for near-term decommissioning.

"I expect the first assignment of a woman aviator to a combat squadron to occur this summer," Adm. Kelso said. Ten to 12 female aviators already training in fleet readiness squadrons are expected to continue the full syllabus leading to assignment in tactical (combat) squadrons.

VP-30 received an ensign, VAW-110 a lieutenant (jg), VAQ-129 a lieutenant, and VA-42 and VFA-125 two women each. Based on women who are already qualified or in various stages of flight training now, 40 to 50 women will be in combat squadrons by 1995.

"Women officers in flight training will be considered on an equal footing with their male counterparts," Kelso went on. "Even without repeal of the current combat exclusion law, women assigned as aviation officers in air wings will be able to deploy aboard combatant ships, including aircraft carriers," he added.

During the Naval Aviation Symposium in Pensacola, Fla., Vice Admiral R. J. Zlatoper, Chief of Naval Personnel, said, "VAQ-130 will receive its first female warriors in July, including a pilot and two Naval Flight Officers (NFOs)." According to Zlatoper, the Navy's first woman completed training in air combat systems and tactics more than a year ago.

During the last week of May, Lieutenant Shannon Workman became the first woman combat aviator to day and night carrier qualify in a Navy tactical jet. She will report to VAQ-130 later this summer. (See sidebar.)

Lieutenant Commander Kathryn P. Hire is the Navy's first woman to serve in a combat aircraft squadron as an NFO. LCdr. Hire, a naval reservist, is assigned to VP-62, Jacksonville, Fla. (See sidebar.)

Today, there are 8,900 women serving in ships, 4,300 women assigned to aviation squadrons, and 260 qualified as pilots or NFOs. "Our goal is 10 to 20-percent

female manning on ships with mixed-gender crews," Zlatoper said.

According to the officials at the Bureau of Personnel (BuPers), Carrier Air Wing 3, embarked on *Dwight D. Eisenhower* (CVN 69), and Carrier Air Wing 11 on *Abraham Lincoln* (CVN 72), will be the first to receive women. Women may now also be assigned to the staffs of the Second, Third, and Seventh Fleet commanders. BuPers also announced the opening of six new occupational fields to women. Effective immediately, women may train and serve as Aviation Antisubmarine Warfare Operators (AWs), Electronic Warfare Technicians, Fire Control Technicians, Gas Turbine System Technicians, Gas Turbine System Technicians Electrical, and Gas Turbine System Technicians Mechanical. The six new ratings alone open potentially more than 2,000 new assignments to enlisted women, half of those as AWs in P-3 aircraft.

AWs serve in flight crews of antisubmarine warfare aircraft. They operate airborne electronic gear for finding, pinpointing, and tracking submarines, as well as sophisticated radars for aircraft targeting. There are approximately 2,800 petty officers in the AW rating.

"It will be as long as a year before the first female sailors who enter the AW rating show up aboard ship," said Lieutenant Commander George Coleman, a BuPers personnel planner. "Women first must agree to enter the newly opened skills. They must meet entry requirements which are typically higher for technical skills than administrative ratings and which

Reservist Ordered to Combat Squadron

Lieutenant Commander Kathryn P. Hire joined Patrol Squadron (VP) 62 May 15 as the Navy's first woman to serve in a combat aircraft squadron.

"LCdr. Hire was selected because she is a superb naval officer," said Rear Admiral Thomas F. Hall, Commander, Naval Reserve Force, "and she has the record and flight experience to support her selection."

Hire was chosen by a board of senior pilots and Naval Flight Officers (NFOs). An NFO with more than 2,100 flight hours, she will fly the Lockheed P-3C Update III *Orion*, the Navy's newest maritime patrol aircraft.

A 1981 Naval Academy graduate, she was

designated an NFO in October 1982. Hire has an M.S. in Space Technology from the Florida Institute of Technology and taught spacecraft guidance and control as a part-time faculty member.

Her Navy assignments include Oceanographic Development Squadron 8, where she served as airborne mission commander and oceanographic project coordinator in the P-3. She was an instructor at Naval Air Training Unit, Mather AFB, Calif., providing celestial navigation, airborne, simulator, and classroom instruction to other NFOs, and also served as course and curriculum manager for the six-month program. She joined the Naval Reserve in February 1989.

As a civilian, Hire is a space shuttle test project engineer for Lockheed Space Operations Company, Kennedy Space Center, Fla.



LCdr. Kathryn Hire

Thanks to the ComNavResFor Public Affairs office for this information.

Women

won't be lowered for women. They must get through the often intense basic skills and specialized training," he added.

While a few packages have been received, according to the AW enlisted community manager, there are currently no school seats available. And until there are he cannot approve the rating conversion.

By October 1997, as many as 1,600 enlisted women could be assigned to combat ships, after the law is modified to permit it, VAdm. Zlatoper said. Women currently serve on noncombatant ships. Zlatoper said repeal of the combat exclusion law would help "career paths for women."

Six women have already received orders to participate in combat training. Lieutenants Pam Lyons and Brenda Scheufele were transferred May 18 to VFA-125. Lieutenant Christina Green, an NFO with VAQ-34, received word May 20 that she will be going to VF-124, an F-14 *Tomcat* training squadron in Miramar, Calif. Lieutenant Kara Hultgreen, assigned to VAQ-33 at NAS Key West, Fla., got orders to begin training at VF-124.

Secretary Aspin said, "Women have proved they can contribute to the readiness and effectiveness of the force. We know from experience that women can fly our high-performance fighter aircraft. We know from experience that they perform well in assignments at sea. And we know, from Operation Desert Shield/Desert Storm, that women stand up to the most demanding environments. So, we are acting on what we know." ■



Lt. Shannon Workman

Woman Combat Aviator Completes Day and Night CQs

By JOCS(AW) Theresa L. Dunn

Lieutenant Shannon Workman classified her becoming the first female combat aviator to complete day and night carrier qualifications (CQs) in a Navy tactical jet as, "Pretty exciting!"

During the last week in May, flying an EA-6B, Lt. Workman completed both day and night carrier qualifications aboard *Carl Vinson* (CVN 70). "It is nice to be able to complete the same program that everyone else gets, then go on to be assigned to a fleet squadron," she said in a recent interview. "My syllabus was no different than any other student's."

"I had made daylight traps before in T-

2s and A-4 *Skyhawks* on the training carrier *Lexington*," she said. "But this was different. *Lexington* is a smaller deck, which means that you don't have as much room to roll out as you do on *Carl Vinson*. The trap seemed a lot less severe."

Workman said she felt "an immense feeling of relief" after her first night trap. "I had never done it before and you hear from all the aviators that it is really difficult. We had practiced for four weeks on the training field, seeing it all come together, leading up to the time on *Vinson*, but it was not as abrupt as traps on *Lexington*."

Workman completed her night carrier qualifications just before celebrating the

third anniversary of receiving her aviator wings. The Cumberland, Md., native graduated from the U.S. Naval Academy and received her commission in 1988; she earned her wings on June 1, 1990. She then spent two years as a flight instructor in T-2 *Buckeyes*.

Soon after completing her qualifications, Workman said she had the opportunity to share her experiences on the carrier with her parents, firsthand, while attending the graduation of her brother from the U.S. Air Force Academy in Colorado.

Lt. Workman will report to VAQ-130 later this summer.

Rafale Undergoes Testing at

The newest French military aircraft, *Rafale*, completed its second series of testing and evaluation at Naval Air Warfare Center Aircraft Division (NAWC AD), Lakehurst, N.J.

Rafale ground and flight tests were performed at Lakehurst under an agreement between the French and U.S. governments in anticipation of the naval version of the aircraft operating on two French aircraft carriers, *Foch* and *Charles De-Gaulle*.

In anticipation of its first carrier

launches and recoveries conducted on *Foch* in April 1993, the *Rafale* was put through nearly 30 launches from the steam-powered catapults at the head of NAWC AD Lakehurst's 12,000-foot dedicated test runway and nearly 35 arrestments at the runway arrested landing site.

A French team of about 70, including representatives from Dassault Aviation, the aerospace industry, and the French government were at Lakehurst to put the aircraft through the second of four test

campaigns, as the French refer to each test sequence.

The *Rafale* was first at Lakehurst in July and August 1992 to ensure the aircraft was up to the stresses of carrier launches and recoveries. As a result of those tests, the aircraft's nose landing gear was strengthened. During their recent visit, the French verified through steam ingestion tests that the *Rafale* was capable of launching from a carrier after its engine had ingested hot steam.

The MO1 *Rafale* French navy fighter/at-



Lakehurst

By Frank Montarelli

tack prototype was flown on April 19–May 7 onboard *Foch* in the Mediterranean. The French referred to these as initial sea trials.

The *Rafale* is scheduled to return to NAWC AD Lakehurst in mid-autumn and again in mid-1994 for more tests.

Frank Montarelli is a public affairs officer at Naval Air Warfare Center Aircraft Division, Lakehurst, N.J.

Editor's note:

The *Rafale* made its first carrier launch on April 19, 1993, from the deck of the French carrier *Foch*.

Below and left, the *Rafale* fighter climbs skyward after launching from the TC-13 MOD O catapult at Lakehurst.



Photos courtesy: Dassault/Aviplan's Francois Robineau

A Unique Role in Desert Storm

Story and Photo by Vance Vasquez

On January 17, 1991, the U.S. and other United Nations coalition forces joined together to liberate occupied Kuwait from Iraqi forces.

Operation Desert Storm affected the lives and careers of thousands of military personnel. One such person, Commander Robert E. Noziglia, Jr., aircraft maintenance officer of Naval Air Weapons Station, Point Mugu, Calif., had a unique role in Desert Storm.

In Washington, D.C., on September 15, 1990, Noziglia was interviewed by Ambassador Edward W. Genhm, Jr., the U.S. designate to Kuwait. Cdr. Noziglia was selected to head the reconstruction of the Kuwait Air Force. A Kuwaiti 747 airliner was used to transport 86 contract technicians along with their supplies to Khamis Mushayt, Saudi Arabia. They departed from Andrews AFB, Md., and arrived in Saudi Arabia September 16, 1990.

"The technicians were retired Navy and Marine Corps personnel with A-4 *Skyhawk* experience," said Noziglia.

When Iraq invaded Kuwait and overwhelmed the small country, only a small portion of the Kuwait Air Force was able to escape into Saudi Arabia. A total of 18 A-4KUs and two TA-4KU *Skyhawk* attack aircraft, along with 15 F-1 *Mirage* fighters and three L100-30 (C-130) transport aircraft were saved.

The Kuwait Air Force arrived with no support facilities – no equipment, tools, or aircraft manuals, which were left behind in Kuwait. "The aircraft were unique. Since no other country operated A-4KU *Skyhawks*, we were able to assemble new manuals from information obtained from the United States," said Noziglia.

After the technicians arrived, the A-4KUs were moved from Khamis Mushayt and were forward deployed to Dhahran, Saudi Arabia. The A-4KUs were stationed far away from Iraq to avoid any possible air strikes before the United Nations' mandate for Iraq to leave Kuwait was ordered. The Kuwait Air Force was integrated with the Royal Saudi Air Force under a single command.

When Operation Desert Storm started, Noziglia credited the Kuwait Air Force with playing an important role in freeing their country.

"There was a day we returned from an air strike and a Kuwaiti A-4KU pilot was as happy as he could be when he delivered a 500-pound bomb right to the front door of the headquarters office – until he realized that it was his old office," recalled Noziglia.

"The Kuwaitis had 'Free Kuwait' painted on the sides of their A-4KUs, which became the national motto. The A-4KU flew from 18 to 24 sorties per day and only one A-4KU was lost to anti-aircraft artillery fire during the war. The pilot became a prisoner of war," Noziglia stated.

After the war, Cdr. Noziglia was involved in Operation Desert Recovery. He said Iraqi personnel had taken almost all of Kuwait's military hardware back to Iraq, including the improved Hawk surface-to-air missile systems. When hundreds of Kuwaiti flight officers were captured, it was believed that A-4KU flight procedures were shown to Iraqi pilots, allowing them to fly the A-4KUs left behind back to Iraq. Noziglia said crews started working on the stolen A-4KUs they found on Iraqi air bases, and six were flown back to Kuwait. "The aircraft had been sitting around for months," he said.

Noziglia remained in Kuwait for the integration of the FA-18C/D *Hornets* being manufactured for Kuwait by McDonnell Douglas. The FA-18C/D will replace both the A-4KU and F-1.

"They're moving from 1960s-vintage airframes in the A-4KU, into the year 2000 with their FA-18C/D *Hornets*," said Noziglia. Kuwait accepted their new *Hornets* last year.

"Desert Storm was definitely a highlight of my career. I made a lot of good friends with the Kuwaitis and we developed a good friendship," Noziglia emphasized.

For his efforts during Operation Desert Storm, Noziglia received the Joint Service Commendation as Kuwait security assistance officer and Navy liaison officer and received a letter of commendation from

Ambassador Genhm. He also received the Bronze Star Medal and a letter of commendation from Major General Jaber Khaled Al-Sabah, Deputy Chief of Staff, Kuwait Air Force.

Vance Vasquez is a staff writer/photographer for *The Missile*, Naval Air Weapons Station, Point Mugu, Calif.



Cdr. Robert E. Noziglia

Vance Vasquez

SURVIAC – A Joint Service Survivability Resource

By Matt Kolley

It is apparent that in today's political and economic environments, fewer new weapon systems will be authorized and fewer units will be produced of the systems that are authorized. These facts imply that any new system must be more survivable and more effective – able to perform its mission, defeat enemy threats, and remain capable of performing additional missions. The importance of survivability in the acquisition process has been emphasized in new versions of Department of Defense (DoD) Directive 5000.1 and DoD Instruction 5000.2, both dated February 23, 1991. These documents stress the need for survivability considerations in each phase of the acquisition process, from concept exploration to definition to operations to support.

Support for implementing these provisions can be obtained from the Survivability/Vulnerability Information Analysis Center (SURVIAC), DoD's designated center of excellence for all aspects of nonnuclear survivability and lethality information. SURVIAC's charter encompasses all nonnuclear threats, including conventional, directed energy, and chemical/biological weapons. Weapon systems considered include U.S. and foreign ships and related systems, aeronautical systems, and ground vehicles and related systems.

SURVIAC was created on December 21, 1984, by the merger of the Combat Data Information Center and the Aircraft Survivability Model Repository. Sponsored

by the Joint Technical Coordinating Groups on Aircraft Survivability and Munitions Effectiveness, SURVIAC functions as one of 23 DoD Information Analysis Centers (IACs). Major fields of interest include survivability considerations such as design, technologies, assessments and methodologies, and weapon system susceptibility and vulnerability; battle damage repair; munitions effectiveness; and combat operations.

As an integral part of the DoD acquisition process, SURVIAC has substantial information resources to help produce survivable, effective systems. SURVIAC maintains libraries which contain extensive collections of reports, studies, analyses, and raw data on air and surface vehicle survivability, maintenance, logistics, and military operations.

SURVIAC also has combat data bases covering conflicts from Vietnam to Desert Storm. These contain about 34,000 individual combat damage, loss, and repair incidents. The center has a number of test data bases available for use, as well, including data on joint live fire testing.

Unique among the DoD IACs, SURVIAC maintains, disseminates, and advises on selected survivability and lethality analysis models. These models are the DoD standard, baseline, configuration-controlled versions and are available through SURVIAC to ensure standard models are used to support the DoD weapon system acquisition process. The modeling function is the fastest growing area of SURVIAC's operation with sig-

nificant expansion proposed by the Office of the Secretary of Defense (OSD) and the joint services in the areas of electronic warfare, signature prediction, and ground vehicle survivability analysis.

In addition to assisting requesters seeking information or modeling services, SURVIAC has been extremely successful in responding to urgent defense agency needs through its Special Task Program. Clients supported through this facet of SURVIAC range from OSD and the service headquarters, through the major defense and service research and development organizations, to service major command components. One of SURVIAC's customers is the Naval Air Warfare Center Weapons Division, China Lake, Calif., whose Susceptibility Models and Range Test Program is intended to review and evaluate the capabilities of various susceptibility models and validate their outputs with range tests.

SURVIAC's chief resource center is located at Wright-Patterson AFB, Ohio. Satellite offices in Arlington, Va., and Aberdeen, Md., provide accessibility to SURVIAC capabilities and resources for Washington, D.C., and Aberdeen Proving Ground users, respectively.

For more information on SURVIAC, call (513) 255-4840, or write Wright Laboratory, WL/FIVS/SURVIAC/Bldg. 45, 2130 Eighth Street, Suite 1, Wright-Patterson AFB, OH 45433-6553.

Mr. Kolley is an associate with Booz-Allen & Hamilton, Inc., which operates the SURVIAC under government contract.

Fighter Tactics in

As war clouds loomed on the horizon prior to the attack on Pearl Harbor in December 1941, the Navy's small fighter community was faced with making the transition from nimble biplanes to heavier, but faster all-metal monoplanes that would dominate air combat in WW II. Paramount to achieving success with the newly arriving F2A *Buffalo* and F4F *Wildcat* was the development of tactics to exploit their effectiveness. Worldwide aeronautical technology delivered several potent adversaries to Axis nations that Navy fighter pilots would have to face. Mitsubishi had produced the superb *Zero* fighter and Messerschmidt the Bf 109, both combat proven by 1941, and flown by skilled pilots. The *Zero* had been introduced over the skies of China and virtually swept away all opposition.

The greater speed of the late generation of monoplane fighters led to eventual adoption of two-ship formations (sections) as the basic building block. German-flown Bf 109s fighting in the Spanish Civil War

transitioned to the two-ship *rotte* and eventually brought the formation to the Battle of Britain where it was also adopted by some of the British squadrons. Navy pilots poured over combat reports from the Battle of Britain where the Royal Air Force (RAF) was evolving combat tactics ranging from squadron-size attacks in line astern to line-abreast tactics. Fighting Two was officially designated to conduct trials with the two-ship formation. Formations also began to open in spacing to account for greater speed and turning radius. Tactics centered around mastery of aerial gunnery from various deflection angles. The standard section called for the leader, invariably the most experienced pilot, to lead the attack with the wingman providing cover. Compared to the Bf 109, the British *Spitfire* enjoyed superiority in turning performance over the Messerschmidt and developed tactics to exploit that fact. Over the Pacific, the situation was reversed with the *Zero* having the better turn performance over allied fighters.

As WW II engulfed the globe, the Japanese *Zero* enjoyed a long period of

virtual absolute superiority over Army Air Forces P-36, P-39, and P-40 fighters in the early days in the Pacific theater. A notable exception was the famed American Volunteer Group (AVG), popularly known as the "Flying Tigers." Although not a part of the Army Air Forces, AVG flew the same P-40 into combat and prevailed as the only notable success against the Japanese in the first six months of the war.

The leader of the AVG, Claire Chennault, had been forced into retirement as a captain partially due to his advocacy of tactical thought, not in concert with the prevailing bomber mentality. Well before Pearl Harbor, Chennault was hired by the Chinese government as an aviation advisor to aid their resistance against the Japanese incursion onto their soil. He flew their fighters and played a primary role in assembling an air defense against the

WW II

By LCdr. Dave Parsons



onslaught of the Japanese. He saw firsthand how the tremendous maneuverability of the Japanese fighters could not be countered by existing western aircraft. He formulated the idea of dissimilar tactics coupled to an early warning network in order to deal with the overwhelming Japanese aerial presence. He saw vindication of his theories as his Flying Tigers ripped into the best of the Japanese attempts to annihilate his tiny fighter force.

The Flying Tigers were repeatedly pitted against the 64th Sentai of the Japanese Army equipped with the nimble *Hayabusa* that was similar to the *Zero* in size and performance. Chennault indoctrinated his group of pilots recruited from the ranks of the Navy, Army Air Forces, and Marine Corps. The idea of dissimilar air combat tactics was unorthodox, but Chennault made believers of his pilots. The tactics worked. Eventually, Chennault was able to compare performance of his P-40s against captured examples of his Japanese opponents.

Claire-Chennault's solution reflected a land-based situation that allowed him to establish an extremely effective early warning net that gave him a significant advantage. Knowing where the Japanese

formations were gave the AVG the ability to husband its scarce fighter force and use it most effectively. Most importantly, it allowed the Flying Tigers enough time to climb to an altitude advantage that was significant tactically. Chennault preached a diving hit-and-run attack that made the most of the P-40's one significant performance advantage over the *Zero* – the dive. This was unorthodox for conventional fighter tactical thinking. RAF pilots stationed at Rangoon alongside the AVG were threatened with court-martial if seen "diving away" from a fight. They stayed in close with their *Hurricanes* and *Buffaloes* and suffered far greater losses than the conventional and successful AVG pilots using dissimilar tactics.

Thousands of miles from the Flying Tigers, another tactics theoretician – Lieutenant Commander Jimmy Thach, commanding officer of Fighting Three (VF-3) – was disturbed when he read the Fleet Air Tactical Unit Bulletin of 22 September 1941. The attack on Pearl Harbor was only months away and, like Chennault, Thach reasoned that it was inevitable he would have to face Japanese pilots in combat. He was searching for any information on Japanese fighter pilots and their tactics and aircraft. The bulletin confirmed what initial reports coming out of China in late 1940 had said concerning the performance of the still-mysterious Japanese

Zero fighter. It was obvious that it was only a matter of time before his F4F *Wildcats* would have to take on this clearly superior fighter. Since taking command, he had molded his squadron into crack shots and superior airmen. Yet, he realized that even if the *Zero's* performance was half as dramatic as the reports said, his F4F *Wildcats* would be at a severe disadvantage no matter how good his pilots were. Conventional tactics wouldn't be able to counter the speed, climb, and turning performance of the *Zero*. He set out to devise a tactic to counter the aerodynamic performance superiority of the *Zero*.

Following each day of flying, he worked night after night on his kitchen table using matchsticks to simulate the opposing fighter formations, experimenting with various tactics to counter the *Zero*. He eventually devised a weaving tactic, but needed to move the idea from the kitchen table into the air. In order to properly test his theories in the air, he needed a dissimilar opponent that would simulate the relative differences of performance between the *Wildcat* and the *Zero*. As no

After the loss of *Lexington* during the Battle of Coral Sea, fighter complements were increased to 27 fighters, recognizing the need to protect the carrier and strike aircraft.





A Zero is the victim of the Thach Weave in this painting titled "Thach's Weave of Destruction," by AT1 Greg Robinson of VFA-15 onboard Theodore Roosevelt (CVN 71).

slower *Wildcats* making a firing run every 20 to 30 seconds. Thach was able to deploy into the weave before the attacks began and lost the number four *Wildcat* as he led his division into a hard right turn trying to spoil the attack. The *Zero* pulled up passing in front of Thach, who let loose with a snap shot as the *Zero* flashed past. It burst into flames.

Now, Thach had three *Wildcats* left. His wingman was familiar with the weave, but the remaining pilot was a new arrival from VF-42 and knew nothing about it. Even worse, his radio was out so Thach led the three ships in a line-astern formation, weaving to throw off the relentless attacks of the *Zeros*. He then directed his wingman to take an abeam position as if he were leading a section and commence the weave.

aircraft in the United States had performance even close to the *Zero*, he came up with a simple innovation to achieve the desired result as he later recalled in *The Pacific War Remembered*: "We [had] practice this, but who's going to be the *Zeros*? How are we going to find airplanes of that sort, that fast and with that high a performance? ... I told Lt(jg) Edward "Butch" O'Hare to take four aircraft and use full power. I would take four and put a little mark on the throttle quadrant and never advance it more than halfway. That gave him at least a superior performance, maybe double, maybe not, but somewhat better."

O'Hare was a recent addition to VF-3, but had rapidly proved himself to be a crack pilot graduating to the "shakedown" team of experienced flyers who were charged with training fledgling pilots. His division put the weaving tactic to the test, but was frustrated by the coordinated defense of weaving *Wildcats*. Thach set out to refine the tactic and instruct the rest of VF-3. He named his tactic the Beam Defense Maneuver.

Deploying to the Pacific, Thach missed out on the Battle of the Coral Sea, sitting out the battle at NAS Kaneohe on the island of Oahu. His outfit, VF-3, had been stripped of pilots to augment other squadrons. He was now in the curious position of having a tactic, but with novice

pilots that needed schooling in the basics of gunnery before they could advance to the weave. The Battle of Midway lay ahead in the not-too-distant future. He was faced with the daunting task of taking brand-new ensigns into combat with scant time to train them in aerial gunnery let alone his new tactic. He conducted a rigorous training program out of the base at Kaneohe and was able to instruct at least some of the pilots he would lead at Midway in the "weave." Thach had the satisfaction of seeing his tactic work in the Battle of Midway. His improvised, in-house, dissimilar air combat had been crucial in validating his tactic and undoubtedly saved the lives of at least several junior pilots. It was a big edge for the *Wildcat* pilots. (During Vietnam, A-1 *Skyraider* pilots used a version of the Thach Weave in 1965 when they were jumped by a NVAF MiG-17. They shot it down.)

Thach didn't have to wait very long to test his tactic in combat. VF-3 flew from *Yorktown* escorting the SBD dive and TBD torpedo bombers against the cream of Japanese carrier aviation. The torpedo bombers became separated and were utterly decimated on their own by the defending *Zeros*. Thach's *Wildcats* were at 5,500 feet when they were attacked by 15 to 20 *Zeros*. The *Zeros* lined up and conducted sequential attacks on the



LCdr. John S. "Jimmy" Thach, VF-3 CO and originator of the Beam Defense Maneuver, or "Thach Weave." This tactic enabled Navy pilots flying F4F *Wildcats* to counter the superior performance of the Japanese *Zero*.



LCdr. Jimmy Thach and Lt. Butch O'Hare at the controls of VF-3 F4F-3 *Wildcats* F-1 and F-13, respectively. Thach and O'Hare were able to "shakedown" the Thach Weave before they entered combat.

One of the *Zeros*, seeing an apparent breakup of the formation, made a pass on Ensign Dibbs and latched onto his tail. Dibbs radioed Thach, "Skipper, there's a *Zero* on my tail! Get him off!" Dibbs made a hard port turn into Thach in accordance with the Beam Defense Tactic as Thach made a corresponding starboard turn towards Dibbs. They passed close aboard with the *Zero* still in hot pursuit, unaware of the trap lying ahead. Thach was now approaching the *Zero* head on from the preferred position of being slightly below his target's flight path, giving him a favorable firing position. Thach commenced firing and his .50-caliber slugs tore into the nose of the *Zero* causing the engine to ignite into flames. The *Zero* flew away into the water. Thach and Dibbs continued to weave forcing the *Zeros* to break off their attacks. Thach's new wingman, Ensign Macomber, flew wing on Thach wondering what Dibbs was up to and becoming highly irritated at Dibbs for breaking formation. It wasn't until return to the carrier that he found out he had been part of the combat test of the weave.

The *Zero* pilots continued their relent-

less attacks responding to the weave only occasionally by aborting their firing passes when the weave initiated. When a second *Zero* attempted to chase Dibbs through the turn, Thach raked its fuselage with .50-caliber fire resulting in Thach's third claim for the day. Thach's other section escorting TBD torpedo bombers was also beset by *Zeros* and forced to fight defensively all the way to the Japanese fleet. Although unable to set up the weave, they did manage to score two kills and two probables. Thach's tactic had proven itself in the face of overwhelming odds. The word quickly spread and other units adopted the tactic. In recognition of his role in devising it, the Beam Defense Position was referred to as the "Thach Weave." Although the ultimate solution was the

fielding of the F4U *Corsair* and the F6F *Hellcat*, both aircraft were still in development and would not be available until the summer of 1943. Until then, the *Wildcat* would have to be the front-line fighter facing the *Zero*.

The early carrier battles highlighted the need for a greater complement of fighters both to protect the carrier from Japanese aerial attack and escort Navy strikers. Carrier fighter complements were initially upped to 27 and then 36 *Wildcats* to provide greater numbers to deal with the *Zero*, but the Thach Weave would be their greatest asset in dealing with the *Zero*. Thach was recognized for his achievement with the Distinguished Service Medal, a lofty award befitting his significant contribution which undoubtedly



Tom Blackburn's famed Fighting 17 established an outstanding combat record using tactics developed off Hampton Roads, Va., in aggressive training.

had saved many aircraft and would continue to do so.

In late summer 1942, Marines went ashore at Guadalcanal beginning an epic struggle for that island and the whole of the Solomon Islands chain. The Japanese vigorously resisted this intrusion into their territory by launching air attacks from their fortress at Rabaul. Marines flying *Wildcats* from the barebones Henderson Field on Guadalcanal also adopted the Thach Weave. The Japanese *Zero* pilots flying out of Rabaul were initially confounded by the tactic and the *Wildcat's* tactic of hit-and-run attacks. Tadashi Nakajima was Japan's leading ace and commander of the Lae-based *Zero* unit recalled to Rabaul to deal with the allied presence in the Solomons. One of his pilots was Saburo Sakai whose score was already approaching 60 and was destined to be Japan's number two ace of the war and leading surviving ace. Both pilots were absolute masters of their aircraft and aerial combat. Sakai relates their reaction to the Thach Weave when they encountered Guadalcanal *Wildcats* using it: "For the first time Nakajima encountered what was to become a famous double-team maneuver on the part of the enemy. Two *Wildcats* jumped on the commander's plane. He had no trouble in getting on the tail of an enemy fighter, but never had a chance to fire before the Grumman's teammate roared at him from the side. Nakajima was raging when he got back to Rabaul; he had been forced to dive and run for safety."

The Aleutian Prize

While Thach was validating his tactic at Midway and Chennault's shark-mouthed P-

40s were decimating the Japanese, another significant event occurred. Concurrent with the attack on Midway, a Japanese task force attacked the Aleutian Islands. A *Zero* had been found virtually intact in 1942 on Akutan Island (part of the Aleutian Island chain). Its pilot had tried to make an emergency landing on a bog after suffering battle damage during the June 4, 1942, attack on Dutch Harbor. He apparently mistook the soft bog for a hard surface and tried to land with the landing gear down.

A VP-41 PBV *Catalina* spotted the *Zero* on July 10, 1942, lying on its back. An intensive salvage effort requiring three expeditions to the remote site was able to retrieve the *Zero* and it eventually made its way to Naval Air Station, San Diego, Calif., where it was restored to flying condition. By late September, it was involved in a series of flight tests and comparisons against the latest U.S. fighters. Instead of using matchsticks or surrogates, an actual *Zero* was then available to develop tactics for each allied aircraft. The *Zero* began to lose some of its mystique. Although still deadly, the advent of powerful new fighters like the F4U *Corsair* and F6F *Hellcat* gave Navy pilots some performance margin against the *Zero* with superior speed.

First Adversary Pilot

After the testing establishment had finished its evaluation, some farsighted and ambitious Navy fighter pilots succeeded in getting the *Zero* released for use in San Diego against fleet units. One of the pilots was Rear Admiral Bill Leonard (then a lieutenant) who was fighter training officer with Commander Fleet Air, West Coast. His boss at the time was the famed James Flatley who, along with Leonard, had fought the *Zero* in the early months of the war in F4F *Wildcats*. They knew firsthand the *Zero's* phenomenal maneuverability. Both pilots also knew its weaknesses, and the best way to survive and win an engagement: allow pilots to train against the real thing. They argued convincingly to secure the *Zero* (the existence of which was still a closely held secret) to use against fleet units in ad-

vanced stages of training just prior to deployment.

Principally, the *Zero* was flown as an "adversary" aircraft against the F6F and F4U to show the pilots "how it smelled in the air." It was also made available to squadron COs and senior pilots to fly themselves in order to acquaint them with the *Zero's* remarkable maneuverability. Reports were one thing, but there was nothing like seeing the real thing in living color. Leonard had seen the *Zero* firsthand while flying a F4F *Wildcat* during both the battles of the Coral Sea and Midway and could attest to its maneuverability, especially at low speeds.

Leonard flew the *Zero* primarily against air wings in their advanced stages of training just prior to deployment to the Pacific combat zone. He also demonstrated it against patrol squadrons. Unfortunately, the *Zero* was later lost in a taxiing accident when a SB2C *Helldiver* didn't see the small fighter and chewed it into scrap with its propeller. A more up-to-date *Zero* was subsequently found as the Pacific offensive began capturing island real estate littered with abandoned aircraft during the island-hopping campaign. This has remained the first documented example of the use of an adversary aircraft in a training role. The program was remarkably visionary and it presaged much of what we do today.

As Leonard demonstrated, the best way to be ready for an opponent is to be able to train against his aircraft, especially if the performance is radically different from your own. This is what the F4F *Wildcat* pilots faced and it is to their credit that they did as well as they did when they first encountered the *Zero*. Of course, in war or peacetime, it is not always possible to obtain flying examples of your potential opponents. The *Zero* based at North Island was only one airplane, not quite enough to train the multitude of fighter pilots under instruction during WW II. Lt. "Boogie" Hoffman was one the pilots assigned to do initial comparative testing of the salvaged *Zero* and returned to Pacific combat with VF-31 where he shared his experiences. No other formal dissimilar training existed, but there were opportunities for plenty of informal encounters.

Back in the days of WW II, anything in the air was fair game. And if nothing could be found airborne, a pilot merely had to head for a neighboring field (preferably



USAF

The vaunted *Zero* never lost its deadly "acrobatic" superiority over Allied aircraft, but tactics such as the Thach Weave allowed Navy pilots to prevail until high-performance fighters like the *Hellcat* and *Corsair* were introduced in 1943.



Edward Steichen

The key to success in air combat was superior aircraft, well-trained pilots, and tactics. Here, VF-16 reads for air combat in late 1943 in the Gilbert's area.

belonging to a sister service) and "beat it up" until an adversary took up the challenge.

If the skies around the local base were bare, then some units took active measures to ensure opponents would show. Commander Tom Blackburn, commanding officer of the fledgling *Jolly Rogers* (VF-17), was working his squadron up in the isolated outer banks of North Carolina at Manteo and when he deemed his pilots ready, he sent out the following dispatch to all the squadrons in the Hampton Roads area: "Combat air patrol will be airborne over Manteo from 0800 until 1200 each weekday. Visitors welcome." Blackburn got the visitors he wanted in the form of fighters, dive-bombers, torpedo bombers, and even some patrol types. He got what he wanted, commenting, "I have a vivid mental picture of a section of dive-bombers pulling out of their attack on the treetops at 300-plus knots with *Corsairs*, wingtips skyward, making 90-degree deflection attacks at their level.

"We were busy. We never had more fun or better training."

Blackburn's remarks are particularly on the mark on both counts. Although air combat can be very debilitating, the contest between two aircraft is considered by most to be fun, at least in training. An old adage goes, "If you're not having fun, you're doing something wrong." Of course, from a different perspective, a pitched battle at low level over a town doesn't conjure up fun.

Blackburn's squadron had been previously based at NAS Norfolk, Va., right under the noses of numerous flag officers. When Ensign "Ike" Kepford had a dogfight with an Army Air Forces P-51 which descended below 500 feet over the citizenry

of Norfolk, Blackburn got to have a one-way conversation with Vice Admiral Bellinger, Commander Air Force, Atlantic Fleet, about the antics of his "hellions." Both parties were more than happy about the move to Manteo. Fun aside, this type of training is, as Blackburn suggests, good training. Beating up rival service's airfields and jumping their aircraft had a direct corollary with combat operations in the Pacific. The pilots flying out of Guadalcanal had to be ready to engage *Zeros* at any time. The landing pattern wasn't safe, nor was the takeoff roll. There is sound reason behind the Navy's carrier break in which aircraft maintain combat speeds until over the field, at which time the aircraft goes into a "break" turn minimizing the time at slow speeds before landing, in case a marauding *Zero* should happen to show.

Throughout the vast aerial battlefields of WW II, the tactics that proved success-

ful were those evolved from the dissimilar air combat arena, although the term dissimilar was still decades away from being institutionalized. Whether pilots realized it or not, the informal bouncing of friendly aircraft provided the dissimilar opponents needed to hone air-to-air combat skills. In every theater, opponents placed high priority on capture of opposing aircraft for exploitation and comparative tests from which dissimilar tactics were devised. Both Allied and Axis air forces developed specialized units to provide dissimilar air combat training after capturing sufficient examples of their opponent's aircraft. In the postwar standdown, the utility of such units did not lead to formalized dissimilar air combat training, although informal bouncing remained as popular as ever. ■

LCdr. Parsons is an F-14 *Tomcat* radar intercept officer currently assigned to Director, Air Warfare Division, Office of the Chief of Naval Operations. He is a former editor of *Approach* magazine.

50 Years Ago – WW II

8 Jul: *Casablanca* (ACV 55), first of her class and first escort carrier designed and built as such, was placed in commission at Astoria, Ore., Capt. S. W. Callaway commanding.

15 Jul: New designations for carriers were established which limited the previous broadly applied CV symbol to *Saratoga*, *Enterprise*, and carriers of the *Essex* class, and added CVB (Aircraft Carriers, Large) for the 45,000-ton class being built and CVL (Aircraft Carriers, Small) for the 10,000-ton class built on light cruiser hulls. The same directive reclassified escort carriers as combatant ships and changed their symbol from ACV to CVE.

18 Jul: The airship K-74, while on night patrol off the Florida coast, attacked a surfaced U-boat and in the gun duel which followed was hit and brought down – the only airship lost to enemy action in WW II. The submarine *U-134* was damaged enough to force her return to base, and after surviving two other attacks on the way, was finally sunk by British bombers in the Bay of Biscay.

22 Jul: Since there had been no operational need for arresting gear and related equipment for landing over the bow of aircraft carriers, the Vice Chief of Naval Operations approved its removal.

18 Aug: To give Naval Aviation authority commensurate with its WW II responsibility, the Secretary of the Navy established the Office of the Deputy Chief of Naval Operations (Air), charging it with "the preparation, readiness and logistic support of the naval aeronautic operating forces." By other orders issued the same day, five divisions were transferred from the Bureau of Aeronautics to form the nucleus of the new office and VAdm. J. S. McCain took command as the first DCNO (Air).

29 Aug: The formation of combat units for the employment of assault drone aircraft began within the Training Task Force Command as the first of three Special Task Air Groups was established. The component squadrons, designated VK, began establishment on 23 October.

Aviation History and Publication Director Retires

By Joan A. Frasher

On August 1, 1993, Commander Stephen R. Silverio will retire from active duty at the end of his current assignment as Director, Naval Aviation History and Publication Division in the Naval Historical Center.

He began his Navy career in 1971 and was designated a Naval Aviator in 1973. He spent his first tour as a flight instructor in Training Squadron 3. He then was assigned to Naval Station, Roosevelt Roads, P.R., flying the C-131. In 1978, he joined the airborne early warning community and deployed aboard *Independence* and *John F. Kennedy* flying the E-2C *Hawkeye*. Prior to assignment to the Naval Historical Center, Cdr. Silverio commanded Fleet Logistics Support Squadron 40, Norfolk, Va.

Captain Clete Wise, Deputy Director,

Naval Historical Center commented, "Steve Silverio has made a strong contribution to both the present and future of our Naval Aviation History and Publication Division while on this tour. He has managed his program and led his people in true customer-driven, quality-oriented fashion. Beyond that, he has planted the seeds of developing technology to significantly upgrade our storage and retrieval capabilities through the pursuit of optical imaging and compact disk methodology. Cdr. Silverio is a far-sighted individual who will be sorely missed."

Judith Walters, a historian in the center's Aviation History Branch, said of Cdr. Silverio, "A professional actor after hours, Cdr. Silverio uses his talents at work to enliven office spirit." The author feels that his multifaceted personality



makes working with him a pleasure – and fun!

Cdr. Silverio will remain in the Washington area with his new wife, Ann. We wish the Silverios the best in the future, a good setup, and an OK 3 wire.

NANews Editor Ends Four-Year Reign

By JO1(SW) Eric S. Sesit

After four years as editor, Lieutenant Commander Richard Burgess has left his post as editor of *Naval Aviation News* to become the training officer onboard *George Washington* (CVN 73).

LCdr. Burgess began his tour at *NANews* in June 1989, but his association with the magazine dates back almost two decades.

"I've dreamed of this job since I was 15 years old," Burgess said. "That's when I got my first subscription to the magazine."

While in the fleet, Burgess's love of flying and writing about Naval Aviation resulted in articles published in *Naval Aviation News* and *Wings of Gold*. In 1989, when *NANews* needed an editor, Burgess was qualified, available, and was offered the position. He has the distinction of being the first Naval Flight Officer to fill the editor's job in the magazine's 75-year history.

An accomplished writer as well as an editor, Burgess is a frequent contributor of articles to *Naval Aviation News*. According to managing editor Sandy Russell, Burgess has greatly improved the quality of technical information in the magazine. "He introduced a new department which is packed with current technical developments, policy changes, squadron/carrier movements, and unit disestablishments. This helps *Naval Aviation News* earn the 'News' in its name," she said.

According to long-time contributing editor Hal Andrews, "Rick has made my job much easier thanks to his technical expertise. His interest and knowledge of aviation helps ensure the technical accuracy of the magazine. He has made the magazine a useful reference tool for researchers like myself."

Cdr. Steve Silverio, Director, Naval Aviation History and Publication Division of the



Naval Historical Center, echoed Andrew's comments. "Rick has been an articulate voice for Naval Aviation. His talents as a writer and historian have greatly enhanced communication with the fleet," Silverio said.

The staff of *Naval Aviation News* wishes LCdr. Burgess and his family the best of luck and happiness as they continue their Navy career in the Norfolk area.

Awards

Sponsored by Kaman Aerospace Corporation and the Naval Reserve Association, the 1992 **Adm. Alfred M. Pride Award** for Naval Air Reserve Lamps ASW Excellence was presented to HSL-94.

NAS Dallas, Texas, earned the 1992 **Commander, Naval Air Reserve Force Aviation Safety Citation Award**.

Naval Aviation Depot, Norfolk, Va., won the 1993 **Secretary of the Navy Environmental Quality Award** in the industrial activities category for its aggressive environmental program and commitment to preserve the Chesapeake Bay.

NAS Lemoore, Calif., and Naval Supply Depot, Guam, won the **Navy's Personnel Property Excellence Award** for 1992.

VP-66 received the 1992 ComNavAir-ResFor **AVCM Donald M. Neal Award** for excellence in aircraft maintenance.

VT-22 received the 1992 **Vice Admiral Robert Goldthwaite Award** presented annually to the squadron which best exemplifies excellence in aviation training. Sponsored by Rockwell International, the award is named in honor of VAdm. Goldthwaite who contributed significantly to the Naval Air Training Command during his 45-year career.

LCdr. Edward Payne, maintenance officer, Naval Air Weapons Station, Point Mugu, Calif., received the 1992 **Capt. Virg Lemmon Award for Aviation Maintenance Excellence**. This annual award recognizes the aviation maintenance officer who has made the most significant contribution in the aviation maintenance/logistics field.

The winners of the 1992 **ComNavAir-Pac Aircraft Squadron/Ship Battle Efficiency Award** are:

HC-5; HS-14; HSLs 33 and 45; VA-155; VAQ-136; VAW-116; VF-154; VFA-192; VP-47; VQ-1; and VS-38.

HC-16 won the 1992 **U.S. Atlantic Fleet Golden Anchor Award** for retention excellence.

MCAS Beaufort, S.C., received the **Commander in Chief's Award for Installation Excellence**.

Grampaw Pettibone Awards for CY 92 are: individual winner – Cdr. Mark W. "Dusty" Danielson, aviation safety officer, NAS Dallas, Texas, and unit winner – VAW-114 *Hornet Hawks*.

Records

Several units marked **safe flying time**.

Unit	Hours	Years
HM-19		1
HMT-301		18
HS-6	12,000	4
HS-8	38,000	12
HS-85	40,000	18
HSL-34		4
HSL-41	60,000	10
HSL-44		5
HSL-49	17,000	17
NAS Alameda	20,500	17
NAS Bermuda		15
NAS Cecil Field		25
NAS Fallon	17,700	13
NAS Glenview	17,500	22
NAS Jacksonville		14
VA-34		7
VA-36		6
VA-145		3
VA-205		22
VAQ-33		2
VAQ-138	19,300	11
VAQ-139	2,000	1
VAQ-141	10,000	5
VC-8		7
VF-1		1
VF-21	27,000	7
VF-45		2
VFA-87		2
VFA-204		12
VFA-305		16
VP-10		20
VP-11		15
VP-40	177,000	26
VP-46	207,400	29
VP-65		22
VP-69		12
VP-90		14
VPU-1	26,900	17
VQ-2		6
VQ-4	233,800	21
VRC-50		4
VS-27		6
VS-29	2,700	1
VS-35	4,235	2
VS-38	25,300	8
VS-41	114,400	13

Cdr. C. W. Kennard, former CO of VAQ-138, passed his 3,000th flight hour October 5, 1992, in a EA-6B *Prowler* at sea during a recovery aboard *Nimitz* (CVN 68).

Starfighter 203, BuNo 160399, was the first Grumman F-14 *Tomcat* to surpass the 5,000-hour milestone on February 2, 1993. The aircraft was piloted by the CO of VF-33, Cdr. A. R. Reade, and radar intercept officer Lt. Christ Stubbs.

SOES, MCAS Cherry Point, N.C., recorded individual flight-hour milestones: **Lt. Col. D. S. Legas**, 11,000; **Maj. R. C. Ellis**, 5,000; **Maj. J. T. Espinosa**, 6,000; **Maj. W. T. Snider**, 5,000; **Lt. Col. B. M. Davis**, 5,000; and **Maj. G. J. Eady**, 7,000.

Rescues

An **HC-11 CH-46** helo was on a logistics run between the oiler *Kansas City* and guided missile cruiser *Reeves* about 460 miles west of San Diego, Calif., when it developed transmission problems.

The helo couldn't land on *Reeves* due to the ship's small helo deck. Pilot Lt. Mark Goodwin declared an emergency and, while the crew began preparing to ditch the aircraft, he headed the aircraft back toward *Kansas City*. When the helo's transmission oil pressure dropped perilously low, Goodwin decided it was time to ditch. He set the CH-46 down on the water and the crew – copilot Lt. Jake Ryan, AE2 Peter Martino, and AMH3 Robert Cayse – quickly exited the helo and inflated a life raft.

With the crew safely in the raft, Goodwin lifted the helo back up and continued to taxi alone toward *Kansas City*, now nearly four miles away. Another CH-46 from HC-11 had headed for the scene as soon as Goodwin called in an emergency. After getting a thumbs-up sign from the crewmen in the raft, pilot Lt. Mike Lindbloom flew toward the distressed helo. By the time Lindbloom arrived, Goodwin had already landed the helicopter in the water, shut it down, and evacuated without injury. He was quickly hoisted up

and returned to Reeves. The helo sank within minutes.

Shore Sailor of 1993

Aviation Machinist's Mate Hydraulics First Class Thomas G. Carter was named by Admiral Frank B. Kelso II as the 1993 **Shore Sailor of the Year**. During ceremonies at the Navy Museum in the Washington Navy Yard, D.C., Adm. Kelso recognized five of the Navy's top shore sailors, three serving in aviation ratings.

The finalists were: AMH1(AW) Thomas G. Carter, VS-27, representing U.S. Atlantic Fleet; PR1(AW) Karol L. Colehour, AIMD, NAS Dallas, Texas, representing Naval Shore Activities; AE1(AW) Steven K. Stuber, Anti-Submarine Warfare Center, Rota, Spain, representing U.S. Naval Forces Europe; OS1(SW) Timothy L.



Easter, Fleet Training Center, Mayport, Fla., representing the Naval Education and Training Command; and MM1(DV) Eric D. Holliday, Ship Repair Facility, Guam, representing the U.S. Pacific Fleet.

After the announcement, Carter was asked how he felt, "Relief! Relief! It's a relief!" he said. "I worked hard for 13 years; I always knew there would be a light at the end of the tunnel and it finally happened. I feel very proud for myself and my family."

AMH1(AW) Carter is the son of Thomas and Claretta Carter of High Point, N.C. He is married to the former Virginia Parham. They live in Jacksonville, Fla., with their son, Marcus, and daughter, Courtney.

Scan Pattern

PH2(AW) Greg McCreash



Vice Admiral Tony Less, Commander Naval Air Force, U.S. Atlantic Fleet, met with four previous Airlant Commanders to update them on current issues facing Naval Aviation and the Navy. Left to right: VAdm. Jack Ready (1989-91), VAdm. Tom Kilcline (1981-83), VAdm. Frank O'Beirne (1960-63), VAdm. Less (1991-present), and VAdm. Dick Dunleavy (1986-89).



Naval Air Warfare Center Weapons Division, Point Mugu, Calif., operates QF-4N target drones.

Vance Vasquez

Flag Move

RAdm. Lloyd E. Allen, Jr., relieved RAdm. Frederick L. Lewis as Commander, Carrier Group Four and Commander, Carrier Striking Force, 2 Mar 93.

Change of Command

CVWR-20: Capt. Robert Hathaway relieved Capt. (Sel) James Cannon, 20 Feb 93.

ComSeaConWingPac: Capt. T. Scott Douglas established a new command and assumed duties as its commander, 22 Apr 93.

Dwight D. Eisenhower (CVN 69): Capt. Alan Mark Gemmill relieved Capt. William V. Cross, 20 Mar 93.

HMH-466: Lt. Col. J. M. Metterle relieved Lt. Col. R. N. Leavitt, 7 Dec 92.

HMM-262: Lt. Col. Stanley E. Wells III relieved Lt. Col. Neil S. Fox, 11 Feb 93.

HS-4: Cdr. G. Paul Kish relieved Cdr. Michael T. Fuqua, 1 Mar 93.

HS-7: Cdr. Gerard M. Lauer, Jr., relieved Cdr. William Christman, 29 Apr 93.

HS-15: Cdr. Mark Adrick relieved Cdr. D. W. Nelms, 25 Mar 93.

HSL-48: Cdr. Keith S. Laser relieved Cdr. Ronald E. Nasman, 25 Mar 93.

LaSalle (AGF 3): Capt. Jack J. Samar, Jr., relieved Capt. Robert C. Klosterman, 20 Mar 93.

NAS North Island: Capt. James R. Jarrell IV relieved Capt. Theodore C. Sexton, 26 Mar 93.

VAQ-140: Cdr. Thomas C. Bennett relieved Cdr. Larry G. Salter, 22 Apr 93.

VAW-113: Cdr. Tom C. Trudell relieved Cdr. Richard C. Herriott, 4 Jun 93.

VFA-22: Cdr. Christian R. Rondestvedt relieved Cdr. James T. Knight, 26 Feb 93.

VFA-127: Cdr. Steven M. Endacott relieved Cdr. C. "J" McNeas, 9 Apr 93.

VFA-136: Cdr. John R. Leenhouts relieved Cdr. David R. Miller, 25 Mar 93.

VFA-203: Cdr. Dale Lewelling relieved Cdr. Steve Hallam, 20 Mar 93.

VFC-12: Cdr. Douglas C. Schlaefer relieved Cdr. Donald E. Auten, 9 Jan 93.

VFC-13: Cdr. Walter L. Baker III relieved Cdr. Jerry M. Harris, 31 Mar 93.

VMA-542: Lt. Col. Kevin E. Leffler relieved Lt. Col. Joseph B. Jones, 4 Mar 93.

VMFA-122: Lt. Col. Jason A. Britt relieved Lt. Col. John M. Gautreaux, 12 Mar 93.

VMFA-314: Lt. Col. Gregory Rath relieved Lt. Col. Ronald Richards, 9 Apr 93.

VP-4: Cdr. Marshall A. Hall relieved Cdr. David M. Cashbaugh, 16 Apr 93.

VP-26: Cdr. Ed Lohoski, Jr., relieved Cdr. Robert Dale Kaser, Jr., 29 Mar 93.

VP-49: Cdr. Mark Anthony relieved Cdr. James Drodody, 26 Mar 93.

VP-93: Cdr. Rodney A. Carlone relieved Cdr. James B. Harshfield, 14 Nov 92.

VP-94: Cdr. Michael Rouen relieved Cdr. Ronald P. Cosgrove, 27 Feb 93.

VQ-4: Cdr. Kristopher L. Strance relieved Cdr. Paul J. Jackson, 6 Jan 93.

VR-52: Cdr. Richard C. Wiedenhaefer relieved Capt. (Sel) Francis X. McBride, 6 Mar 93.

VS-35: Cdr. Michael W. Luginbuhl relieved Cdr. David G. Heine, 18 Mar 93.

VT-2: Cdr. John J. Durkin relieved Cdr. John W. Yaeger, 29 Apr 93.

VT-10: Cdr. Richard A. Rigazzi relieved Cdr. Richard J. Jensen, 31 Mar 93.

By Cdr. Peter Mersky, USNR

Parsons, Dave, and Derek Nelson. *Fighter Country: The F-14 Tomcats of NAS Oceana*. Motorbooks International, 729 Prospect Ave., Osceola, WI 54020. 1992. 160 pp. Ill. \$29.95.

Although many books claim it, this book is the first and only one that offers a genuine glimpse inside today's Navy fighter crews and their world. Dave Parsons, an F-14 radar intercept officer whose logbook includes green ink in Libya and the Persian Gulf, is also a fine aviation photographer, with a sense of what goes into a good-looking picture.

Fighter Country is a blend of informative, light text written from the inside, and first-class color photography so much in vogue for today's large-format military aviation publications. There is considerable humor in the various explanations of the traditions and operational terms of the Navy's fighter community,

accompanied by a glossary of "Aviator Slang."

Highlights include inside information about *Tomcats* and their role in Operation Desert Storm, a discussion of what it means to be part of the two-man flight crew of an F-14, and a description of the hijacking of VF-143's squadron mascot by junior officers of VF-102. The authors also delve into the little known and fascinating history of one of the Navy's two major fighter bases and have included histories of all the F-14 squadrons on NAS Oceana, Va., as well as the fleet adversary squadron, VF-43.

Typos are kept to a minimum, although one would have expected the proofreader to catch F-23 as an incorrect designation for the F-21 *Kfir*.

This book is the best so far from this team and is sure to become a classic, showing the heritage of today's *Tomcat* community.

ANA Bimonthly Photo Competition

The Association of Naval Aviation and its magazine, *Wings of Gold*, is continuing its annual photo contest which began in 1989. Everyone is eligible except the staffs of *Wings of Gold* and *Naval Aviation News*. The ONLY requirement is that the subject matter pertain to Naval Aviation. Submissions can be in black and white or color, slides or prints of any dimension. Please include the photographer's complete name and address, and PHOTO CAPTION.

Cash Awards: Bimonthly - \$100; Annual - First, \$500; Second, \$350; Third, \$250.

For deadline and submission details, call (703) 998-7733. Mail photographs to: Association of Naval Aviation Photo Contest, 5205 Leesburg Pike, Suite 200, Falls Church, VA 22041-3863.



David Skepner of Nashville, Tenn., won the bimonthly ANA Photo Contest with this shot: "Last Sunset ... Last Cruise." The aft bridge lookout from *Ranger* (CV 61) watches a helo unload supplies from the aircraft carrier to *Wabash* (ADR 5) and *Mauna Kea* (AE 32). This was *Ranger's* last ride.

Corrections to May-Jun 93

Front cover caption: The gunner is holding a Thompson .45-cal. submachinegun, not a Brownie automatic rifle as stated.

Pages 18-19: Photo of "The Kill" is flopped.

Pages 24-25: Robert F. Dorr adds the following on the final version of the HOK/H-43 featured in "Naval Aircraft": In 1964, two USAF HH-43Bs were converted to drones for Navy application and designated QH-43Gs. Seeking to develop a system to communicate with U.S. strategic missile submarines, Kaman tested the Shipboard Very Low Frequency System aboard this pair of QH-43G Huskie drones, which were taken to sea on Wright (CG 2). The Navy eventually chose a different TACAMO system which uses an antenna trailing behind a fixed-wing aircraft, currently the Boeing E-6A Mercury.

Page 36 caption: The "Vallons" are designated VFA-15 vice VFA-14 as stated.

Page 37 caption: The Aircraft Carrier Memorial is located near the old "Navy Fleet Landing" on North Harbor Drive overlooking San Diego and facing NAS North Island - not aboard NAS North Island.

50 Years Ago - WW II

I wish to correct a mistake in *NANews*, Mar-Apr 93, p. 31. In "50 Years Ago - WW II," the March 1, 1943, redesignation of carrier scouting squadrons (VS) is said to have resulted in a reduction from four to three in the number of squadrons comprising an *Essex*-class air group. This is not so.

The redesignation resulted in each air group having two VB squadrons rather than one VB and one VS. The reduction to three squadrons did not take place until the following July, when the two bombing squadrons were amalgamated and given the same number as the parent air group. The March 1 redesignations were:

Saratoga Air Group	VS-6 to VB-13
CVG-5	VS-3 to VB-4
CVG-9	VS-9 to VB-19
CVG-10	VS-10 to VB-20
CVG-11	VS-11 to VB-21
CVG-12	VS-12 to VB-33
CVG-16	VS-16 to VB-23
CVG-17	VS-17 to VB-7

G. F. P. Kernahan
26 Cleveland Road, Uxbridge
Middlesex, England UB8 2DR

Ed's note: Mr. Kernahan is correct. According to Naval Aviation historian Steve Hill, the March 1 redesignation resulted in a reduction in the num-

ber of "types" of squadrons embarked, not a reduction in the number of squadrons embarked. For a short period of time, between March and July 1943, carrier air groups operated two VB squadrons. By the end of the first week of July, the number of squadrons embarked aboard fleet carriers had been reduced to three: one VF, one VB, and one VT.

WW II in the Pacific Conference

Hyatt Regency Crystal City
Arlington, VA
10-12 August 1994

Call for Papers

This conference will examine the momentous Allied offensive campaign against the Empire of Japan from August 1942 to August 1945. The program committee welcomes single papers or entire sessions on such aspects of the war as grand strategy and policy; Allied coalition politics; the South, Southwest, and Central Pacific campaigns; the battles of Leyte Gulf, Okinawa, and Iwo Jima; combat leadership; military medicine; intelligence and code breaking; the evolution of naval air and amphibious warfare doctrine; combat art and photography; technological development of ships, aircraft, and weapons; Marine Raider and Navy UDT operations; and logistics.

Please send one-paragraph abstracts of paper or session proposals, curriculum vitae, and related correspondence to:

Dr. Edward J. Marolda
Chair, Program Committee
WW II in the Pacific Conference
Naval Historical Center
Bldg. 57 Washington Navy Yard
Washington, DC 20374-5060

**Deadline for submission of proposals:
30 November 1993**

Reunions, Conferences, etc.

NATS reunion, JUL 11-17, Belleview, WA. POC: Victor Kish, 12716 Silver Ln., Sugar Creek MO 64050.

Guadalcanal (LPH 7) reunion, JUL 23, Norfolk, VA. POC: Lt. F. M. Dunn, Guadalcanal (LPH 7), FPO AE 09562-1635, 804-473-1508.

TACAMO reunion, JUL 23-24, Tinker AFB, OK. POC: Lt. Marc Rzepczynski, VQ-3, Tinker AFB, OK 73145-8703, DSN 339-3893, 405-739-3893.

AB Assn. reunion, JUL 27-31, Virginia Beach, VA. POC: B. Sowers, 804-427-1557.

Pre-Flight Class 2763 reunion, AUG 93, Pen-

sacola, FL. POC: Stan Jochim, 3418 Lake Country Ct., Dallas, TX 75234, 509-255-9330.

VX-1 50th anniv./reunion, AUG 20, Patuxent River, MD. POC: Lt. John Turner, 301-826-3224, ext. 7116.

WW II Air Support Control Units reunion, SEP 93, Chicago, IL. POC: John Pinto, 24 Webb Pl., Yonkers, NY 10710, 914-779-5388.

Lake Champlain (CV 39/CG 57) reunion, SEP 93, Nashville, TN. POC: Phillip Nazak, POB 34, Vestal, NY 13851-0034, 607-729-5192.

Kula Gulf (CVE 108) reunion, SEP 93, St. Louis, MO. POC: Larry Eckard, POB 5310, Hickory, NC 28603.

Tripoli (LPH 10/CVE 64) reunion, SEP 93, Omaha, NE. POC: Jim Metts, 1103 22nd St., Nederland, TX 77627, 409-722-1468.

Independence (CVL 22) reunion, SEP 1-5, Chicago, IL. POC: H. Backlund, 46 Ocean Dr., Key Largo, FL 33037, 305-852-5865.

Hoggatt Bay (CVE 75) reunion, SEP 2-5, Kansas City, MO. POC: Del Canady, 5868 Argyle Way, Riverside, CA 92506-3513, 909-787-8666.

Bogue (CVE 9) reunion, SEP 6-10, Nashville, TN. POC: Tony Potochniak, 1100 Holly Ln., Endwell, NY 13760, 607-748-3284.

Escort Carrier Sailors & Airmen Assn. reunion, SEP 6-10, Nashville, TN. POC: Tony Potochniak, 1100 Holly Ln., Endwell, NY 13760, 607-748-3284.

Anzio (CVE 57) reunion, SEP 8-11. POC: Paul Swander, 1741 Nilo, Terre Haute, IN 47804, 813-234-3654.

Curtiss (AV 4) reunion, SEP 8-11, San Diego, CA. POC: Francis Pavlu, 9255 N. Magnolia Ave. Sp. 293, Santee, CA 92701-3168, 619-448-3685.

Sallsbury Sound (AV 13) reunion, SEP 8-12, Denver, CO. POC: Marian Bruce, 813 Branding Iron SE, Albuquerque, NM 87123.

VR-24 reunion, SEP 9-12, San Diego, CA. POC: Pete Owen, 24633 Mulholland Hwy., Calabassas, CA 91302, 818-222-6936.

Air Power History Symposium, SEP 9-10, Bolling AFB, DC. POC: Dr. Roger Miller, CAFH/DR Bldg. 5681, Suite 400, BAFB, DC 20332-5113, 202-767-4713.

Essex (CV/CVA/CVS 9) reunion, SEP 13-19, Virginia Beach, VA. POC: Bob Morgan, 6361 SW 106th Pl., Ocala, FL 34476-4802, 904-854-6474.

Antietam (CV/CVA/CVS 36/CG 54) reunion, SEP 14-17, Las Vegas, NV. POC: James Mayton, Rt 1, Box 1414, Manchester, TN 37355, 615-728-0671

Card (CVE 11) reunion, SEP 16-18, Norfolk, VA. POC: Joe Macchia, Box 1369, Melrose, FL 32666.

Naval Airship Assn. reunion, SEP 16-18, Scottsdale, AZ. POC: Keith Hinrichsen, 653 Alvarado Ln., Cottonwood, AZ 86326-5004, 602-634-0727.

Attu (CVE 102) reunion, SEP 15-19, Norfolk, VA. POC: Jack Moore, 285 Moore Rd., Hackberry, LA 70645, 318-762-4656.

Lunga Point (CVE 94) reunion, SEP 16-19, Portland, OR. POC: Ivan Costner, 5400 Kirkside Dr. #C, Bakersfield, CA 93309, 503-281-4511.

PBY Catalina Intl. Assn. reunion, SEP 15-19, Seattle, WA. POC: James Thompson, 1510 Kabel Dr., New Orleans, LA 70131, 504-392-1227.

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